The Citadel Graduate College (CGC)

2021 – 2022 Academic Year

171 Moultrie Street

Charleston, SC 29409

(843) 953-5089

www.citadel.edu/graduatecollege

Please refer to the CGC website for frequently called numbers, schedule of courses, term dates, fees, and other important information.

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Welcome to The Citadel undergraduate transfer degree programs, where we extend our mission to educate and develop principled leaders for all walks of life to those seeking further study to become leaders in their chosen fields. We take great pride in our distinguished faculty and excellent academics that combine to offer a unique learning environment. You will find that our students - your friends, neighbors and colleagues - have chosen The Citadel because they know it will equip them for the challenges they will face as they advance in their careers. We hope you will join the ranks of more than 12,000 undergraduate and graduate alumni for whom a degree from The Citadel was a stepping-stone to continued growth and success.

Glenn M. Walters,'79
General, USMC (Retired)
President, The Citadel

Board of Visitors

Pursuant to S.C. Code Ann Section 59-121-10, the Board of Visitors is composed of the Governor, the Adjutant General, the State Superintendent of Education (who are members ex-officio), and eleven others who are graduates of the College. Seven of these members are elected by joint vote of the General Assembly, three are elected by such means and methods as may be determined by The Citadel Alumni Association, and one is appointed by the Governor.

Additionally, the Board currently has three Emeritus Members. Emeritus Members are former Board members who served at least eighteen years, and were voted as such because of their significant contribution to the governance of the College.

The 2021-2022 Board of Visitors, listed in order of seniority, are:

Colonel Dylan W. Goff, '02, Chair
Colonel Peter M. McCoy, Sr., '74, Vice Chair
Colonel Allison Dean Love, CGC, '93
Colonel L. E. "Gene" Pinson, '72
Colonel Stanley L. Myers, Sr., '98
Colonel John C. Dominick, USAF (Retired), '71
Colonel James E. Nicholson, Jr., '85
Colonel F. G. "Greg" Delleney, Jr., '74
Colonel Robert E. Lyon, Jr., '71
Colonel William M. (Bill) Connor, V, USA (Retired), '90
(Governor's Appointee – TBD)

The Honorable Henry D. McMaster, Governor of the State of South Carolina, Ex Officio
Major General R. Van McCarty, SCNG, '82, Adjutant General of South Carolina, Ex Officio
The Honorable Molly M. Spearman, State Superintendent of Education, Ex Officio

Colonel Leonard C. Fulghum, Jr., '51, Chairman Emeritus
Colonel William E. Jenkinson III, '68, Member Emeritus
Colonel Douglas A. Snyder, '82, Member Emeritus

Non-Voting Representatives:
Dr. Christopher C. Swain, '81, Chairman, The Citadel Foundation
Commander Drury C. "Chip" Nimmich, Jr., USN (Ret), '76, President, The Citadel Alumni Association
Lieutenant Colonel William R. Culbreath, Jr., USAFR, '79, President, The Citadel Brigadier Foundation

Statement of Vision

Achieving excellence in the education and development of principled leaders

Core Values

Honor: embodies adherence to the Honor Code of The Citadel. "A Citadel student "will not lie, cheat or steal, nor tolerate those who do." The commitment to honor extends beyond the gates of The Citadel and is a life-long obligation to moral and ethical behavior. In addition, honor includes integrity; "doing the right thing when no one is watching." Finally, honorable behavior includes exercising the moral courage to "do the right thing when everyone is watching." The Honor Code is the foundation of our academic enterprise.

Duty: embraces the need to accept and accomplish the responsibilities assigned as a member of the campus community. Citadel students hold themselves and others accountable for their actions, and put service before self.

Respect: empathizes to treat other people with dignity and worth – the way you want others to treat you. Respect for others eliminates any form of prejudice, discrimination, or harassment (including but not limited to rank, position, age, race, color, gender, sexual orientation, national origin, religion, physical attributes, etc.). In addition, respect for others means to respect the positions of those in authority that include faculty, staff, administrators, active duty personnel, and the leadership of The Citadel. Finally, respect includes a healthy respect for one's self.

Mission

As a higher education institution, The Citadel's mission is to educate and develop our students to become principled leaders in all walks of life by instilling the core values of The Citadel in a disciplined and intellectually challenging environment. A unique feature of this environment for the South Carolina Corps of Cadets is the sense of camaraderie produced through teamwork and service to others while following a military lifestyle.

The Citadel strives to produce graduates who have insight into issues, ideas, and values that are of importance to society. It is equally important that Citadel graduates are capable of both critical and creative thinking, have effective communication skills, can apply abstract concepts to concrete situations, and possess the methodological skills needed to gather and analyze information.

Throughout its history, The Citadel's primary purpose has been to educate undergraduates as members of the South Carolina Corps of Cadets and to prepare them for post-graduate positions of leadership through academic programs of recognized excellence supported by the best features of a military environment. The cadet lifestyle provides a structured environment that supports growth and development of each student's intellect, character, discipline, and physical fitness; The four pillars which define The Citadel experience.

A complementary purpose of The Citadel, realized through The Citadel Graduate College, is to provide the citizens of the Lowcountry and the State of South Carolina opportunities for professional development by offering a broad range of educational programs of recognized excellence at both the graduate and undergraduate levels. These programs are designed to accommodate the needs of non-traditional students seeking traditional and demanding academic challenges.

Institutional Characteristics. The Citadel is a coeducational, comprehensive, public, four-year institution whose primary undergraduate student body consists of approximately 2400 members of the Corps of Cadets, all of whom reside on campus. The primary service area for these students is regional, with approximately half of each freshman class coming from South Carolina. The Citadel, however, does draw undergraduate students from all parts of the United States and many foreign countries. The college offers a wide range of baccalaureate degree programs across five academic schools in the humanities, social and natural sciences, business administration, engineering, and education. These academic programs prepare graduates for a variety of careers; about half of these graduates enter business and the professions, a third or more enter the military and government service, and the remainder go directly into graduate and professional study. Many graduates choose to pursue professional or graduate degrees later in their careers.

Through its evening undergraduate and graduate programs, The Citadel serves a degree-seeking population of approximately 1,300. Meeting the needs of the Lowcountry in terms of instruction, public service, and research, including such initiatives as cooperative programs with other educational institutions, is an important part of The Citadel's mission.

Together, the Corps of Cadets, the Transfer Program, and The Citadel Graduate College enroll approximately 3,600 students, about three-fourths of whom come from South Carolina. In its educational programs, The Citadel acknowledges and endorses the teacher-scholar ideal, recognizing that the excellence of all of its academic programs is dependent upon the quality of its faculty. This ideal manifests through teaching and lecturing, researching, writing, publishing, and public service. The Citadel's faculty also address audiences beyond the College by sharing their knowledge with other scholars and with the public.

The Citadel Graduate Program's Mission/Purpose

An important component of a positive educational experience for students involves an intentional effort to meet their needs and offer service that underscores The Citadel's commitment to principled leadership.

Service: Creating a culture that values service, fosters mutual respect, and makes the student's needs the most important priority; implementing new technologies that enhance our services; and providing timely, efficient, and accurate information to all requests.
Performance: By ensuring a quality educational experience through administrative oversight of programs and the regular review of policies and procedures; conducting analysis of existing data and generating reports to identify patterns and trends within the undergraduate programs; creating research opportunities for students and faculty; and assisting departments with implementing creative delivery methods of academic programs.
Integration: By providing welcoming and rewarding experiences, online students and evening undergraduates, both past and present, feel a part of the larger Citadel community and play an important and significant role on campus.

Accreditation

The Citadel is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, masters, and specialist in education degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404- 679-4500 for questions about the accreditation of The Citadel. Standard inquiries about the institution, such as admissions, educational programs, educational policies and practices, etc. should be addressed directly to The Citadel and not to the Commission's office. This contact information is published exclusively for accreditation-related purposes.

Civil Engineering, Electrical Engineering, and Mechanical Engineering programs are accredited by the Engineering Accreditation Commission (EAC) of ABET; web address is http://www.abet.org. The Bachelor of Science in Computer Science is accredited by the Computing Accreditation Commission (CAC) of ABET, 415 North Charles Street, Baltimore, MD 21202. Telephone: 410-347-7700; web address is www.abet.org.

The Masters of Science degree in Project Management is accredited by the Global Accreditation Center (GAC), 14 Campus Blvd, Newton Square, PA 19073-3299. Telephone: 610-355-1601; FAX: 888-562-3564. The web address is https://www.pmi.org/global-accreditation-center.

The undergraduate program in Business and the program leading to the Master of Business Administration are accredited by the Association to Advance Collegiate Schools of Business (AACSB), 777 South Harbour Island Boulevard, Suite 750, Tampa, FL 33602-5730. Telephone: 813-769-6500; Fax: 813-769-6559. The web address is www.aacsb.edu.

The Bachelor of Science in Nursing degree at The Citadel is accredited by the Commission on Collegiate Nursing Education (CCNE). 655 K Street, NW, Suite 750, Washington, DC 20001. Telephone: 202-887-6791; Fax: 202-887-8476; Web address: www.ccneaccreditation.org.

Programs for the preparation of secondary teachers at the bachelor's level, for the preparation of secondary and special education teachers at the master's level, for the preparation of guidance counselors at the master's and specialist degree levels, and for the preparation of school superintendents at the specialist degree level are accredited by the Council for Accreditation of Educator Preparation (CAEP), 1140 19th Street, NW, Suite 400, Washington, DC 20036. Telephone: 202-223-0077. The web address is www.caepnet.org.

The Citadel's School Psychology Program has been granted full approval by the National Association of School Psychologists (NASP), 4340 East West Highway, Suite 402, Bethesda, MD 20814. Telephone: 301-657-0270; FAX: 301-657-0275. The web address is www.nasponline.org.

The Clinical Counseling program is accredited by the Masters in Psychology and Counseling Accreditation Council (MPCAC), 595. New Loudon Rd., #265, Latham, NY 12110. Telephone: 518-785-1980. The web address is http://mpcacaccreditation.org/.

The School Counseling Programs that offer a Master of Education in Counselor Education (Elementary or Secondary School Counseling Certification) are fully accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP), 500 Montgomery Street, Suite 350, Alexandria, VA 22314. Telephone: 703-535-5990. The web address is: https://www.cacrep.org/.

Full Fall Semester	
Date	**Description**
8/20/21	Payment for fall 2021 classes due in the Treasurer's Office (by 4:00pm)
8/24/21	College of Charleston joint program fall 2021 classes begin
8/25/21	Fall 2021 CGC classes begin for full semester
8/30/21	College of Charleston last day to add or drop a full semester class
8/31/21	CGC - Last day to add or drop fall 2021 full semester courses and receive a refund
9/07/21	Labor Day – Classes held for all students
9/08/21	Last day to request and Audit or Pass/Fail
10/29/21	College of Charleston - last day to withdraw with a grade of "W"
11/02/21	CGC - last day to withdraw with a grade of "W" from a full semester course
10/30/21	Deadline for filing applications for degree and certificate graduation in the Registrar's Office
11/19/21	CGC fall break begins
11/29/21	CGC classes resume
12/06/21	Last day of College of Charleston classes
12/08/21	Last day of classes for CGC. Last day to resolve graduate incomplete grades from previous semester
12/08/21	CGC exams begin
12/15/21	CGC exams end
12/23/21	The Citadel closes for the holidays

First Eight Weeks Session	
Date	**Description**
8/23/21	First 8-week classes begin
8/26/21	Last day to add/drop a first 8 weeks class
9/20/21	Last day to withdraw from first 8 weeks courses with a "W"
10/17/21	Last day of first 8 weeks classes

Second Eight Weeks Session	
Date	**Description**
10/18/21	Second 8 weeks classes begin
10/21/21	Last day to add or drop a second 8 weeks class
11/15/21	Last day to withdraw from second 8 weeks courses with a "W"
12/12/21	Last day of second 8 weeks classes

Full Spring Semester	
Date	**Description**
1/12/22	Spring 2022 CGC classes begin for full semester
1/17/22	Martin Luther King Jr. Holiday – no classes held
1/18/22	Last day to add or drop a course, or change sections
3/23/22	Last day to withdraw with a grade of “W”
4/10/22	Current students begin registration for fall 2022
4/26/22	Classes end
4/27-5/3/22	Final exams
4/30/22	Deadline for removal of incomplete grades from fall 2021 semester
5/4/22	Graduating students’ grades due by 10:00am
5/5/22	Remaining grades due by 10:00am.
5/7/22	Commencement

Purpose of the CGC Catalog

This catalog should not be construed as the basis of a contract between a student and The Citadel. Every effort is made to provide information in the catalog that is accurate at the time the catalog is prepared. However, information on regulations, policies, fees, curricula, courses, and other matters is subject to change at any time during the period for which the catalog is in effect.

Each program of study shall be governed by the program requirements in effect on the date of enrollment. If a student withdraws from the college or fails to maintain enrollment for one year and subsequently returns, the catalog requirements in effect at the time of return will prevail. Any exception to policies in this catalog, purported to have been made verbally to a student by an official of the college, are null and void unless documented with a signed statement from the college official authorized to make the exception.

This catalog is not an unchangeable contract but an announcement of the current policies. Implicit in each student's matriculation at The Citadel is an unwritten agreement to comply with the institution's rules and regulations, which The Citadel may modify to ensure the quality of its academic programs. When graduation requirements are changed, every effort will be made to insure that the new requirements can be met by the student's original expected graduation date. Nonetheless, each student is expected to read and be aware of the policies and procedures contained in the catalog in order to assure that admissions, registration, and graduation procedures are being followed. The college cannot assume responsibility for a student who does not comply with policy or procedure.

Admission and Enrollment Policies

Application and Admissions

The Citadel Graduate College seeks to enroll students whose motivation and educational backgrounds demonstrate a strong potential for success in the academic program of their choice. Specific entrance requirements are detailed in the degree program sections of this catalog. The application process at The Citadel Graduate College (CGC) is a two-part process. The applicant must be accepted into the program to which they seek a degree and must be accepted into the Citadel by the Citadel Graduate College. The Application consists of the following:

1. Completion of the online graduate application along with the non-refundable application fee;
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Other supplemental items, which may include official test scores (GMAT, GRE or MAT- see program requirements for acceptable test and test scores), as required by the program.
4. An official TOEFL score if English is not the native language. The minimum acceptable score of 550 paper-based, 213 computer-based, or 79 internet-based;
   *Applicants may be exempted from the TOEFL requirement if the applicant has a minimum of 2 years of course study, with a 3.0 or higher GPA, from an institution accredited by a United States accreditation entity, or the international equivalent from a university of recognized standing in a country in which all instruction is provided in English. Therefore, applicants with completed coursework from the U.S., Australia, Canada (except Quebec), New Zealand, Singapore, and the United Kingdom may be eligible for an exemption. All exemption requests must be made in writing to The Citadel Graduate College and be accompanied by the domestic transcripts showing the minimum requirements for a waiver have been met. Other exceptions may be considered on a case by case basis with written justification and supporting documentation submitted to the Graduate College for review.
5. Additional documentation as required by individual programs.

Our applicant are able to log into the Citadel's application portal to view a list of required supplemental items at any time.

The requirements for acceptance into specific programs and degrees are described in this catalog for each program. If accepted, official copies of all admissions documents must be sent directly to the Graduate College, and admission test scores (if required) must be submitted directly from the testing organization and current within five years of application.

Full acceptance is not granted until both the program and Graduate College's requirements are met. After acceptance by the Graduate College, any non- U.S. citizen must complete the application for an F-1 Visa.

Applicants must not have a record of conviction of a criminal offense showing poor moral character.

Upon acceptance, a letter is sent to the student identifying their faculty advisor. Students are encouraged to schedule an appointment for advising upon admission.

While each program has its own set of admissions requirements, ultimate authority to admit a student rests with the provost or her designee. Typically, departments and programs have the authority to determine admissions criteria and the provost intervenes only in unusual or extraordinary circumstances. However, the decision by the provost as the chief academic officer for the college is final.

Legal Presence and Residency

The State of South Carolina requires all state colleges and universities to verify each student's legal presence in the United States. As part of the admissions process, each student is required to submit a photocopy of a valid South Carolina Driver's License, birth certificate, or valid U.S. passport.

Joint Degree Programs

The Citadel participates in joint graduate degree and certificate programs with the College of Charleston in Computer Science, English, and History. Students routinely take courses at both institutions. Citadel students will register for all their Computer Science, English, and History at The Citadel, even when a particular course may be offered at the College of Charleston. Students who have declared a home institution must complete at least 33% of their coursework at that institution.

Veteran's Status as a Student on The Citadel Campus

The Citadel welcomes active duty, veterans, and their families to become part of our educational community. The Veteran Student Success Center hosts dedicated resources to assist our veteran and active duty students as they pursue their graduate education.

Admission and Student Categories

Graduate students may be admitted to the Citadel in one of the below categories.

Degree seeking - A graduate student is classified as degree seeking if they hold a bachelor's degree or an advanced degree, all admission requirements are met and the student has been admitted to a degree program.

Non-degree seeking - A graduate student is classified as non-degree seeking if they hold a bachelor's degree or an advanced degree but who, at the time of the application, does not plan to pursue a degree. This category authorizes the student to take no more than 8 hours total. Enrolling in courses does not imply admission to a degree program. Persons admitted to the non-degree student status who later wish to become degree seeking must file an application for the desired program and comply with the admission requirements stated above.

Senior Citizens - South Carolina Senior citizens, those who are age 60 and over and legal residents of the state, who wish to take courses tuition-free at The Citadel are eligible to enroll as a degree-seeking or non-degree seeking student on a space available basis. If a student wishes to pursue a degree, they must submit an application for the program of study and follow the appropriate admissions protocol. Up to 8 credit hours taken as a non-degree seeking student may be transferred into the program. Proof of age (SC Driver's License) is required at the time of application to be awarded free tuition.

Registration for classes as a senior citizen is allowed on a space available basis—the timeline for registration is the Monday prior to the start of each semester. Additionally, permission from the instructor may be needed to take a course as a non-degree student. Students are encouraged to request this permission ahead of time and forward the approval in writing to the Registrar's Office at registrar@citadel.edu.

International Students - An international student who applies to a graduate program at The Citadel must complete the following requirements after admission and before enrolling in classes:

1. Provide a completed Immigration Request form.
2. If applying for a student visa or transferring a student visa from another institution, must provide evidence of ability to meet all financial obligations while in graduate study at The Citadel by completing the Certification of Finances form prior to enrolling in courses.
3. International students may not register before full acceptance into a degree program and clearance from the International Student Director.

Provisional Status - Applicants who do not meet the minimum GPA and/or test score required by their program's admission criteria may be allowed to pursue coursework as a provisionally admitted student. The purpose of the provisional status is to monitor and support the students' academic success. Provisional status requires meeting specific academic standards in coursework. Refer to the degree program for provisional requirements.

Undergraduate Students Taking Graduate Courses Academic seniors with a cumulative Grade Point Average of at least a 3.20 may take up to a maximum of twelve hours of graduate courses through The Citadel Graduate College once they have reached senior status. As part of the maximum 12 hours of graduate credit, no undergraduate student may take more than six credit hours of graduate credit in any one term (Fall, Spring, Summer). These courses may provide students a head start on earning a graduate certificate or a graduate degree, but graduate courses may not be used to meet undergraduate degree requirements unless the student is formally admitted to an accelerated program and will NEVER be used in the computation of the undergraduate GPA. Students must have the permission of the Associate Provost. Undergraduate students accepted in an accelerated program at The Citadel may take and share up to twelve hours of structured graduate credit between the graduate and undergraduate majors.

Refer to specific accelerated program requirements for total hours permitted to share.

Admission Test

For any graduate programs that require submission of an official admissions test score, the test must be current within five years of the application. See the appropriate program for the type of test(s) required.

Applicants for some graduate programs in The Citadel who possess a master's or doctorate degree from an accredited institution may be eligible to waive the requirement to supply an admissions test score. The applicant must send the written waiver request and transcript showing a conferred Master's or higher degree, directly to the Graduate College.

Registration

Registration is conducted online through Lesesne Gateway. Students may not attend class until they are fully registered and listed on the class roster. Completed registrations will be honored on a first-come, first- served basis. Registration is not completed until all fees are paid. All fees are due by published calendar dates. Knowingly attending class without paying is an integrity violation and will result in dismissal from the college. Any changes in registration must be made prior to the end of the term's Drop/Add period. Information concerning class times and important registration dates can be found for each academic term online at: http://www.citadel.edu/root/registrar-courses.

Completion of coursework for a program in which a student has not been formally accepted does not imply admission into that program. A student may not pursue more than 8 credit hours of coursework for a program to which they have not been formally accepted.

Drop/Add and Withdrawals

Formal notice of intent to drop or withdraw from any class is necessary in all cases. The dates for dropping and withdrawing are listed in the term calendar at: http://www.my.citadel.edu/root/registrar-important-dates. To drop or add a course from the course schedule or to change sections within a course, a student must drop/add through Lesesne Gateway. Approval to drop a course and receive a refund after the published drop date is granted only under documentable extenuating circumstances (i.e. death in immediate family, serious medical issues, military deployment).

After the drop period, students who choose to withdraw must complete a withdrawal form available in the Registrar's Office or online. Course withdrawal means a student is withdrawing from a course after the drop/add date has passed. A grade of "W" will appear on the student transcript. The "W" does not affect the student's grade point average (GPA). Ceasing to attend a course does not constitute an official drop or withdrawal from the course. Any withdrawal request that occurs after the published withdrawal date must have a written justification for the late request to accompany the withdrawal form. Late withdrawal requests will be approved on a case-by-case basis by both the academic dean and the Associate Provost for Enrollment Management.

Advisement and the Planned Program

Upon acceptance into a degree program, a student is assigned an advisor. It is the student's responsibility to confer with this advisor at an early date and at periodic intervals to assure appropriate course selection and awareness of degree requirements. Degree candidates in some programs must file an official program of study. This program of study will be developed in consultation with the student's advisor and approved by the appropriate Dean or Department Head. This program of study is filed in the Registrar's Office and will be used in the degree audit process. It is a joint responsibility of the advisor and student to maintain the program of study in a current state. Modifications in a program of study can be accomplished with the written approval of the appropriate Dean or Department Head. Students who wish to select a new degree program must file an application and fee, meet all admission requirements of the new degree program, and be accepted into the new degree program before registration in the new program should occur. Completion of coursework for a program in which a student has not been formally accepted does not imply admission into that program. A student should pursue no more than 8 credit hours of coursework for a program to which they have not been formally accepted.

Audit Policy

A student may elect to audit a course for no credit. Permission to audit must be obtained from the school/department offering the course and a form must be submitted. Students must possess an undergraduate degree from an accredited college or university to audit a graduate level course. Students cannot switch from credit to audit status, or vice versa, after two class meetings. Auditors must apply and be accepted as a non-degree seeking student and are permitted to register for a class on a "space available" basis. The audit tuition is the same as the regular credit hour tuition.

Course Load

Graduate students are considered full-time if they carry nine (9) credit hours accumulated over any combination of courses during a full semester. The maximum credit any graduate student may carry is 17 credits per full semester (Fall, Spring, or Summer). For students enrolled in one mini term per semester, 4.5 credit hours will be considered full-time for the mini term. The semester hour load for students wishing to be classified as part-time is 4.5 credit hours during a full semester. Students holding Citadel graduate assistantships will be considered as full time if they are taking at least six (6) semester hours. Students enrolled in any combination of summer sessions may not exceed a maximum of five courses (15 credit hours, but 17 credit hours including lab courses). In addition, the maximum load allowed in an individual summer term is 7 credit hours (Full Summer, Summer I, Summer II, Mini term A, Mini Term B).

Summer School

The Citadel's Summer School is managed by the Associate Provost of Enrollment Management who has the responsibility for the coordination and administration of all aspects of The Citadel's graduate and undergraduate summer school programs.

All Summer School students are ultimately the academic and administrative responsibility of the Provost. Students residing in the barracks, regardless of academic status are the disciplinary responsibility of the commandant; all other students who are not members of the corps of cadets remain as stated above.

Course Substitution

Course substitutions in degree programs can only be authorized by the approval of the Head of the Department and Dean of the School. Forms to initiate this procedure are available in the Registrar's Office or online.

English Fluency Policy

In accordance with the laws of South Carolina, The Citadel ensures the English fluency of its teaching faculty. Should a student challenge the English fluency of a member of the faculty, standard procedures for student academic grievances will be followed. If a review committee is called for, the native language of one of the faculty members will not be English.

Readmission Policy

In exceptional and extraordinary circumstances, a graduate student can petition their academic school dean for reinstatement through a letter of appeal, but the granting of such appeals would be considered unusual and rare.

Transfer Credit

The Citadel Graduate College does permit up to 12 hours of transfer credit from other accredited higher education institutions and from military education and training recommended for credit by the American Council on Education. Exceptions may be granted by the Associate Provost of Enrollment Management. Only graduate credit hours in which grades of "B" or higher have been earned are transferable and applicable to degree requirements. Some programs allow fewer hours of transfer credit. Students should check the requirements for specific programs for the maximum number of credit hours that may be transferred into The Citadel.

To be transferred, credit hours must have been earned within six years of the date of admission to The Citadel. Students who desire to take a course at another institution for transfer while enrolled in CGC must obtain prior approval from their department head. Acceptance of transfer credits within the foregoing rules is the prerogative of the academic department or school.

Ordinarily, course work accepted for transfer must parallel course work available at The Citadel. However, where the head of the major department or Dean of the school feels that graduate course work not equivalent to courses at The Citadel will enhance the program, up to six semester hours of such credit may be acceptable. These will be part of the maximum allowable transfer hours for that program.

Graduate students applying for transfer credit will use the "Transfer Credit for Graduate Programs" form located online at http://www.my.citadel.edu/root/registrar-forms. Submit the form to the Registrar's Office through the student's advisor and department head with a copy of the course description from the catalog of the originating institution and the course syllabus. An official copy of the transcript for the institution where the credit was earned must be on file with the Graduate College.

Expenses & Financial Aid

Fee Payment

The Citadel Treasurer's Office is responsible for the collection of monies due to The Citadel. All fees are due and payable at the time of registration. If fees are not paid by the date on the term calendar, the student may be dropped from registered classes. Checks should be made payable to The Citadel and mailed to 171 Moultrie Street, Charleston, SC 29409. Fees may also be paid online with Visa, Mastercard, Discover or American Express. Electronic check payments are available at no charge. Deferred payment plans may be arranged in advance of a semester through the Citadel Tuition Payment Plan. Forms are available on the Treasurer's webpage at www.citadel.edu/treasurer. The Citadel reserves the right to adjust fees at any time to meet the current cost of operation. Fee schedules are published each semester on The Citadel's web page. All correspondence concerning fees, payments, and status of accounts should be directed to the Treasurer's office.

Financial Aid and Scholarships

The Office of Financial Aid and Scholarships administers student loan applications, grants, scholarships, and work-study programs. The office is located in Bond Hall, Room 138, and staff can be reached at (843) 953-5187 or by email at financial_aid@citadel.edu.

Forms and Deadlines

To apply for financial aid at The Citadel, all students should file a Free Application for Federal Student Aid (FAFSA) online at fafsa.ed.gov as soon as possible after October 1 each year. Additional information may be requested by the Office of Financial Aid and Scholarships. Students are responsible for checking their Lesesne Gateway accounts, completing all requested paperwork, and meeting financial aid requirements in a timely manner. Funds are limited, so late applications are considered for aid only if resources are still available.

FAFSA Priority Deadline Dates	
Academic year (fall and spring)	October 31
Fall only	October 31
Spring only	October 1
Summer	April 1

Applicants who have not completed all financial aid paperwork by June 30 should not expect to receive notification of awards prior to the beginning of fall semester. These applicants should be prepared to pay for their tuition, fees, and other costs by established fee payment deadlines. Students are reimbursed if subsequently determined to be eligible for financial aid.

Determining Financial Need

The amount of financial aid is based on the FAFSA form the applicant files after October 1 each year. This form solicits information about the family's current financial situation and produces an "expected family contribution" (EFC). Adjusted gross income data from tax forms are used, along with current asset information to determine family resources. Allowances are made for federal and state taxes, social security, employment (when both parents work), unusual medical and dental expenses, and family size. Other factors considered include any unusual expenses and the number of family members in college. In its simplest definition, financial need is the difference between what a student will pay to attend college and the expected family contribution, as determined by the need analysis. If costs exceed the amount of family contribution, then the applicant has "demonstrated" financial need.

Dependent or Independent Status

Federal student aid programs are based on the premise that parents have the primary responsibility of financing their children's education. However, independent students are not required to submit parental data. Students who fall into at least one of the following categories are considered independent:

- He/she is at least 24 years old by Dec 31 of the academic year.
- He/she is a graduate student.
- He/she is married.
- He/she is currently serving on active duty in the U.S. Armed Forces for purposes other than training.
- He/she is a veteran of the U.S. Armed Forces.
- He/she has children (or other dependents) and will provide more than half of their support.
- He/she was in foster care or deemed a dependent or ward of the court.
- He/she was an emancipated minor or in legal guardianship as determined by a court.
- He/she is determined to be an unaccompanied youth who is homeless or self-supporting and at risk of being homeless.

Federal Eligibility Requirements

Any student who is accepted for admission is eligible to request financial assistance. However, there are several general eligibility requirements a student must meet to receive federal financial aid:

1. A student must be admitted to The Citadel as a regular or provisional student.
2. A student must be a U.S. citizen, or a national or permanent resident.
3. A student may not receive aid if he or she is in default at any institution on any Federal Student Loan Program.
4. Students must be enrolled at least half-time. This is defined as 4.5 hours/semester for graduate students and six (6) hours/semester for undergraduate students. The only exception to this rule will be internships and practicums, which, given their somewhat unique composition and requirements, qualify a student for half-time status. This definition of half-time status is important to be eligible for financial aid and to qualify for in-school deferment on prior federal student loans.
5. A student may not receive aid if he or she owes a repayment at any institution on a Pell Grant, Supplemental Grant, or State Student Incentive Grant.

6. A student must have the minimum grade point average and must make satisfactory academic progress (SAP) toward a degree to continue to receive federal financial aid.
7. A graduate certificate student is not eligible for federal financial aid.

Types of Financial Aid

Please visit http://www.citadel.edu/finaid for detailed information about the various financial aid programs offered.

Satisfactory Academic Progress (SAP) for Financial Aid Recipients

In compliance with regulations governing federal and/or state financial aid programs, The Citadel is required to monitor each student to be certain that he or she is maintaining Satisfactory Academic Progress (SAP) in his or her course of study. SAP standards are separate from The Citadel's academic policies and are reviewed annually at the end of each spring semester.

How the Policy Works

Students who fail to meet published SAP standards will be ineligible to receive federal or state financial aid funds. However, those students failing to meet the minimum standards, as prescribed in this policy, may appeal their status by following outlined conditions.

Academic Year

The academic year for SAP determination is comprised of the fall, spring, and summer terms.

Minimum Standards

Unsatisfactory academic progress is defined as a failure to meet at least one of the following standards:

Graduate Students

1. Academic Progression
   a. Full-time students (enrolled in at least 9 hours/semester) must earn 18 credit hours in an academic year. Full-time students enrolled in one semester are considered to be meeting progression standards by earning at least 9 hours.
   b. Part-time students (enrolled in 4.5 hours/semester) must earn at least 66% of credit hours attempted in an academic year.
2. GPA – A student must earn at least a 3.0 grade point average.
3. Attempted credit hours cannot exceed 150% of the student's program length.

SAP Appeal

Students who have not met SAP have the opportunity to complete an appeal to regain eligibility for federal aid. Completion of this process does not guarantee reinstatement of federal financial aid. Students are responsible for full payment of tuition/fees regardless of financial aid status. It is also the student's responsibility to be aware of and to meet all fee payment and financial aid deadlines.

The SAP Appeal form is available on the Office of Financial Aid & Scholarship's webpage on The Citadel website at citadel.edu.

The SAP Appeal must include:
1. A completed SAP Appeal Form and Academic Improvement Plan approved by Academic Affairs and signed by both the advisor and the student, and
2. A letter written by the student that defines why the student failed to make SAP and what has changed that enables the student to meet SAP at the next evaluation.

If a student fails to either regain regular SAP eligibility after one semester or meet the conditions of the Academic Improvement Plan, the student is ineligible to receive federal financial aid (Title IV aid).

Appeal Deadlines

Completed appeal forms must be turned in two weeks before the end of the term for which the appeal is filed.

Grades

Only letter grades are given to evaluate a student's progress. The following definitions of letter grades are applicable:
"A" Superior
"B" Very Good
"C" Satisfactory; Acceptable
"D" Marginal; Passing
"F" Unsatisfactory
"P" Grade assigned in pass/fail courses that do not carry credit hours to designate passing performance
"S" Grade assigned in pass/fail courses that carry credit hours to designate that a grade of "A", "B" or "C" has been earned and credit has been awarded
"U" Grade assigned in pass/fail courses and in ENGL 101 to designate that a grade of "D" or "F" has been earned and no credit has been awarded
"W" Withdrawal from a course prior to the official deadline
"I" An Incomplete is awarded when course requirements have been very nearly met but for authorized reasons (illness, injury, family emergency, etc.) cannot be completed during the current semester.
"IP" Grade assigned for courses in which requirements are not expected to be met in one academic term. The grade of "IP" must be removed after two full semesters, or the "IP" becomes an "F." The summer session will not be considered a semester in this case. Under extenuating circumstances, an extension may be awarded by the Associate Provost for Academic Affairs with the recommendation of the instructor. The removal of the "IP" is the responsibility of the student. Students may not enroll in a course in which they currently have an "IP."

Students who are enrolled in audit courses will not receive financial aid for these courses.

Students can access midterm progress and semester grade reports online by using BANNER Self-Service through the Lesesne Gateway portal.

Taking or Repeating Courses to Improve the GPA/Grade Replacement

The regulatory definition for full-time enrollment status (for undergraduates) has been revised to allow a student to retake (one time only per previously passed course) any previously passed course. For this purpose, passed means any grade higher than an "F," regardless of any school or program policy requiring a higher qualitative grade or measure to have been considered to have passed the course. This retaken class may be counted towards a student's enrollment status, and the student may be awarded Title IV aid for the enrollment status based on inclusion of the class. A

student may be repeatedly paid for repeatedly failing the same course (normal SAP policy still applies to such cases), and if a student withdraws before completing the course that he or she is being paid Title IV funds for retaking, then that is not counted as his or her one allowed retake for that course. However, if a student passed a class once, then is repaid for retaking it, and fails the second time, that failure counts as their paid retake, and the student may not be paid for retaking the class a third time.

Transfer Credits
When evaluating SAP, a student's transfer credits, accepted by The Citadel toward completion of the student's degree program, will count as both credit hours attempted and hours earned.

Change of Major
Students that have changed majors and earn more than the maximum allowable number of credit hours toward graduation will be required to submit an SAP Appeal.

Second Degrees
Students that are completing a second degree will be required to submit an SAP Appeal to explain the reason behind earning more than 150% of allowable credit hours.

Financial Aid Funds Covered By SAP Standards
- Federal Pell Grant
- Federal Supplemental Educational Opportunity Grant (SEOG)
- Federal Work Study
- Federal Direct Loan, subsidized and unsubsidized
- Federal Direct PLUS Loan
- Federal Direct Graduate PLUS Loan
- South Carolina Teachers Loan
- South Carolina Career Changers Loan
- South Carolina Palmetto Fellows Scholarship
- South Carolina LIFE Scholarship
- South Carolina Need-Based Grant
- Other federal/state programs as required
- Some Private Educational Loans (as required by the lender)

Financial Aid Refund and Repayment Policy

Refunds
Refunds will be returned to the programs from which the student received aid. The Higher Education Act of 1998, Public Law 105-244, substantially changed the way funds paid toward a student's education are managed should the student, as a recipient of federal financial aid, withdraw from school. If a student who was awarded financial aid withdraws from school, he/she is eligible for the "institutionally-determined refund" that remains after the immediate repayments of the financial aid award to the Office of Financial Aid & Scholarships. This policy also applies to students on whose behalf a parent has borrowed a Title IV loan. Refunds are returned to the programs that awarded the student aid. In the case of federal financial aid, a statutory schedule is used to determine the amount of federal financial aid that has been earned based on the period the student was in attendance. Up through the 60% point, in each payment period of enrollment, a pro rata schedule is used to determine how much federal financial aid the student will receive. After the 60% point, in the payment period of enrollment, a student has earned 100% of the federal funds awarded for the period.

The percentage earned will be calculated based on the following schedule:	
Week 1	6 percent
Week 2	12 percent
Week 3	18 percent
Week 4	25 percent
Week 5	31 percent
Week 6	37 percent
Week 7	43 percent
Week 8	50 percent
Week 9	56 percent
Week 10	60 percent
Week 11-16	100 percent

For example, if a student has received $1,000 in Federal Financial Aid and withdraws within the first week of classes, that student will receive 6 percent ($60) of the aid award applied to total charges. The remaining $940 will be returned to the Federal Financial Aid programs in the following order:
1. Unsubsidized Student Loans
2. Subsidized Student Loans
3. Perkins Loans
4. PLUS Loans/Graduate PLUS Loans
5. Federal Grants
6. Other Assistance under Title IV

The refund and repayment provisions mandated by the federal government for federal aid recipients apply when a student receives financial aid funds and withdraws, drops out, takes an unapproved leave of absence, fails to return from an approved leave of absence, is expelled, or otherwise fails to complete the period of enrollment for which he or she was charged. The refund and repayment requirements DO NOT APPLY to a student who:
- Withdraws, drops out, or is expelled before his or her first day of class, or
- Withdraws from some classes, but continues to be enrolled in other classes, or
- Does not receive funds for the period in question. (Students whose parents received a PLUS Loan are considered to have received funds and so are covered for the refund and repayment requirements.)

Repayments
If a student's non-instructional educational expenses (allowances as prescribed below) incurred up to the time of withdrawal exceed the amount of cash disbursement, the student does not owe a repayment. If cash disbursed exceeds the non-instructional costs of education incurred up to the time of withdrawal, the student does owe a repayment. This repayment is the difference between costs incurred and the actual cash refund received. Non-instructional expenses are determined by calculating the percentage of room, board, books, supplies, travel, and personal expenses incurred during the portion of the term a student is enrolled. Off-campus board and personal expenses are prorated on a weekly basis. There is no proration of on-campus room charges. A percentage of books, supplies, and travel costs is allowed based on length of enrollment.

Student Aid Accounts to be Refunded and Repaid
Once the amounts to be refunded and/or repaid are determined, the aid programs from which the student received funds will be reimbursed in the following order:

1. Federal Direct/Stafford loans
2. Federal Perkins loans
3. Federal PLUS loans received on behalf of the student
4. Federal Pell Grants
5. Federal SEOG Grants
6. Other Title IV programs
7. Other federal, state, private, or institutional student financial assistance received by the student for which refunds are required
8. The student

Other Assistance

Vocational Rehabilitation Scholarships: This program provides for education and training if the student has a physical or mental disability that is a substantial handicap to employment and if there exists reasonable expectation that vocational rehabilitation services may lead to gainful employment. Additional information is available through the Department of Vocational Rehabilitation in the student's home state.

College Budget Plans: The Citadel Tuition Payment Plan (CTPP) allows all students and families to finance the cost of Tuition, Auxiliary Fees (Housing/Room/Board) and OneCard. The plan is offered as a service to the student, allowing the student to finance education and related costs over the period of a semester. To calculate the amount to include in the plan, students should subtract financial aid and any scholarships from their balance- and only place their uncovered expenses in the payment pan. There is a $50 enrollment fee per term. The plan is for 4 equal payments. Enrollment deadlines can be found on the Treasurer's web page at www.citadel.edu\treasurer. Failure to pay any outstanding balance by the end of the semester will result in a registration hold being placed on their account until the balance is paid off.

Veterans Services: Services are administered under the umbrella of student financial aid at The Citadel. Veteran services are intended to meet the needs of students receiving benefits under the following programs:

- Ch. 30—Montgomery GI Bill ®—Active Duty, Veterans
- Ch. 31—Vocational Rehabilitation
- Ch. 33—Post 9-11 GI Bill®
- Ch. 35—Dependents' Educational Assistance Program
- Ch. 1606—Montgomery GI Bill®—Selected Reserve

Due to the complexity of VA educational benefits, students are encouraged to contact The Citadel's Veterans Student Success Office well in advance of the beginning of the semester. Students who have already applied for benefits should submit a copy of their Department of Veterans Affairs Certificate Eligibility. In compliance with federal regulations, students are required to follow guidelines set by the Department of Veterans Affairs. VA Certification Policies and Procedures can be found on The Citadel's website under Veterans Services. Staff can be reached at 843-953-9824 or email at va_benefits@citadel.edu.

Refunds

No fees are refunded after the published drop deadline. This date is usually following two class meetings and is published in the term calendar ahttp://www.my.citadel.edu/root/registrar-important-dates. To obtain the appropriate refund, a student must drop the course via Lesesne Gateway. The Citadel Graduate College may authorize a refund for extenuating circumstances after the scheduled refund date if a formal appeal is made in writing to the Associate Provost for Enrollment Management. Extenuating circumstances are defined as a death in immediate family, serious medical issues, or military deployment. Registration, technology, infrastructure, and application fees are not refundable.

Academic Regulations and Procedures

Application for Resident Status for Tuition and Fee Purposes

Any student or prospective student who is uncertain about payment of in-state tuition and fees has the responsibility of securing a ruling from The Citadel by providing all relevant information on special application forms. These forms can be obtained from the Office of the Registrar, Bond Hall, Room 173, or online at http://www.citadel.edu/registrar/forms/. Completed forms must be returned to that office at least four to six weeks prior to registration for any semester or summer term for which the student is attempting to qualify for in-state tuition and fee rate.

Requirements for Graduation

In addition to the program requirements, the following requirements must be met for graduation.

The Citadel Principled Leadership Seminar

The Citadel Principled Leadership Seminar (LDRS 500) is an online seminar in which graduate students at The Citadel learn about principled leadership and the institution's core values – honor, duty, and respect. Participants focus on what it means to be a member of The Citadel community, and the application of core values as a guiding feature of one's place in life and in leadership within an organization. Students must complete LDRS 500 and the protection of minors module in their first two semesters of study at The Citadel. Students who fail to successfully complete LDRS 500 after two semesters will be placed on academic hold and will not be allowed to continue in their coursework until LDRS 500 is successfully completed.

Protection of Minors

The Citadel is committed to the safety of all individuals in its community. The College has particular concern for those who are potentially vulnerable, including minor children, who require special attention and protection. Our online training requirement establishes guidelines for those in the college community who may work or interact with individuals under 18 years of age, with the goal of promoting the safety and wellbeing of minors.

All degree-seeking graduate students (including those enrolled in graduate certificates) who enroll in Citadel course(s) are required to successfully complete our designated protection of minors training module at the beginning of their graduate program. Graduate students complete the training through their participation in LDRS 500. Students who have completed equivalent training in the last five years may provide a copy of their certificate of completion by uploading it through their Principled Leadership Seminar course – LDRS 500.

The Citadel Student Honor Code

Honor Code Statement: It is the responsibility of all community members to promote, abide by, and enforce the following honor code: "A Citadel student (e.g. graduate, undergraduate, or veteran) does not lie, cheat, steal, nor tolerate those who do."

It is the responsibility of all Citadel community members to promote, abide by, and enforce the following honor code. Every non-cadet student (which includes undergraduates, graduate students, day veterans, fifth-year students, and all active duty students) must uphold the honor code as well as The Citadel's Core Values of Honor, Duty, and Respect. Each student is required to represent him or herself honestly in all college business matters and on all documents. Each student does his or her own work and refrains from any form of academic dishonesty, including plagiarism and cheating. In personal conduct, each student acts in a professional and ethical manner and refrains from any form of disrespectful behavior to any other member of The Citadel community.

In addition to students enrolled in degree programs and certificates, or as part of a joint program with other institutions, this honor code is also applicable to transient students and cadets who enroll in courses during the summer.

Definition of Terms:
In general, four types of conduct fall under the honor code: lying, cheating, stealing, and the toleration of those who engage in any of these activities.

1) **Lying**. Defined as any attempt to deceive, falsify, or misrepresent the truth in any matter involving college business. This includes but is not limited to matters involving academic standing, participation in courses, financial information, or any false statements to faculty, staff, administrators, or university officials.

2) **Cheating**. Defined as taking or attempting to take, or otherwise procure intellectual property in an unauthorized manner; selling, giving, lending, or furnishing to any unauthorized person by a student enrolled in that course, material which can be shown to contain the questions or answers to any exam from any course offered at The Citadel. Academic Dishonesty also includes plagiarism, including fabricating, forging, or falsifying laboratory results or reports, or using work from other courses or from previous assignments for a current class.

The term cheating includes, but is not limited to: 1) the use of sources beyond those authorized by the instructor for written assignments; 2) the use of any unauthorized assistance in taking exams or quizzes; 3) the unauthorized acquisition of tests or other academic material belonging to a faculty or staff member or a student.

The term plagiarism includes, but is not limited to, the use of published or unpublished work of another person without full and clear acknowledgement. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic material.

3) **Stealing**. Defined as taking without authority, personal, government, or college property.

4) **Toleration**. Defined as the failure to report a case of lying, cheating, or stealing as defined above to the proper Honor Council authorities.

Honor Council Composition:
Faculty: Six members; one from each Academic School and one from the Library. Honor Council members are appointed by Graduate Council and serve three-year terms.

Students: Two members appointed by The Citadel Student Government Association.

Chair: A faculty member elected by members of the Council. Calls meetings, ensures procedures are followed, and is non-voting but casts the deciding vote in the event of a tie.

Training of Honor Council Members: All members are required to participate in a workshop/training seminar on Citadel Honor Code and procedures. Note: this training should be similar in nature to what cadet honor court members receive on procedures and content.

Procedures:
Any student, faculty member, or administrator may charge a student with an honor code violation. All accused students participating in Honor Council hearings are guaranteed the following rights during a hearing:

1. The right to a representative. In all college hearings and boards in which a student faces suspension, dismissal or expulsion, the student may be represented by up to two student representatives. Representatives must be students in the same academic program as the student facing disciplinary action, i.e., graduate students or evening undergraduate students may not serve as representatives for cadets, nor may cadets serve as representatives for graduate or evening undergraduate students. Representatives may participate in the board or hearing, including speaking directly to the board or hearing officer and questioning witnesses.
2. The right to question all witnesses. In cases where the complainant is an alleged victim, accommodations may be made.
3. The right to present evidence and call witnesses.
4. The right to decline making any statements or answering questions. In doing so, the Council may draw inferences, either positively or negatively, from such a refusal.
5. The right to an audio copy of the hearing upon written request.
6. The right to appeal the decision of the Honor Council.

Honor Council Hearing Procedural Guidelines:
All student conduct hearings shall be conducted according to the following guidelines except as provided below:

1. Hearings will be conducted in private.
2. The complainant, accused student, and their representatives, if any, shall be allowed to attend the entire portion of the hearing at which information is received (excluding deliberations). Admission of any other person to the hearing shall be at the discretion of the Honor Council Chair.
3. In hearings involving more than one accused student, the Honor Council Chair, at his or her discretion, may permit the hearings concerning each student to be conducted either separately or jointly.
4. The complainant and the accused student have the right to be assisted by a representative of his or her choosing. Representatives must be students in the same academic program as the student facing disciplinary action, i.e., graduate students or evening undergraduate students may not serve as representatives for cadets, nor may cadets serve as representatives for graduate or evening undergraduate students. Representatives may participate in the board or hearing, including speaking directly to the board or hearing officer and questioning witnesses.
5. The complainant and the accused student may arrange for witnesses to present pertinent information to the hearing. Witnesses will provide information to and answer questions from the Honor Council.
6. Pertinent records, exhibits, and written statements may be accepted as information for consideration during the hearing at the discretion of the Honor Council Chair.
7. All procedural questions are subject to the final decision of the Honor Council Chair.
8. After the portion of the hearing concludes in which all pertinent information has been received, the Honor Council shall determine whether the accused student is in violation of the Non-Cadet Honor Code.
9. The determination shall be made on the basis of a preponderance of the evidence--whether it is more likely than not that the accused student violated the Honor Code. Formal rules or process, procedure, and/or technical rules of evidence, such as those applied in criminal or civil court, are not used in these proceedings.
10. There shall be a single audio recording of all student conduct hearings (not including deliberations). Deliberations should not be recorded. The record shall be the property of The Citadel. If an accused student, with notice, does not appear for a hearing, the information in support of the charges shall be presented and considered even if the accused student is not present.

Hearing Protocol:

I. Introductions of the participants in the hearing
II. Chair or Administrator reviews hearing process and procedures
III. Chair or Administrator confirms charges and statements of responsibility
IV. Complainant/university calls witnesses
   A. Complainant asks questions of witnesses
   B. Board/Administrator asks questions of witnesses
   C. Accused student asks questions of witnesses
   D. All parties have opportunity to ask any additional questions
V. Accused student calls witnesses
   A. Accused student asks questions of witnesses
   B. Board/Administrator asks questions of witnesses
   C. Complainant asks questions of witnesses
VI. All parties have opportunity to ask any additional questions to accused student and/or complainant
VII. Deliberations by Board - Student will be notified of the decision in writing via university e-mail, with a hardcopy sent by registered mail, within three business days.

Range of Sanctions:
Note: This list is not exhaustive and may be modified to meet particular circumstances in any given case. All sanctions become a part of student's official record. Final appeals of Honor Council rulings are made to the President. The procedure for appeals is found in the campus policies and procedures manual.

1. Expulsion—Permanent forced withdrawal from The Citadel. Although this may be imposed as a first offense for serious cases, it is usually imposed after other disciplinary methods have not achieved desired results. In all cases in which expulsion is appropriate, the Associate Provost of Enrollment Management will submit documentation and findings to the President of the college for final disposition. The President may elect, at his discretion, to impose another penalty. The student will be notified of the President's decision, and that decision is final. A student's suspension or expulsion will be noted on his or her transcripts.
2. Dismissal—Forced withdrawal from The Citadel for two semesters.
3. Suspension—Forced withdrawal from The Citadel for one semester. In instances of both dismissal and suspension, students may not visit campus or participate in any campus-related activities. An exception to this rule is if the student is seeking clarification of his or her academic record and a physical visit to campus is required.
4. Reprimand—Written notice to student that behavior was unacceptable and that further issues could result in suspension or expulsion.
5. Restriction—Loss of privileges including but not limited to parking on campus, access to university facilities, etc.
6. Course Withdrawal—From the course in which the offense occurred.
7. Grade Change—Only for cases involving academic integrity. Such a sanction must be approved by the Provost or the Associate Provost of Enrollment Management.
8. Restitution—Reimbursement for physical damages or loss of property.

Appeals:
Grounds. An appeal does not provide a second forum in which to present the case. Appeals deal only with how a decision has been reached and not with the decision itself. The following are the exclusive grounds for all disciplinary and academic appeals:

1. That the hearing officer or board failed to provide due process;
2. That significant information has been discovered since the board or hearing, which would probably change the result, but which could not, in the exercise of due diligence, have been presented to the board or hearing.

A review by the President is not considered an entitlement but is within the scope of authority of the President. This is the final appeal at the institution and if applicable, all imposed sanctions are implemented after the President issues his decision.

Title IX at The Citadel

Title IX of the U.S. Education Amendments of 1972 ("Title IX") is a federal civil rights law that prohibits discrimination on the basis of sex in education programs and activities. The Citadel does not discriminate on the basis of sex in the education programs or activities that it operates including admissions and employment.

Under Title IX, discrimination on the basis of sex can also include sexual harassment which is defined as conduct on the basis of sex that satisfies one or more of the following:

1. An employee of the College conditioning the provision of education benefits on participation in unwelcome sexual conduct (i.e., quid pro quo); or
2. Unwelcome conduct that a reasonable person would determine is so severe, pervasive, and objectively offensive that it effectively denies a person equal access to the institution's education program or activity; or
3. Sexual assault (as defined in the Clery Act), dating violence, domestic violence, or stalking as defined in the Violence Against Women Act (VAWA).

Any person may report sex discrimination, including sexual harassment (whether or not the person reporting is the person alleged to be the victim of conduct that could constitute sex discrimination or sexual harassment), in person, by mail, by telephone, or by electronic mail, using the contact information listed for the Title IX Coordinator, or by any other means that results in the Title IX Coordinator receiving the person's verbal or written report. Such a report may be made at any time (including during non-business hours) by using the telephone number, electronic mail address, or by mail to the office address listed for the Title IX Coordinator. The following person has been designated to handle inquiries related to Title IX: Valerie Mercado, Title IX Coordinator; 171 Moultrie St, Bond Hall 192, Charleston, SC, 29409; 843-953-6881; vmercado@citadel.edu.

The Citadel Policy https://www.citadel.edu/root/title-ix provides information on The Citadel's grievance procedures, including how to report or file a complaint and how The Citadel will respond.

Inquiries can also be made to the Assistant Secretary. The Assistant Secretary contact information is U.S. Department of Education, Office of Postsecondary Education, 400 Maryland Avenue, S.W., Washington, DC 20202, Main Telephone: 202-453-6914.

Academic Standards

All students are expected to maintain high academic standards. In addition to the grade point average requirements for satisfying degree standards, the following policies set minimum guidelines for all graduate programs. Specific programs may establish more rigorous criteria for satisfactory progress. Students should carefully study the sections of this catalog pertinent to their degree program for statements about expectations, which may exceed these minimal criteria.

Any grade of "C" (ie. "C", "C+") is a warning that the individual is not performing at the level expected of graduate students; a grade of "F" is a clear statement of inadequate performance. Either a "C" or "F" grade calls into question the expectation of reasonable progress toward the degree. In order to maintain appropriate academic quality, the following policy applies to students enrolled at The Citadel:

1. If a student receives a grade of "F" in a graduate course, regardless of his or her status, the student will be terminated from the Citadel Graduate College. The student may appeal in writing to his or her Dean for reinstatement. If the student is

granted reinstatement status before the end of the drop/add period for the next academic term, he or she may register for that term.

2. If a student receives seven (7) or more credit hours of graduate course work with a grade of "C"or "C+" regardless of his or her status, the student will be terminated from the Citadel Graduate College. The student may appeal in writing to his or her Dean for reinstatement in the program. If a student is granted reinstatement status before the end of the drop/add period for the next academic term, he or she may register for that term.
3. Any student admitted to a graduate program who has earned or attempted twelve (12) hours of graduate credit must have a cumulative GPA of 3.0 or higher to continue in the program. If a student's GPA falls below a 3.0 any time after the completion of twelve (12) hours of graduate credit, the student must improve his/her GPA to a minimum 3.0 by the time he/she has completed nine (9) additional graduate credit hours. If the student achieves a minimum 3.0 while completing these nine (9) additional graduate credit hours, the standard of maintaining a 3.0 GPA begins again.

Some programs have stricter program requirements. Check with your program advisor for the standards for your program. Generally, a student can expect to receive a decision on an appeal within 10 working days. Students are encouraged to provide a courtesy copy of grievances and appeals to the CGC for record.

Catalog of Record

The catalog bearing the academic year in which the student enters The Citadel will be his or her catalog of record for academic program requirements.

Class Attendance

Regular attendance is required of all Citadel students, and the attendance record maintained by the instructor is official. In case of absences due to illness or other circumstances beyond their control, students should notify the instructor as soon as possible.

Online Course Attendance Policy

Distance education (online) students are subject to The Citadel's attendance policy. Attendance in a distance education (online) course is defined by activate participation. Logging into Canvas does not qualify as sufficient evidence of attending, as per federal financial aid guidelines, and nonattendance may affect financial aid and/or veteran's benefits. Completion of tests, submission/completion of assignments, and participation in discussion forums are activities used to document enrollment. Students must participate throughout the semester. Any student who does not participate over any 2 week period will be administratively dropped from the roll and the last date of attendance will be determined by participation of the student in class activities.

Comprehensive Examinations

The Citadel graduate programs vary in their exit requirements. While all degree programs require at least a 3.0 cumulative GPA (3.25 for Ed.S.) for graduation, some have an exit examination or exit project requirement. It is the student's responsibility to be aware of these standards.

Confidentiality of Student Records

The Citadel maintains and discloses information from student records in accordance with the provisions of the "Family Educational Rights and Privacy Act of 1974" (FERPA), as amended. This law requires that educational institutions maintain the confidentiality of student educational records. The Citadel accords its students all rights under the law. FERPA coverage applies to all educational records that contain a student's name, social security number, or other personally identifiable information, in whatever medium, to include electronic form. No one outside of The Citadel shall have access to nor will the institution disclose any information from a student's educational records without the written consent of the student except in compliance with the provisions of Federal and State law.

Educational records may be disclosed to personnel within the institution who have a legitimate educational interest, to parents of students who are dependents as defined by IRS standards, to persons or organizations providing students financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, or in an emergency, to persons in order to protect the health or safety of the student or others.

Within The Citadel community, only those members, individually or collectively, acting in the student's educational interests are allowed access to student educational records. These members include the Board of Visitors, Faculty, and personnel in the Offices of the President, Provost and Dean of the College, Associate Provost of Academic Affairs, Associate Provost of Enrollment Management, Registrar, and Vice President for Finance and Business Affairs. Directory information about a student may be disclosed at the discretion of The Citadel without the consent of the student unless the student has notified the Registrar within two weeks of the beginning of the academic year (fall semester) that the student refuses to allow the disclosure of such information. Any student desiring to keep directory information confidential must give notice at the beginning of each academic year and the notice is valid only for that year.

Course Cancellation

It occasionally becomes necessary to cancel a course. The Citadel reserves the right to cancel any course for which there is insufficient enrollment. This cancellation may be done without notice. Students affected by a course cancellation will receive due consideration and notification by the department offering the course. If no other satisfactory arrangements can be made, the student will receive a complete refund of all tuition and fees paid.

Degree and Certification Requirements

Specific requirements are detailed in the appropriate sections of the catalog. The general requirements include completing all specific program requirements and coursework while maintaining at least a "B" (3.0) GPA. Students should check the specific requirements of the program in which they are enrolled. State certification

requirements are determined by external agencies over which The Citadel has no control. It is the student's responsibility to meet these requirements, which are subject to legislative change. Advisors will assist students in staying current with these requirements and adjusting programs of study to reflect any change.

Earning a Second Master's Degree

The College permits a student to earn a second Citadel master's degree in a different program as long as no more than twelve credit hours in common course requirements are applied to the second master's degree. The Second Master's Degree must be significantly different in subject matter.

Professional Conduct

Responsibility for professional conduct rests with students as adult individuals and as members of The Citadel community. CGC students are expected to conduct themselves as the responsible adults they are. All members of the campus community are expected to use reasonable judgement in all aspects of campus life and activity and to show due concern for the welfare and rights of others. Students are expected to adhere to all federal, state, and local laws.

The Citadel protects freedom of action and speech, so long as the exercise of this freedom is not of an inflammatory or demeaning nature and does not interfere with the operation of the College. The Citadel's Conduct Policy prohibits the possession of drugs, destruction of property, making false statements of emergency situations, physical or verbal abuse, or harassment of any sort.

Students who violate the rules and regulations of The Citadel are subject to expulsion or lesser sanctions. These rules and regulations are published in "Regulations for Non-Cadet Students for Fall and Spring Semester And All Students, Including Cadets, for Maymester or Summer School," which can be found online at: http://www.citadel.edu/root/images/BOV/Policies/03-provost/3-107-regulations-for-non-cadets.pdf.

The Provost or her designee is responsible for administering the disciplinary conduct code for CGC students unless they reside in the barracks during Maymester and Summer School, in which case the commandant is responsible for discipline.

Grades

Only letter grades are given to evaluate a student's progress. No numerical symbol or percentage is fixed or assigned to the equivalent of any grade.

A: A grade of "A" represents work of a high quality. Four quality points are awarded for each credit hour.

B+: A grade of "B+" represents above average quality work. Three and one-half quality points are awarded for each credit hour.

B: A grade of "B" indicates average graduate work. Three quality points are awarded for each credit hour.

C+: A grade of "C+" indicates below average graduate work and is an unsatisfactory grade. Two and one-half quality points are awarded for each credit hour.

C: A grade of "C" is unsatisfactory. Two quality points are awarded for each credit hour.

P: A grade of "P" indicates work of acceptable, graduate- level quality. While it signifies work of "A" or "B" level, it carries no quality points and is awarded only for designated courses such as workshops, internships, etc.

F: A grade of "F" indicates that the minimum requirements have not been met. No quality points are awarded.

I: A grade of "I" represents work of satisfactory quality incomplete for authorized reasons. (See section below.)

W: A grade of "W" represents withdrawal from a course prior to the scheduled withdrawal deadline. No quality points are associated with the "W", and there is no academic penalty for the student.

IP: A grade of "IP" assigned for courses in which requirements are not expected to be met in one academic term. The grade of "IP" must be removed after two full semesters, or the "IP" becomes an "F." The summer session will not be considered a semester in this case. Under extenuating circumstances, an extension may be awarded by the Associate Provost of Enrollment Management with the recommendation of the instructor. The removal of the "IP" is the responsibility of the student. Students may not enroll in a course in which they currently have an "IP."

Grade of "I"

Incomplete "I" grades must be made up during the term following the recording of the grade. A grade of "I" received in the fall term must be made up by the end of the following spring term. A grade of "I" received in either the spring or summer term must be made up by the end of the following fall term. An extension of time not to exceed one additional term may be authorized for extenuating circumstances by the appropriate dean. Grades not made up within the authorized time limit will convert to a grade of "F," and such courses will be included in calculating the GPA.

Pass-Fail Courses

For certain courses, such as internships, practica, workshops, professional development courses, etc., a grade of pass or fail may be appropriate. Students taking courses of this nature need to discuss such arrangements with their advisor. Quality points will not be awarded for pass or fail work, and performance that is barely adequate (C+ or below) will not receive credit.

Cumulative Grade-Point Average

In addition to completing all specific program requirements, in order to remain in good academic standing, The Citadel Graduate College requires students to maintain a 3.0 GPA. Failure to maintain this GPA results in dismissal from that program. Should a student be enrolled in multiple programs or certificates, a cumulative GPA is not sufficiently accurate in determining a student's academic standing. In such cases, the standard used to determine their eligibility is the student's GPA in that particular program, not their cumulative GPA.

Graduation

The Citadel Graduate College is committed to making the graduation and commencement experience a special one for its students. The following policy outlines the procedures for applying

to graduate and participation in the annual CGC commencement ceremony. It is each student's responsibility to apply to graduate. There are three graduation dates each calendar year. There is a May graduation date at the end of the Spring period of instruction, an August graduation date at the end of the Summer period of instruction, and a December graduation date at the end of the Fall semester period of instruction. There is one commencement ceremony each calendar year, in May, following the Spring semester.

Graduation

1. Applications for graduation are available on Lesesne Gateway, via the Student Tab. Failure to apply by the deadline incurs a late fee, may delay receipt of the diploma, and may prevent the student from participating in the commencement ceremony.
2. The graduation date is the term in which the student completes all requirements. An incomplete grade is a delay in the completion of a requirement, and the posting of the final grade determines the completion of that requirement.
3. Do not select a graduation date until you plan to meet all requirements by that date as applications are processed and diplomas are ordered based on your graduation application. If the graduation date submitted is not met, a new application will be required along with applicable fee, and the diploma will need to be reordered.
4. To be recommended for a degree, students must satisfactorily complete the program requirements and non-program requirements for the degree. Students must be free from all financial indebtedness to The Citadel.
5. Students may apply for graduation and participate in commencement during the academic year in which they are completing their degree requirements.

Participation in the CGC Commencement Ceremony

1. Students must indicate on their application for graduation they intend to participate in commencement ceremonies. If a student does not confirm intent, they will not be permitted to participate in the ceremony.
2. All grade-point average (GPA) requirements have been met. The cumulative grade-point averages for graduate students must be at least 3.000.
3. Graduate students must be no more than 9 credit hours short of meeting degree requirements.
4. Students must properly wear official regalia for the commencement ceremony.
5. Students who complete all coursework and degree requirements during the summer session following that year's commencement exercises may participate in that ceremony or can decide to participate in the commencement ceremony the following year.
6. In some cases, students have completed their program requirements but are unable to participate in the commencement ceremony during the year they intended to graduate (e.g. military deployment, career relocation, or illness). In such cases, students may apply to graduate and participate in the next year's commencement ceremony. Students exceeding this one year of eligibility will not be allowed to participate in the CGC commencement ceremony.
7. Students who have earned a second master's degree within the same academic year will be recognized for both programs of study.
8. Children, parents, step-parents, or grandparents who are either graduates of the Corps of Cadets, the Veterans Program, or The Citadel Graduate College may present diplomas to their children, parents, step-parents, grandchildren or grandparents at the CGC commencement ceremony. The graduate must provide the CGC with their full name, relationship, and graduation year before the stated deadline and for approval.

Intellectual Property Policy Preamble

The Citadel has among its primary purposes teaching, research, and the expansion and dissemination of knowledge. Products of these endeavors include the development and use of intellectual property. It is the policy of the College that its faculty, staff, and students carry out their scholarly work in an open and free atmosphere that encourages publication and creation of such works without constraint but consistent with applicable laws and College policy. This policy will be in accord with the guidelines and criteria published in The American Association of University Professors' "Statement of Copyright" (Policy Documents and Reports. Ninth Edition, 2001, or subsequent editions).

Intellectual Property

Ownership of intellectual property will reside with the originator, whether a member of the faculty, staff, or a student, unless: (a) the property is created at the specific direction of the College; or (b) the originator has made exceptional use of College resources in creating it.

At the time when the work is directed by the College or at the time when the College makes exceptional resources available to the originator of intellectual property, the Provost and the originator will together determine ownership and will negotiate a written agreement concerning that property. These determinations will be made on a case-by-case basis.

Nondiscrimination Policy

The Citadel is committed to providing equal opportunities to men and women students in all campus programs, including intercollegiate athletics, in order to make The Citadel the best coeducational college in America.

This commitment requires that no discrimination shall occur in our admissions policies, academic programs or services, as well as employment practices on the basis of sex, race, color, religion or national origin. This policy is in accordance with Title IX of the Educational Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990 as amended. Inquiries concerning the application of Title IX and other nondiscrimination laws may be referred to The Citadel's Affirmative Action Officer and Title IX Coordinator, Bond Hall, Room 369, 171 Moultrie Street, Charleston, South Carolina, 29409, 843-953-6989, or the Assistant Secretary of Education, Civil Rights Division, US Department of Education, Washington, DC 20201-2516.

Repeating a Course

Courses may be repeated only under the following circumstances:

- No courses may be repeated once a grade of "B" or higher has been earned.
- If a class in which a "C+" or "C" was earned is repeated, it may be repeated only one time.
- If a course is repeated, the last grade of record is used to determine whether course requirements for graduation have been met.
- The hours may be used only once toward graduation.
- All courses, previously passed or repeated, will be figured in the student's GPA. No grade previously recorded is removed from the transcript.

Satisfactory Progress and Length of Academic Program

Unless otherwise stated, students are expected to complete all degree requirements within a six (6) year period from the time of registration for the first graduate course in that program. Students enrolled in the Ed.S. in School Psychology program have seven (7) years to complete the degree. Students enrolled in the MA in Psychology: Clinical Counseling degree program have a five (5) year limit. Requests for an extension must be initiated by the student to the appropriate Department Head, who is responsible for notifying the student of the decision. Department Heads will forward recommendations through the program extension form, provided by the Office of the Registrar, to their appropriate academic dean. Extension approvals must be on file in the Registrar's Office prior to application for graduation. If an extension is granted, a probationary extension for one year is authorized. At the completion of that year, an additional extension may be authorized (if necessary) contingent upon the student having made adequate progress. "Adequate Progress" is defined as completing graduate work in two of the three semesters (summer session counting as a semester) of the year of probation. An average grade of "B" (3.0) for that year is also required.

Pace of progression is the quantitative standard for Satisfactory Academic Progress. Graduate students must complete 67% of all courses attempted to remain in a graduate program.

At all levels, the department or school will be responsible for oversight of student progress and initiation of action related to unsatisfactory progress. It is the student's responsibility to be aware of courses that will not meet graduation time lines for satisfactory progress. Advisors should assist students with this calculation.

Student Academic Grievances

The academic grievance process of the college is reserved for the most serious alleged offenses. These matters deal not with differences of opinion, but with violations of due process; denial of individual rights; or unequal treatment/ discrimination based on sex, race, color, or national origin. Students who feel that they have an academic grievance are directed first to confer with the instructor or other individual(s) involved. Where this does not result in satisfaction or if this step is not feasible, the student should present the grievance in writing to the lowest appropriate level not involved in the grievance, department head or Dean.

If the student does not receive a response within a reasonable period of time, normally considered two weeks, a copy of the written grievance may be provided to the next higher academic level not previously involved in the grievance, i.e. the department head or the school Dean, with a request for assistance in resolving the grievance. A final appeal for satisfaction may be made to the Provost. The purpose of this process is to permit each level of the academic level of authority to have the opportunity to resolve the grievance satisfactorily. The Graduate College does not process academic matters. However, students are encouraged to provide a courtesy copy of grievances and appeals to the Associate Provost for Enrollment Management for record. The Associate Provost or her designee will monitor time lines and processes for compliance with procedure and will inform the appropriate level of the academic authority if procedure is not followed.

Student Appeal of Final Grade

A student will have three weeks from when final grades are released to begin this process.

1. The student presents his/her concerns in writing to the instructor and then discusses these concerns. The instructor will respond to the student within 3 business days. If the student's concerns are not resolved or if the instructor fails to respond within the allotted time, the student can proceed to the next step.

2. The student presents his/her concerns in writing to the department head. (In the event the instructor is the department head, then the dean will play this role, and if the instructor is a dean, then the Associate Provost of Operations will play this role.) The student then meets with the department head to discuss these concerns. The department head will respond to the student within 3 business days. If the student's concerns are not resolved or if the department head fails to respond within the allotted time, the student can proceed to the next step.

3. The student presents his/her concerns in writing to the dean. (If the student is uncertain of who the dean is, he/she should contact the Associate Provost who will direct the student appropriately.) The student then meets with the dean to discuss these concerns. If the student is not satisfied with the outcome of the discussion, the student will submit a grade appeal form and provide required material to the dean of the school within four weeks from when grades were released.

Examples that can lead to a grade appeal include:
a. The instructor has miscalculated a final grade.
b. The instructor has violated the grading policies outlined in the syllabus.
c. The instructor has violated a college or departmental policy or procedure.

4. The dean will form a grade appeal committee consisting of at least three (3) tenured or tenure-track faculty (two from the relevant academic department and one from outside the department). The dean will provide direction to the committee, including emphasizing the importance of maintaining the confidentiality of the process.

5. The dean may request materials as needed from the instructor regarding the grade appeal, including but not limited to grades, syllabus, and assignments, for the grade appeal committee.

6. The dean may request additional information from the student as needed for the grade appeal committee, as well as ask the student to craft a detailed letter about why he/she is appealing the grade. Note: The grade appeal committee does not interact with the student or

instructor. Any needed materials are to be gathered and disseminated by the dean.

7. The grade appeal committee submits its recommendation to the Associate Provost. Potential recommendations that may be forwarded include, but are not limited to:

a. Change of grade
b. Late Withdrawal
c. Change of grade to Pass/Fail option
d. Opportunity to repeat class at no cost
e. Appeal is denied

8. The Associate Provost will notify the student and instructor of the appeal decision within 15 business days of receipt of the grade appeals form. The names of the members of the grade appeal committee are not shared in the decision letter nor are they shared with the course instructor or the student.

Student Responsibility

The College and departments establish certain academic requirements that must be met before a degree is granted. Advisors, department heads, and Deans are available to help the student understand and arrange to meet these requirements, but the student is responsible for fulfilling them. If, at the end of a student's course of study, the requirements for graduation have not been satisfied, the degree will not be granted. For this reason, it is important for each student to be acquainted with all academic, financial, and administrative requirements within the prescribed deadlines and time limits.

Transcript

A transcript is a confidential document and is released only when students make a request online at www.citadel.edu/root/registrar-transcripts. The transcript fee is based on the method of delivery. Transcripts can be sent electronically, mailed, or picked up in the Registrar's Office. An official college transcript is one that is sent directly from The Citadel to the requestor. It bears the college seal, along with a date and official signature. Most colleges require the official record.

Transcripts sent from other colleges to The Citadel become the property of The Citadel and cannot be issued to the student as a third party.

Leave of Absence Policy

There are many reasons why graduate students could miss courses in a given academic year. These include medical reasons, military deployment, temporary changes in job status, or other reasons. In an effort to better identify students in these situations, along with providing a mechanism that grants a respite from the time limits for degree completion, a leave of absence policy has been created. This policy also excludes students who have not enrolled in courses in a given semester. Since they will be recognized as "on leave," these students will not be included in the list of students eligible to be contacted by Graduate College staff. The following outlines the parameters of The Citadel Graduate College's Leave of Absence Policy.

Leave Of Absence Request

Students who intend to take a pause from enrolling in courses for up to three semesters in a given academic year can communicate this to the Office of the Registrar through an online web form, available at http://www.citadel.edu/registrar-forms. Students may request a leave of absence for up to three semesters in an academic year (including summer, which constitutes a single term). Students with an approved leave of absence need not reapply for admission to the Graduate College unless the leave extends beyond three semesters in a given academic year. In such cases, they must request to reactivate their student record for their program of study using the form available on the Registrar's Office webpage mentioned above.

A leave of absence request should normally occur prior to the drop/add date. If the student's request is made after these deadlines, a reasonable and compelling explanation for the delay must accompany the request. In such cases, supporting documentation (e.g. medical, mental health, deployment, temporary job transfer) should be provided with the request. The decision to grant the leave of absence is at the discretion of the Associate Provost of Enrollment Management. Students who request a leave of absence after the drop/add date during the semester may be responsible for at least a portion of the tuition for the classes in which they are enrolled. In such cases, students should consult with the Treasurer's Office as well as the Office of Financial Aid to determine if their time away from campus impacts their student loan eligibility.

Student Services

Student Success Center

The Citadel's Student Success Center (SSC) provides a wide range of academic support services. Included among these are the enhancement of writing, mathematical, and reading skills; the general improvement of academic performance in all subject areas; and an emphasis on retention throughout The Citadel's academic community. In addition to individual and small-group tutorials held in the Center, the staff conducts requested workshops for both graduate and undergraduate classes.

In all of its activities, the Center strives to assure that its efforts are consistent not only with the mission statement of The Citadel, but also with the objectives of the academic departments and specific graduate programs. Although there may be an occasional exceptional situation in which it is appropriate to restrict the nature of the assistance that may be offered by the Center (e.g., because of specific program accreditation issues that might impact, say, a particular assignment), all students are encouraged to take advantage of the resources offered by the Student Success Center.

Disability Services

Services for Students with Disabilities. The SSC empowers students to manage challenges and limitations that may be characteristic of their particular disabilities. Our professionally trained staff provide students with exceptional services as they transition to college or continue their studies at The Citadel.

The office serves students with learning, physical, health, or psychiatric disabilities by managing the varying demands of The Citadel experience. In addition, to serving students, the staff assists The Citadel community in making programs, services, and activities accessible to everyone. The SSC provides services and academic accommodations for both graduate and undergraduate students with documented disabilities.

Office of Multicultural and International Student Services

Bridging together history, tradition & cultures within the Citadel Family and around the World, the Office of Multicultural and International Student Services enhances the undergraduate experience through co-curricular programs and culturally relevant services that are meant to empower students in their identity, build community, and help a diverse group of students find their individual and collective voices.

Veteran Student Success Center

The Citadel's Veteran Student Success Center provides an array of resources and support for veteran students and those still serving in the military, as well as their dependents. In addition to providing a physical space where students can gather, the center serves as an on-ramp to navigating and accessing military-related education benefits.

Our services are intended to empower veteran and military students at every point in their academic journey, whether they are new to The Citadel, pursuing post-graduate work or seeking to enter the workforce.

Class Ring

All graduate students graduating from degree programs are eligible for the Class ring. Graduate students may order their ring upon completion of all but the final two semesters of coursework/ internship and must possess an overall 3.0 GPA. To place a class ring order, contact the Alumni Center at (843) 953-7698. The Alumni Center will verify eligibility.

Parking

Ample and secure parking is available on campus for Graduate and Undergraduate on-campus students and all on-campus summer school students. All automobiles parked within The Citadel gates are required to have a parking decal. Using your @nation.citadel.edu email address to order and pay for your decal online at https://citadel.aimsparking.com/ and then pick it up in person at 208 Richardson. If you cannot order the pass online, come by the office and it will be billed to your student account. Two and three wheeled motorized vehicles may not be o perated on campus.

Recreation

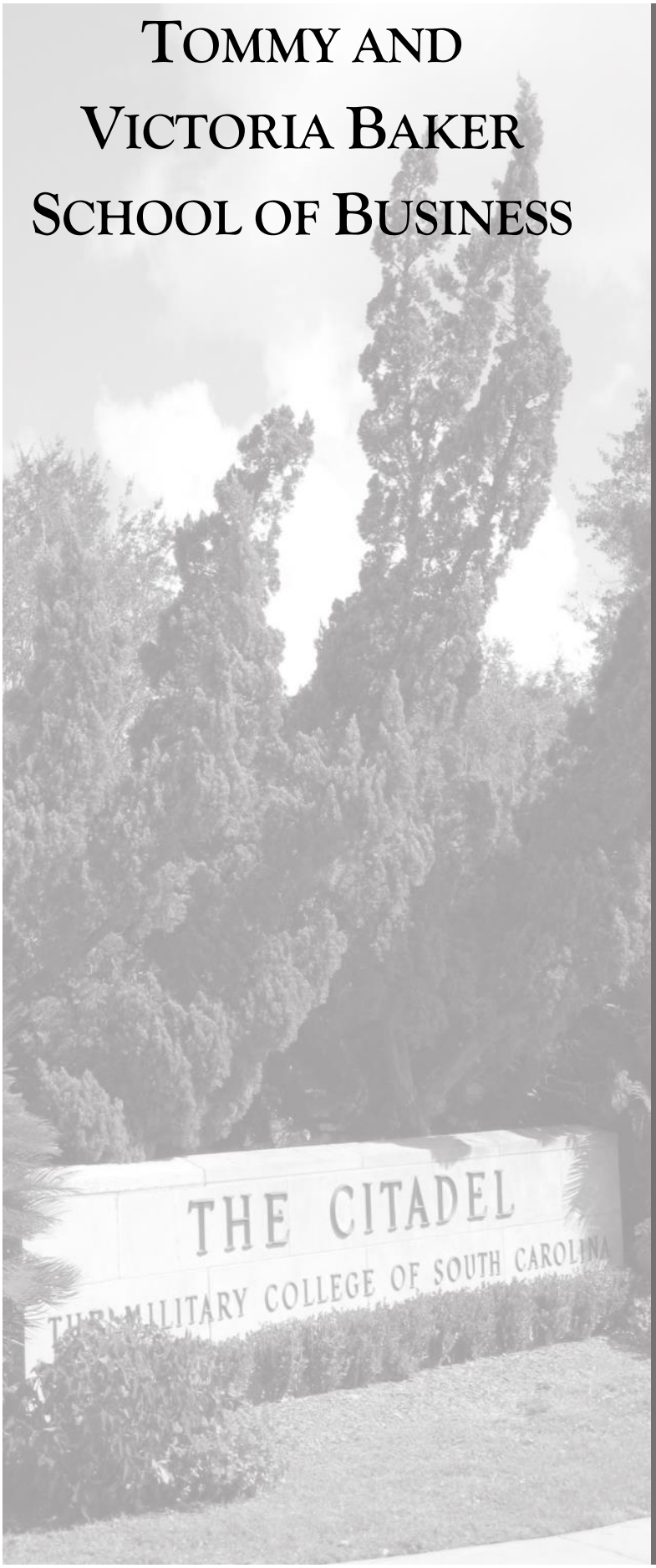
Campus recreational facilities are available to students enrolled in classes. These facilities include the Deas Hall weight room, racquetball courts, swimming pool, gymnasium, tennis courts, track, boating center, and The Citadel Beach House located on the Isle of Palms. Students must show The Citadel identification card to use these facilities.

Student Identification Cards

Students attending on-campus courses must obtain a Citadel identification card. This card is necessary for using The Citadel and area consortium libraries and accessing a number of buildings on campus.

Graduate Degree Programs

Tommy and Victoria Baker School of Business



Master of Business Administration

Master of Business Administration

Tommy and Victoria Baker School of Business
843-953-5056
www.citadel.edu/mba

Todd L. Drew, Ph.D.
MBA Program Director
tdrew@citadel.edu

Brian Tucker, M.F.A.
MBA Advisor
843-953-5257, btucker2@citadel.edu

Mission Statement

The mission of the Tommy and Victoria Baker School of Business is to educate and develop leaders of principle to serve a global community.

Admission Requirements

Requirements for admission to the program conform to the general regulations of The Citadel Graduate College (CGC) and the accreditation standards of the Association to Advance Collegiate Schools of Business (AACSB). Admission decisions are based on a holistic review of standardized test score performance, previous scholastic performance, professional experience, and professional recommendations. An undergraduate degree in business is not a requirement for admission. Applicants can be admitted to begin Fall, Spring, or Summer semester.

Provisional Admission: Applicants may be admitted provisionally if their GPA and/or GMAT/GRE score does not meet the minimum standard for admission. Students admitted provisionally are limited to take two courses and must receive a grade of "B" or better in each course to continue in the MBA program.

Applications to the MBA Program are accepted on a continual basis. Students may begin the program in any Fall, Spring, or Summer session. Applicants are encouraged to submit all materials as early as they can prior to the term in which they plan to begin.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Students are asked to provide documentation of an earned degree from an accredited institution with a competitive grade point average. A degree in business is not required for admission.
3. Submission of official scores from a valid (5 years old or less) Graduate Management Admissions Test (GMAT) or Graduate Record Examination (GRE). A waiver may be considered for applicants who already hold a graduate degree. MCAT or PCAT scores are acceptable for MD and PharmD applicants.
4. Submission of a resume detailing previous work experience.
5. Submission of two letters of recommendation from someone familiar with your academic and/or professional work. Professors, supervisors, and military personnel are acceptable references.

Program Requirements

Students are expected to complete all degree requirements within six years from the term of admission into the MBA program.

All admitted students follow the same curriculum, regardless of undergraduate education or work experience.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

CORE COURSES (30 credit hours)
BADM-702 MBA Essentials I
BADM-703 MBA Essentials II
BADM-705 Managing Innovation

BADM-719 Information Technology Management
BADM-728 Accounting for Executives
BADM-731 Quantitative Methods for Operations Management
BADM-734 Case Studies in Finance
BADM-735 Ethical Leadership and Org. Behavior
BADM-737 Strategic Marketing
MBA CAPSTONE COURSE*
*This course should be taken in the student's final semester.

ELECTIVE COURSES (Choose 2 courses, 6 credit hours)
BADM-713 **or** LDRS-723 Communications for Leadership
BADM-716 Legal and Ethical Decision Making
BADM-726 Financial Statement Analysis
BADM-750 Lecture in Business Administration
BADM-751 Lecture in Accounting
BADM-752 Lecture in Economics
BADM-753 Lecture in Finance
BADM-754 Lecture in Management
BADM-755 Lecture in Marketing
BADM-756 Financial Modeling
BADM-757 Personal Finance

BADM-762 Negotiation Strategies
BADM-764 Entrepreneurship
BADM-766 **or** LDRS 766 Human Resource Development
BADM-768 Human Resource Management
BADM-772 International Management
BADM-774 International Business
BADM-776 International Marketing
BADM-778 Investments

BADM-782 Advanced Topics in Information Technology
BADM-784 Business and Economic Forecasting
BADM-786 Contemporary Accounting and Advanced Problems
BADM-788 Consumer Behavior
BADM-790 Production/Operations Strategies for Manufacturing and Service Industries
BADM-792 Financial Markets and Institutions
BADM-795 Independent Study

Total Credit Hours: 36

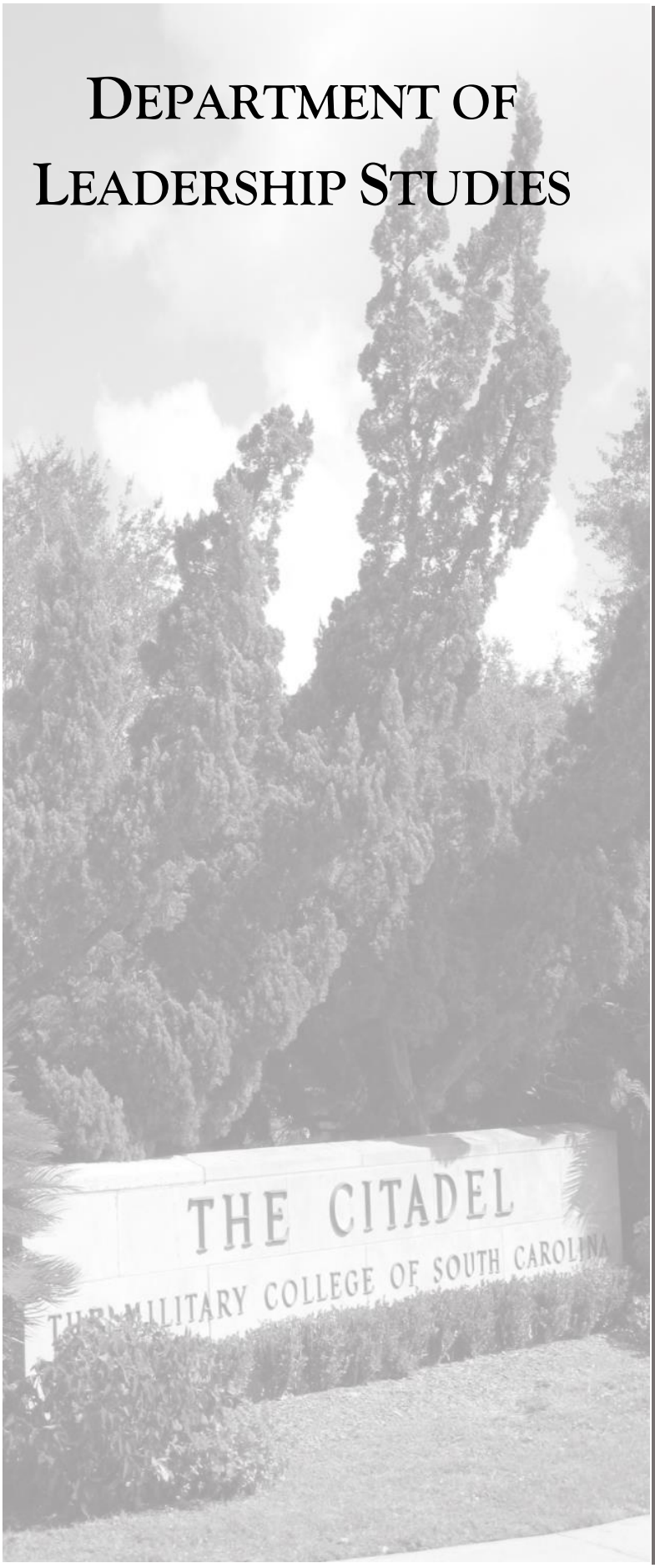
Descriptions of courses are listed in the last section of this catalog. For Special Topics courses (BADM750-755), descriptions may be found on the MBA website.

Course Load: Students are limited to 12 credit hours maximum each semester, but no more than 6 credit hours in each 8-week term. The Baker School of Business offers most MBA courses in an accelerated 8-week format. For students who work full-time, the recommendation is no more than 2 courses per semester. Students who have been admitted on a provisional basis are limited to six credit hours in their first semester.

Course Availability: All core courses are available each semester. Elective courses are not offered on a regular schedule. Courses are taught as hybrid (in person in the evening) or completely online. Students are encouraged to register early and strategize with their academic advisor. Once a class is full, students may place themselves on the waitlist and will be notified by email upon space availability.

Transfer Credit: A maximum of six credit hours of graduate credit from an accredited institution may be approved for transfer credit (except Capstone), provided: (1) the course is determined to be equivalent to one of the advanced or elective courses at The Citadel, (2) a grade of "B" or better was received in the course, and (3) credit was earned within the five years of admission into the MBA program at The Citadel.

Department of Leadership Studies



Master of Science in Leadership

Master of Science in Leadership

Department of Leadership Studies
843-953-8401
www.citadel.edu/root/ms-leadership
leadership@citadel.edu

Lani Connelly, Ph.D.
Faculty and Master's Program Advisor
Lconnell@citadel.edu

Mission Statement

The mission of The Citadel's Master of Science in Leadership program is to enhance the ability of students from any academic background and level of professional experience to perform effectively as principled leaders in their present or future leadership roles.

The Masters of Science in Leadership's integrated curriculum of interdisciplinary courses engage students in comprehensive understanding of leadership in applied contexts. Designed for individuals seeking to develop leadership competencies and enhance their career progression, the curriculum allows students to tailor the focus of their study toward individual and career interests.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) score. The minimum for the GRE is a verbal and quantitative combination of 290. The minimum for the MAT is a score of 396.**

Provisional Acceptance: Students who fail to meet the minimum score requirement may be ***provisionally accepted*** into the MS degree program provided all other admission requirements have been met. Students who score between 283-289 on the GRE or 380-395 on the MAT may be provisionally accepted provided all other admission requirements have been met. Upon completion of the first nine hours of degree coursework, with a minimum GPA of 3.25, the student is considered fully admitted.

The ***testing requirement can be waived* if an individual has successfully completed 9 hours in the Leadership Certificate or Military Leadership Certificate. Successful completion requires a 3.0 GPA average with no course grades below C+.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Required in first semester of program

Program Requirements

The Master of Science in Leadership is a 36 credit-hour program consisting of the following requirements:

A. Required Courses

1. Human Behavior (one course)
PSYC-570 Social and Cognitive Foundations of Interpersonal Behavior

2. Research Methods (Select one course)
PSCI-501 Research Methods in Social Science
EDUC-512 Data Collection and Analysis

3. Leadership (Eight core courses)
LDRS-710 Ethics, Values and Principled Leadership
LDRS-711 Leading Change: Organization Development and Transformation*
LDRS-712 Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS-714 Strategic Leadership, Vision, Mission and Contemporary Issues*
LDRS-715 Leadership Capstone Project
LDRS-722 Leadership in Organizations: Principles and Practices
LDRS-723 Leadership Communications

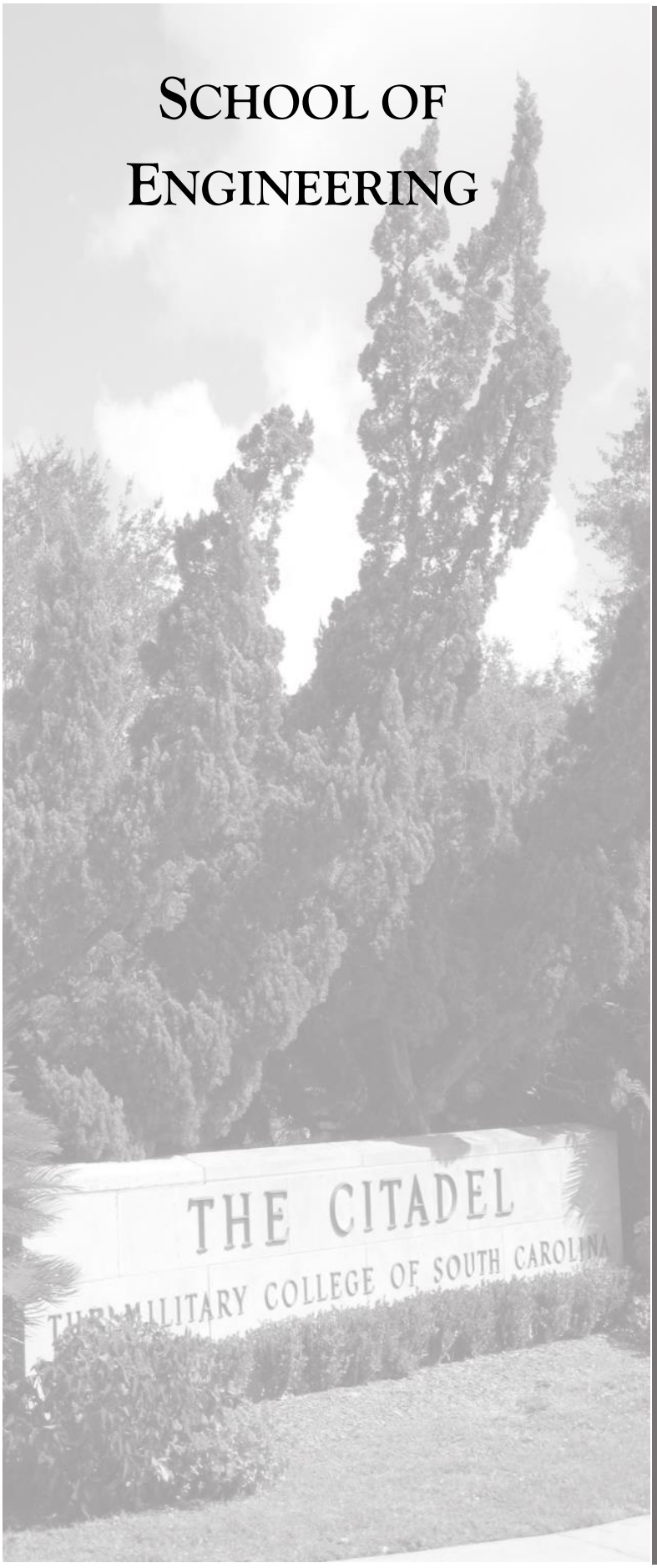
**LDRS 722 is a prerequisite for these courses.*

4. Electives (Select three courses)
PSYC-500 Human Growth and Development
PSCI- 500 Semlnar in Social Sciences
LDRS-716 Independent Study in Leadership
LDRS-733 Special Topics in Leadership Studies

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

School of Engineering



Master of Science

- Project Management
- Civil Engineering
- Electrical Engineering
- Mechanical Engineering

Master of Science in Project Management

School of Engineering
843-953-9811
www.citadel.edu/root/pmgt-admission

Dr. David Greenburg, dgreenbu@citadel.edu

Mission Statement

The mission of The Citadel's Master of Science in Project Management degree program is to equip a diverse professional student population with the applied knowledge, principled leadership, and management skills needed to effectively lead an organization's implementation of projects and multi-disciplinary initiatives.

Admission Requirements

Applicants will be admitted to the Master of Science in Project Management (MSPM) degree program on the basis of professional and scholastic achievement, along with their aptitude for graduate study and experience. Anyone holding a bachelor's degree from an accredited college or university is eligible for consideration. A technical or engineering background is not a requirement for admission.

All material must be received by the CGC office on or before the following dates to assure consideration to the MSPM degree program during the applicable semester.

Admission Term:	Materials Due:
Fall	August 1
Spring	December 1
Summer	April 1

For degree-seeking students:
1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Submission of resume detailing work experience or permission from Department Head.
4. Submission of two letters of recommendation.
5. Submission of a one-page letter of intent that provides concise, complete answers to the following questions.
   a. How has your experience prepared you for MSPM graduate courses?
   b. How will your knowledge, skills, and attitude contribute to the MSPM learning community?
   c. What do you hope to gain from the MSPM graduate program?

For non-degree seeking professionals wanting to take graduate- level courses to fulfill professional practice requirements:

1. Completion of the online graduate application along with the non-refundable application fee
2. Submission of an official transcript of the earned baccalaureate degree from an accredited college or university and transcripts from all postgraduate institutions attended.
3. Submission of resume detailing previous work Experience

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Master of Science in Project Management is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSPM program and must be approved by the department head. No transfer credit will be accepted for core courses. Any prerequisites for applicable courses must be met.

All degree candidates must:

1. Complete four core Technical Project Management (TPM) courses for a total of 12 hours:
   PMGT-650 Overview of Technical Project Management
   PMGT-651 Technical Project Planning and Scheduling
   PMGT-652 Applications of Quality Management
   PMGT-653 Technical Project Support and Operations
2. Complete two core Leadership courses for a total of 6 hours. Courses include:
   PMGT-671 Project Manager Leadership Development
   PMGT-672 Applied Leadership Concepts
3. Complete a plan of study totaling 12 hours of elective courses taken from the following areas. Elective courses can be taken in multiple areas of study or from one area of study.

Areas of Study

- Technical Program Management
  PMGT-660 Overview of Technical Program Management
  PMGT-661 The Legal and Contractual Aspects of Program Management
  PMGT-662 Program Development Strategies and Processes
  PMGT-663 Fundamentals of Agile Project Management
  PMGT-685 Decision and Risk Analysis
- Systems Engineering Management
  PMGT-680 Systems Engineering Management Fundamentals
  PMGT-681 Requirements Development and Management
  PMGT-682 System Verification and Validation
  PMGT-683 Systems Modeling and Integration
  PMGT-684 Human System Integration
  PMGT-685 Decision and Risk Analysis
- Organizational Leadership

BADM-713 **or** LDRS 723 Communication for Leadership
LDRS-722 Leadership in Organizations
BADM-735 Ethical Leadership & Organizational Culture
PMGT-690 Independent Study
PSYC-500 Human Growth and Development
PSYC-523 Statistics and Research Design
PSYC-570 Social and Cognitive Foundations of Interpersonal Behavior

- Civil and Environmental Engineering

CIVL-502 Sustainability
CIVL-504 Designing for Natural and Man Made Hazards
CIVL-506 Geographic Information Systems
CIVL-508 Monitoring of Civil Engineering Infrastructure
CIVL-575 Traffic Engineering Operations
CIVL-576 Roadway Geometric Design
CIVL-602 Water Quality Modeling and Management
CIVL-604 Aquatic Chemistry
CIVL-608 Structural Load and Systems
CIVL-610 Wood Design
CIVL-612 Urban Transportation Planning
CIVL-614 Ground Improvement
CIVL-616 Deep Foundations
CIVL-640 Urban Mobility Infrastructure Policy and Planning
CIVL-642 Public Health, Physical Activity, and Design of the Built Environment
CIVL-650 Special Graduate Topics in Civil Engineering
CIVL-655 Masonry Structural Design
CIVL-657 Intermediate and Matrix Structural Analysis
CIVL-711 Design of Masonry, Wood, and Cold Formed Steel Structure
CIVL-712 Design of Coastal Structures and Bridges
CIVL-713 Design of Civil Engineering Systems for Natural and Manmade Hazards
CIVL-714 Advanced Steel Design
CIVL-715 Advanced Reinforced Concrete Design
CIVL-716 Prestressed Concrete
CILV-718 Matrix and Finite Element Analysis
CIVL-719 Elastic Stability of Structures
CIVL-720 Dynamic Analysis of Structures
CIVL-721 Earthquake Engineering for Structural Engineers
CIVL-730 Geotechnical Earthquake Engineering
CIVL-731 Geo-environmental Engineering
CIVL-732 Advanced Soil Mechanics
CIVL-733 Advanced Foundation Design
CIVL-734 Soil Behavior
CIVL-740 Transportation Safety Engineering
CIVL-741 Travel Demand Forecasting

- Electrical and Computer Engineering

ELEC-605 Advanced Power Systems
ELEC-615 Spectral Analysis
ELEC-625 RF Systems
ELEC-635 Adaptive Signal Processing
ELEC-645 Data Communication Networks
ELEC-655 Digital Communications
ELEC-665 Fundamentals of Adv Energy Conservation
ELEC-675 Computer Architecture
ELEC-685 Digital Control System

- Mechanical Engineering

MECH-604 Advanced Mechanics of Materials
MECH-605 Materials and Process Selection
MECH-606 Fatigue and Fracture
MECH-611 Advanced Fluid Mechanics
MECH-615 Applied Heat Transfer
MECH-617 Advanced Topics in Renewable Energy Systems
MECH-618 Energy Sources, Technology, and Policy
MECH-619 Power Systems Engineering
MECH-625 Computer-Aided Design and Analysis
MECH-631 Advanced Engineering Mathematics
MECH-635 Computer-Aided Design and Analysis Laboratory
MECH-640 Manufacturing Process and Design
MECH-645 Machine Design
MECH-660 Advanced Design
MECH-650 Modeling, Analysis, and Control Systems
MECH-655 Advanced Mechatronics
MECH-670 Applied Aerodynamics
MECH-702 Theory of Elasticity
MECH-703 Theory of Plasticity
MECH-708 Mechanics of Composite Materials
MECH-711 Compressible Flow
MECH-722 Computational Methods in Thermal Sciences
MECH-750 Introduction to Modern Control Engineering
MECH-755 Nonlinear Control Engineering

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Transfer Credit: A maximum of two graduate courses (6 credit hours) may be transferred in from an accredited college or university. (except for PMGT 650, PMGT 651, PMGT 652, PMGT 653, PMGT 671, and PMGT 672), provided: (1) grades of "B" or better were earned; (2) credit was earned within six years prior to admission into MSPM program; and (3) courses are approved by the department head.

Requirements for Graduation: The degree of Master of Science in Project Management may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point average (GPA) of 3.0 or better on hours earned at The Citadel. Completion of additional credit hours of graduate coursework beyond the requirements for this degree will only be allowed for professional development, and may not be used to increase GPA to the 3.0 required for graduation.

Master of Science in Civil Engineering

School of Engineering,
843-953-5083
www.citadel.edu/root/cee-graduate-programs/master-of-science-civil-engineering

Dr. William J. Davis, P.E. (AL)
jeff.davis@citadel.edu

Mission Statement

The mission of The Citadel's Master of Science in Civil Engineering program is to provide a student-centered learning environment focused on advanced applied engineering techniques and professional skills development for principled leaders in the engineering community through a rigorous curriculum, emphasizing practical engineering concepts, strong professional values, and a disciplined work ethic.

Admission Requirements

Applicants will be admitted to the Master of Science in Civil Engineering (MSCE) degree program on the basis of professional and scholastic achievement, along with their aptitude for graduate study. Other qualities appropriate to graduate study are also considered. Anyone holding a bachelor's degree from an ABET accredited college or university is eligible for consideration. Other technical bachelor's degrees will be considered on a case-by-case basis.

Provisional Admission: Applicants may be admitted provisionally if their GPA does not meet minimum requirements. Students admitted provisionally are limited to take two civil engineering courses and must receive a grade of "B" or better in each engineering course to continue in the program.

All material must be received by the CGC office on or before the following dates to assure consideration to the MSCE degree program during the applicable semester.

Admission Term:	Materials Due:
Fall	July 20
Summer	April 15
Spring	December 1

For degree-seeking students:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an ABET accredited engineering program or approved alternative and transcripts from all postgraduate institutions attended.
3. Submission of two letters of recommendation.

For non-degree seeking professionals wanting to take graduate-level courses to fulfill professional practice requirements:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree an ABET accredited engineering program or approved alternative.
3. Permission of department is required.

Program Requirements

The Master of Science in Civil Engineering is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSCE program. Any prerequisites for applicable courses must be met.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

COURSE REQUIREMENTS

All degree candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest
2. Complete at least six courses (18 hours) from the civil engineering areas of study below.
3. Complete four courses (12 hours) in technical or non-technical classes listed below. Other electives will be considered on a case-by-case basis with approval from the department head.

Civil Engineering Areas of Study

Geotechnical Engineering

CIVL 730	Geotechnical Earthquake Engineering
CIVL 731	Geo-environmental Engineering
CIVL 732	Advanced Soil Mechanics
CIVL 733	Advanced Foundations Design
CIVL 734	Soil Behavior

Structural Engineering

CIVL 504	Designing for Natural and Manmade Hazards
CIVL 608	Structural Loads and Systems
CIVL 610	Wood Design
CIVL 655	Masonry Structural Design
CIVL 657	Indeterminate and Matrix Structural Analysis
CIVL 711	Design of Masonry, Wood & Cold Formed Steel Structures
CIVL 712	Design of Coastal Structures and Bridges
CIVL 713	Design of Civil Engineering Systems for Natural & Manmade Hazards
CIVL 714	Advanced Steel Design
CIVL 715	Advanced Reinforced Concrete Design

CIVL 716 Analysis & Design of Prestressed Concrete
CIVL 718 Matrix & Finite Element Analysis Members
CIVL 719 Elastic Stability of Structures
CIVL 720 Dynamic Analysis of Structures
CIVL 721 Earthquake Engineering for Structural Engineers

Transportation Engineering
CIVL 506 Geographic Information Systems
CIVL 575 Traffic Engineering Operations
CIVL 576 Roadway Geometric Design
CIVL 612 Urban Transportation Planning
CIVL 640 Urban Mobility Infrastructure Policy & Planning
CIVL 642 Public Health, Physical Activity, & Design of the Built Environment
CIVL 740 Transportation Safety Engineering
CIVL 741 Travel Demand Forecasting

Non-Technical Electives

Business Administration
BADM 702 MBA Essentials I
BADM 703 MBA Essentials II
BADM 713 or LDRS 723 Communication for Leadership
BADM 716 Legal & Ethical Environment for Decision Makers
BADM 735 Ethical Leadership and Organizational Behavior

Engineering Leadership and Program Management
PMGT 650 Overview of Tech Project Management
PMGT 651 Technical Project Planning & Scheduling
PMGT 652 Applications in Quality Management
PMGT 653 Tech Project Support & Operations
PMGT 661 The Legal & Contractual Aspects of Program Management
PMGT 671 Project Manager Leadership Development
PMGT 672 Applied Leadership Concepts

Leadership
LDRS 710 Ethics, Values and Principled Leadership
LDRS 711 Leading Change: Organization Development and Transformation
LDRS 712 Leading Teams: Coaching, Culture, Diversity, & Globalization
LDRS 714 Strategic Leadership, Vision, Mission & Contemporary Issues
LDRS 722 Leadership in Organizations

Total Credit Hours: 30

Transfer Credit: A maximum of two graduate courses (6 credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSCE program, and (3) each course has been approved by the department head. A maximum of five courses (15 credit hours) may be transferred in from Clemson University, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSCE program, and (3) each course has been approved by the department head.

Master of Science in Electrical Engineering

Department of Electrical and Computer Engineering
843-953-5057
http://www.citadel.edu/root/ece

Dr. Mark McKinney,
mckinney@citadel.edu

Mission Statement

The Master of Science in Electrical Engineering program is designed for students seeking advanced engineering techniques and professional development skills in the field of electrical engineering. Our goal is to provide both recent graduates and professionals in the engineering community with a rigorous curriculum containing theoretical and practical engineering concepts for building additional expertise in a high-paced technological society.

Admission Requirements

Applicants will be admitted to the Master of Science in Electrical Engineering (MSEE) degree program on the basis of professional and scholastic achievement, along with their aptitude for graduate study. Other qualities appropriate to graduate study are also considered. Anyone holding a bachelor's degree from an ABET accredited college or university is eligible for consideration. Other technical bachelor's degrees will be considered on a case-by-case basis.

For degree seeking students:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an ABET accredited engineering program or approved alternative and transcripts from all postgraduate institutions attended.
3. Submission of official copy of Graduate Record Examination (GRE) score. Admission test must have been taken within the last five years. The GRE requirement can be waived if applicant has a previously earned master's degree.
4. Submission of two letters of recommendation.

For non-degree seeking students:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an ABET accredited engineering program or approved alternative.
3. Permission of the department head or program manager.

Program Requirements

The Master of Science in Electrical Engineering is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSEE program. Any prerequisites for applicable courses must be met.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All degree candidates must:

1. File a plan of study outlining the intended areas of interest and approved by the program director.
2. Complete at least six courses (18 hours) from the electrical engineering (ELEC) areas of study below.
3. Complete four courses (12 hours) in technical or non-technical classes listed below. Other electives will be considered on a case-by-case basis with approval from the department head.

CORE COURSES

Computer Engineering

ELEC 635	Advanced Signal Processing
ELEC 645	Data Communications Networks
ELEC 655	Digital Communications
ELEC 675	Computer Architecture

Electrical Engineering

ELEC 605	Advanced Power Systems
ELEC 615	Spectral Analysis
ELEC 625	RF Systems
ELEC 650	Special Topics in Electrical Engineering
ELEC 665	Advanced Energy Systems Engineering
ELEC 685	Digital Control Systems

NON-TECHNICAL ELECTIVES (no more than 12 credit hours)

Business Administration

BADM 702	MBA Essentials I
BADM 703	MBA Essentials II
BADM 713 **or** LDRS 723	Communication for Leadership
BADM 716	Legal and Ethical Environment for Decision Makers
BADM 735	Ethical Leadership and Organizational Behavior

Engineering Leadership and Program Management

PMGT 650	Overview of Tech Project Management
PMGT 651	Technical Project Planning & Scheduling
PMGT 652	Applications in Quality Management
PMGT 653	Tech Project Support & Operations
PMGT 661	The Legal and Contractual Aspects of Program Management
PMGT 671	Project Manager Leadership Development
PMGT 672	Applied Leadership Concepts
PMGT 680	Systems Engineering Management Fundamentals
PMGT 681	Requirements Development and Management
PMGT 682	System Verification and Validation
PMGT 683	Systems Modeling and Integration
PMGT 684	Human System Integration
PMGT 685	Decision and Risk Analysis

Leadership

LDRS 711	Leading Change: Organization Development and Transformation
LDRS 712	Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS 713	Leadership Self-Appraisal, Development & Critical Thinking
LDRS 714	Strategic Leadership, Vision, Mission & Contemporary Issues

Total Credit Hours: 30

Transfer Credit: A maximum of two courses (six credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSEE program, and (3) each course has been approved by the department head. A maximum of five courses (15 credit hours) may be transferred in from Clemson University, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSEE program, and (3) each course has been approved by the department head.

Course Availability: The courses will be offered based on student preferences and overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course offerings will be based on minimum class size enrollment. The Electrical and Computer Engineering Department will continually monitor student interest to expedite completion of your program of study.

Transfer Credit from The Citadel: A maximum of 12 hours may be transferred from one Citadel graduate degree program where appropriate, provided that core degree requirements are met.

Grading: All students are subject to the Academic Standards section under Policy Information of The Citadel Graduate College catalog.

Requirements for Graduation: The degree of Master of Science in Electrical Engineering may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point average (GPA) of 3.0 or better on hours earned at The Citadel. Completion of additional credit hours of graduate coursework beyond the requirements for this degree will only be allowed for professional development, and may not be used to increase GPA to the 3.0 required for graduation.

Accelerated Master of Science in Electrical Engineering

Department of Electrical and Computer Engineering
843-953-5057
http://www.citadel.edu/root/ece

Dr. Mark McKinney,
mckinneym@citadel.edu

Mission Statement

The Accelerated Master of Science in Electrical Engineering program is designed to provide Citadel undergraduate students an accelerated route to obtain a Master's degree in Electrical Engineering. The purpose of this program is to offer advanced undergraduate students the opportunity to begin taking graduate-level courses during their senior year, and have those courses be applied toward an MS in Electrical Engineering degree.

After earning a Bachelor's degree, students in this program will continue their graduate course work until completing the requirements for the MS in Electrical Engineering program. It is expected that students in this program would complete the requirements for both the Bachelor's degree and the Master's degree in about 5 years. Undergraduates in this program will acquire a broader and deeper education in electrical engineering through additional advanced coursework. An advanced degree in electrical engineering can provide employment opportunities that the Bachelor's degree alone cannot provide. This program is for students seeking advanced engineering techniques and professional development skills in the field of electrical engineering.

Admission Requirements

The program is available to Citadel undergraduate students majoring in electrical engineering. Students interested in this program should apply during their junior or senior year. However, students are encouraged to apply by the end of their junior year to help ensure that they have the full subsequent year, including the summer, to begin taking courses for graduate credit. This program is not available to undergraduates enrolled at other institutions, or those who have completed a Bachelor's degree or advanced degree at another institution.

1. Complete and return an online application form along with the non-refundable application fee to The Citadel Graduate College.
2. Undergraduate GPA of 3.2 or higher in the B.S. in Electrical Engineering degree program at The Citadel.
3. Senior (1A) classification.
4. Submission of a one-page letter of intent that provides concise description of your post BSEE graduation plans.
5. Approval of Electrical and computer engineering Department Head.

Program Requirements

Program requirements for the Accelerated Master of Science in Electrical Engineering are identical to that of the MSEE program. A student enrolled in the Accelerated Master's Program can register for up to two graduate level courses during the summer and one graduate level course during each of the fall and spring semesters. Undergraduate students enrolled in graduate classes will be held to The Citadel Graduate College policies in those classes, including Academic Standards, Grades, and Attendance. Cadets in graduate classes will continue to be subject to the honor system as prescribed by "The Honor Manual of the South Carolina Corps of Cadets." Following successful completion of the requirements for the Bachelor's degree, students would be classified as graduate students by The Citadel Graduate College and follow all of their policies and procedures.

At the discretion of the graduate program director and the student's undergraduate major dean/department head, the student may have up to two courses, or six credit hours, waived from their undergraduate major degree requirements for completing graduate level courses with a grade of B or higher.

The Master of Science in Electrical Engineering is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSEE program. Any prerequisites for applicable courses must be met.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)

All degree candidates must:

1. File a plan of study outlining the intended areas of interest and approved by the program director.
2. Complete at least six courses (18 hours) from the electrical engineering (ELEC) areas of study below.
3. Complete four courses (12 hours) in technical (ME, CE, EE, CS) or nontechnical classes below.

ELECTRICAL ENGINEERING AREAS OF STUDY

Computer Engineering

ELEC 635	Advanced Signal Processing
ELEC 645	Data Communications Networks
ELEC 655	Digital Communications
ELEC 675	Computer Architecture

Electrical Engineering

ELEC 605	Advanced Power Systems
ELEC 615	Spectral Analysis
ELEC 625	RF Systems
ELEC 650	Special Topics in Electrical Engineering
ELEC 665	Advanced Energy Systems Engineering
ELEC 685	Digital Control Systems

NON-TECHNICAL ELECTIVES
(no more than 12 credit hours)

Business Administration

BADM 702 MBA Essentials I
BADM 703 MBA Essentials II
BADM 713 or LDRS 723 Communication for Leadership
BADM 716 Legal and Ethical Environment for Decision Makers
BADM 735 Ethical Leadership and Org. Behavior

Engineering Leadership and Program Management

PMGT 650 Overview of Tech Project Management
PMGT 651 Technical Project Planning & Scheduling
PMGT 652 Applications in Quality Management
PMGT 653 Tech Project Support & Operations
PMGT 661 The Legal and Contractual Aspects of Program Management
PMGT 671 Project Manager Leadership Development
PMGT 672 Applied Leadership Concepts
PMGT 680 Systems Engineering Management Fundamentals
PMGT 681 Requirements Development and Management
PMGT 682 System Verification and Validation
PMGT 683 Systems Modeling and Integration
PMGT 684 Human System Integration
PMGT 685 Decision and Risk Analysis

Leadership

LDRS 710 Ethics, Values and Principled Leadership
LDRS 711 Leading Change: Organization Development and Transformation
LDRS 712 Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS 714 Strategic Leadership, Vision, Mission and Contemporary Issues
LDRS 722 Leadership in Organizations

Total Credit Hours: 30

Transfer Credit: A maximum of two graduate courses (six credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSEE program, and (3) each course has been approved by the department head. A maximum of five courses (15 credit hours) may be transferred in from Clemson University, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSEE program, and (3) each course has been approved by the department head.

Course Availability: The courses will be offered based on student preferences and overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course offerings will be based on minimum class size enrollment. The Electrical and Computer Engineering Department will continually monitor student interest to expedite completion of your program of study.

Transfer Credit from The Citadel: A maximum of 12 hours may be transferred from one Citadel graduate degree program where appropriate, provided that core degree requirements are met.

Requirements for Graduation: The degree of Master of Science in Electrical Engineering may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point average (GPA) of 3.0 or better on hours earned at The Citadel. Completion of additional credit hours of graduate coursework beyond the requirements for this degree will only be allowed for professional development, and may not be used to increase GPA to the 3.0 required for graduation.

Master of Science in Mechanical Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate-programs/master-of-science-mechanical-engineering

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

Mission Statement

The mission of The Citadel's Master of Science in Mechanical Engineering program is to provide a student-centered learning environment focused on advanced applied engineering techniques and professional skills development for principled leaders in the engineering community through a rigorous curriculum, emphasizing practical engineering concepts, strong professional values, and a disciplined work ethic.

Admission Requirements

Applicants will be admitted to the Master of Science in Mechanical Engineering (MSME) degree program on the basis of professional and scholastic achievement, along with their aptitude for graduate study. Other qualities appropriate to graduate study are also considered. Anyone holding a bachelor's degree from an ABET accredited college or university is eligible for consideration. Other technical bachelor's degrees will be considered on a case-by-case basis.

Provisional Admission: Applicants may be admitted provisionally if their GPA does not meet minimum requirements. Students admitted provisionally are limited to take two mechanical engineering courses and must receive a grade of "B" or better in each engineering course to continue in the program.

All material must be received by the CGC office on or before the following dates to assure consideration to the MSME degree program during the applicable semester.

Admission Term:	Materials Due:
Fall	July 20
Spring	December 1
Summer	April 15

For degree-seeking students:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an ABET accredited engineering program or approved alternative and transcripts from all postgraduate institutions attended.
3. Submission of official copy of Graduate Record Examination (GRE). Admission test must have been taken within the last five years.
4. Submission of two letters of recommendation.

For non-degree seeking professionals wanting to take graduate-level courses to fulfill professional practice requirements:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree an ABET accredited engineering program or approved alternative.
3. Permission of department is required.

Program Requirements

The Master of Science in Mechanical Engineering is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSME program. Any prerequisites for applicable courses must be met.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Graduation Requirements (Course Requirements)

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete at least six courses (18 hours) from the mechanical engineering areas of study below.
3. Complete four courses (12 hours) in technical or non-technical classes listed below. Other electives will be considered on a case-by-case basis with approval from the department head.

CORE COURSES

- **Composites Engineering**
  - MECH 604 Advanced Mechanics of Materials
  - MECH 605 Materials and Process Selection
  - MECH 606 Fatigue and Fracture
  - MECH 702 Theory of Elasticity
  - MECH 703 Theory of Plasticity
  - MECH 708 Mechanics of Composite Materials
- **Aeronautical Engineering**
  - MECH 631 Advanced Engineering Mathematics
  - MECH 611 Advanced Fluid Mechanics
  - MECH 670 Applied Aerodynamics
  - MECH 771 Compressible Flow
  - MECH 772 Computational Methods in Thermal Sciences
- **Manufacturing Engineering**
  - MECH 625 Computer-Aided Design and Analysis
  - MECH 635 Computer-Aided Design and Analysis Laboratory
  - MECH 640 Manufacturing Process and Design
  - MECH 645 Machine Design
  - MECH 660 Advanced Design

- **Power and Energy**
  - MECH 615 Applied Heat Transfer
  - MECH 617 Advanced Topics in Renewable Energy Systems
  - MECH 618 Energy Sources, Technology, and Policy
  - MECH 619 Power Systems Engineering

- **Mechatronics Engineering**
  - MECH 650 Modeling, Analysis, and Control Systems
  - MECH 655 Advanced Mechatronics
  - MECH 750 Introduction to Modern Control Engineering
  - MECH 755 Nonlinear Control Engineering

NON-TECHNICAL ELECTIVES

- **Business Administration**
  - BADM 702 MBA Essentials I
  - BADM 703 MBA Essentials II
  - BADM 713 **or** LDRS 723 Communication for Leadership
  - BADM 716 Legal and Ethical Environment for Decision Makers
  - BADM 735 Ethical Leadership and Organizational Behavior

- **Engineering Leadership and Program Management**
  - PMGT 650 Overview of Tech Project Management
  - PMGT 651 Technical Project Planning & Scheduling
  - PMGT 652 Applications in Quality Management
  - PMGT 653 Tech Project Support & Operations
  - PMGT 661 The Legal and Contractual Aspects of Program Management
  - PMGT 671 Project Manager Leadership Development
  - PMGT 672 Applied Leadership Concepts

- **Leadership**
  - LDRS 710 Ethics, Values and Principled Leadership
  - LDRS 711 Leading Change: Organization Development and Transformation
  - LDRS 712 Leading Teams: Coaching, Culture, Diversity, and Globalization
  - LDRS 714 Strategic Leadership, Vision, Mission and Contemporary Issues
  - LDRS 722 Leadership in Organizations

Total Credit Hours: 30

Transfer Credit: A maximum of two graduate courses (six credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSME program, and (3) each course has been approved by the department head. A maximum of five courses (15 credit hours) may be transferred in from Clemson University, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSME program, and (3) each course has been approved by the department head.

Course / Certificate Availability: The courses / certificates will be offered based on student preferences/ overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of your program of study.

*Students who have been admitted to the MSME with an approved focus area (Composites, Aeronautical, Manufacturing, Power and Energy, or Mechatronics) need to apply for the respective Engineering Graduate Certificate (application fee will not be required for those already admitted to the MSME program).

Requirements for Graduation: The degree of Master of Science in Mechanical Engineering may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point average (GPA) of 3.0 or better on hours earned at The Citadel. Completion of additional credit hours of graduate coursework beyond the requirements for this degree will only be allowed for professional development, and may not be used to increase GPA to the 3.0 required for graduation.

Accelerated Master of Science in Mechanical Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate/programs/accelerated-master-of-science-in-mechanical-engineering

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

Mission Statement

The Accelerated Master of Science in Mechanical Engineering program is designed to provide Citadel undergraduate students an accelerated route to obtain a Master's degree in Mechanical Engineering. The purpose of this program is to offer advanced undergraduate students the opportunity to begin taking graduate-level courses during their senior year, and have those courses be applied toward an MS in Mechanical Engineering degree.

After earning a Bachelor's degree, students in this program will continue their graduate course work until completing the requirements for the MS in Mechanical Engineering program. It is expected that students in this program would complete the requirements for both the Bachelor's degree and the Master's degree in about 5 years. Undergraduates in this program will acquire a broader and deeper education in mechanical engineering through additional advanced coursework. An advanced degree in mechanical engineering can provide employment opportunities that the Bachelor's degree alone cannot provide. This program is for students seeking advanced engineering techniques and professional development skills in the field of mechanical engineering.

Admission Requirements

The program is available to Citadel undergraduate students majoring in mechanical engineering. Students interested in this program should apply during their junior or senior year. However, students are encouraged to apply by the end of their junior year to help ensure that they have the full subsequent year, including the summer, to begin taking courses for graduate credit. This program is not available to undergraduates enrolled at other institutions, or those who have completed a Bachelor's degree or advanced degree at another institution.

1. Complete and return an online application form along with the non-refundable application fee to The Citadel Graduate College.
2. Undergraduate GPA of 3.2 or higher in the B.S. in Mechanical Engineering degree program at The Citadel.
3. Senior (1A) classification.
4. Submission of a one-page letter of intent that provides concise description of your post BSME graduation plans.
5. Approval of Mechanical Engineering Department Head.

Program Requirements

Program requirements for the Accelerated Master of Science in Mechanical Engineering are identical to that of the MSME program. A student enrolled in the Accelerated Master's Program can register for up to two graduate level courses during the summer and one graduate level course during each of the fall and spring semesters. Undergraduate students enrolled in graduate classes will be held to The Citadel Graduate College policies in those classes, including Academic Standards, Grades, and Attendance. Cadets in graduate classes will continue to be subject to the honor system as prescribed by "The Honor Manual of the South Carolina Corps of Cadets." Following successful completion of the requirements for the Bachelor's degree, students would be classified as graduate students by The Citadel Graduate College and follow all of their policies and procedures.

At the discretion of the graduate program director and the student's undergraduate major dean/department head, the student may have up to two courses, or six credit hours, waived from their undergraduate major degree requirements for completing graduate level courses with a grade of B or higher.

The Master of Science in Mechanical Engineering is conferred upon those candidates who successfully complete an approved program of study consisting of 30 semester hours of graduate credit as delineated below.

Students are expected to complete all degree requirements within a six-year period from the time of registration in their first graduate course at The Citadel. Any transfer credit must have been earned within six years prior to admission into The Citadel MSME program. Any prerequisites for applicable courses must be met.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)

All degree candidates must:

1. File a plan of study outlining the intended areas of interest and approved by the program director.
2. Complete at least six courses (18 hours) from the mechanical engineering (MECH) areas of study below.
3. Complete four courses (12 hours) in technical (ME, CE, EE, CS) or nontechnical classes below.

MECHANICAL ENGINEERING AREAS OF STUDY

Composites Engineering

MECH 604	Advanced Mechanics of Materials
MECH 605	Materials and Process Selection
MECH 606	Fatigue and Fracture
MECH 702	Theory of Elasticity
MECH 703	Theory of Plasticity
MECH 708	Mechanics of Composite Materials

Aeronautical Engineering

MECH 631	Advanced Engineering Mathematics
MECH 611	Advanced Fluid Mechanics
MECH 670	Applied Aerodynamics
MECH 771	Compressible Flow
MECH 772	Computational Methods Thermal Sciences

Manufacturing Engineering

MECH 625	Computer-Aided Design and Analysis
MECH 635	Computer-Aided Design and Analysis Laboratory
MECH 640	Manufacturing Process and Design
MECH 645	Machine Design
MECH 660	Advanced Design

Power and Energy

MECH 615	Applied Heat Transfer
MECH 617	Advanced Topics in Renewable Energy Systems
MECH 618	Energy Sources, Technology, and Policy
MECH 619	Power Systems Engineering

Mechatronics Engineering

MECH 650	Modeling, Analysis, and Control Systems
MECH 655	Advanced Mechatronics
MECH 750	Introduction to Modern Control Engineering
MECH 755	Nonlinear Control Engineering

NON-TECHNICAL ELECTIVES (no more than 12 credit hours)

Business Administration

BADM 702	MBA Essentials I
BADM 703	MBA Essentials II
BADM 713 **or** LDRS 723	Communication for Leadership
BADM 716	Legal and Ethical Environment for Decision Makers
BADM 735	Ethical Leadership and Org. Behavior

Engineering Leadership and Program Management

PMGT 650	Overview of Tech Project Management
PMGT 651	Technical Project Planning & Scheduling
PMGT 652	Applications in Quality Management
PMGT 653	Tech Project Support & Operations
PMGT 661	The Legal and Contractual Aspects of Program Management
PMGT 671	Project Manager Leadership Development
PMGT 672	Applied Leadership Concepts
PMGT 680	Systems Engineering Management Fundamentals
PMGT 681	Requirements Development and Management
PMGT 682	System Verification and Validation
PMGT 683	Systems Modeling and Integration
PMGT 684	Human System Integration
PMGT 685	Decision and Risk Analysis

Leadership

LDRS 710	Ethics, Values and Principled Leadership
LDRS 711	Leading Change: Organization Development and Transformation
LDRS 712	Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS 714	Strategic Leadership, Vision, Mission and Contemporary Issues
LDRS 722	Leadership in Organizations

Total Credit Hours: 30

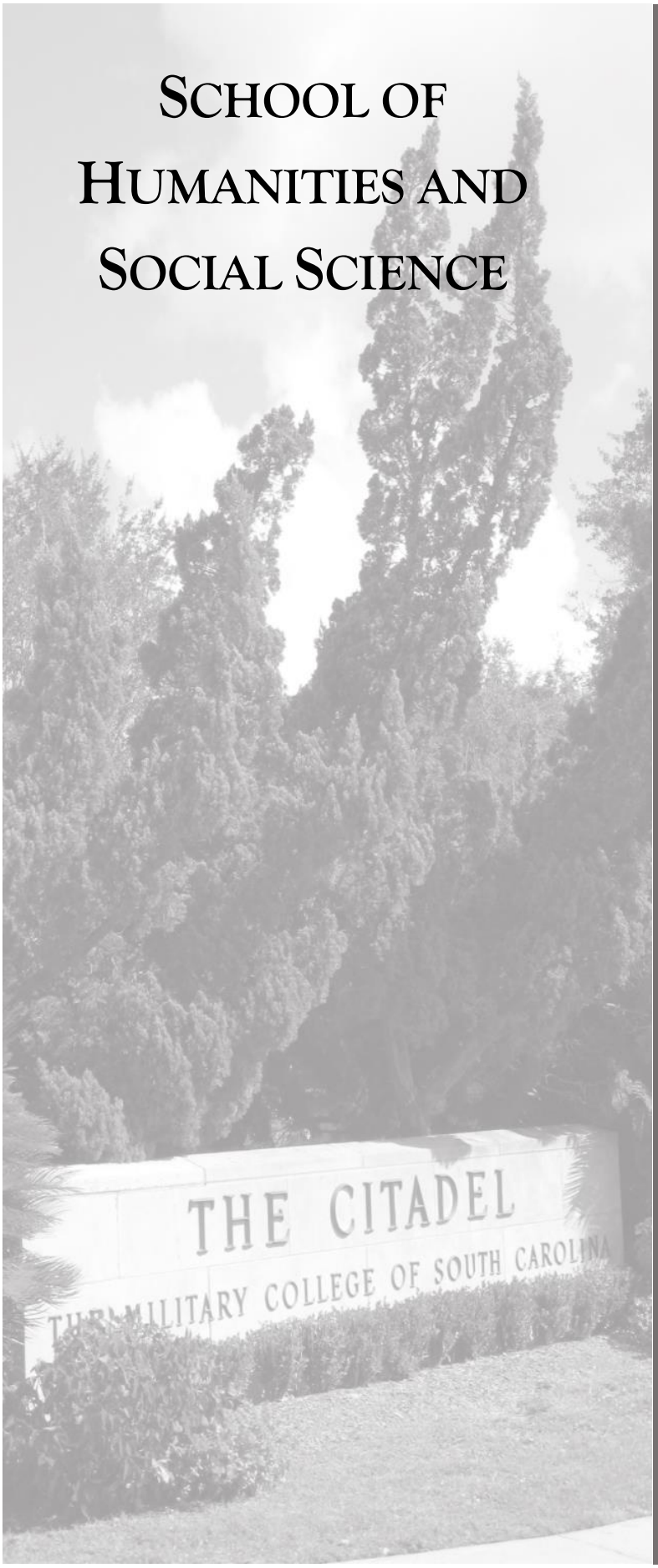
Transfer Credit: A maximum of two courses (six credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSME program, and (3) each course has been approved by the department head. A maximum of five courses (15 credit hours) may be transferred in from Clemson University, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSME program, and (3) each course has been approved by the department head.

Course Availability: The courses will be offered based on student preferences and overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course offerings will be based on minimum class size enrollment. The Mechanical Engineering Department will continually monitor student interest to expedite completion of your program of study.

Transfer Credit from The Citadel: A maximum of 12 hours may be transferred from one Citadel graduate degree program where appropriate, provided that core degree requirements are met.

Requirements for Graduation: The degree of Master of Science in Mechanical Engineering may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point average (GPA) of 3.0 or better on hours earned at The Citadel. Completion of additional credit hours of graduate coursework beyond the requirements for this degree will only be allowed for professional development, and may not be used to increase GPA to the 3.0 required for graduation.

School of Humanities and Social Science



Master of Arts

- English
- History
- Intelligence and Security Studies
- International Politics and Military Affairs
- Military History
- Social Science
- Psychology: Clinical Counseling

Specialist in Education in School Psychology

Master of Arts in English

Department of English, Fine Arts, and Communications
843-953-5139
www.citadel.edu/root/english

Dr. Licia Hendriks, Director
hendriksl1@citadel.edu

Mission Statement

The Citadel and the College of Charleston offer a joint Master of Arts degree in English. The 30-hour program, with a thesis option, provides advanced coursework in British literature, American literature, English language, and composition and rhetoric. The program is designed to attract qualified holders of the baccalaureate degree, whether recent college graduates, English teachers, or others interested in pursuing graduate studies in English. A Joint Program Committee, comprised of faculty members from each institution, oversees admissions, course scheduling, degree certification, and other matters related to the management of the program. Diplomas and other official documents indicate that the program is a joint endeavor and include the names of both institutions.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. A cumulative undergraduate grade point average of at least 2.5 and a 3.0 in the major.
4. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) score. Applicants who do not have an undergraduate degree in English are also required to take the GRE advanced test in literature. Applicants are expected to have a composite GRE verbal and quantitative score of at least 300 and a 4 on the writing assessment section. Those taking the MAT should have a score of at least 400. Admission tests must have been taken within the last five years.
5. Submission of at least two signed letters of recommendation, preferably from former professors. Each reference should be as specific as possible in addressing the applicant's academic ability, motivation, and ability to complete a graduate degree.
6. Submission of a two-page statement about educational goals and interest in a graduate program in English.
7. Submission of a writing sample that demonstrates an ability to perform literary analysis and conduct research. Typically, this requirement can be met by submitting a research paper prepared for an advanced undergraduate English course.

An applicant who does not meet the minimum GPA and/ or test score expectations or who does not have sufficient undergraduate background in English may be allowed to pursue coursework as a provisional student. Upon completing nine semester hours with a minimum GPA of 3.25, the student will be eligible to continue in the program.

Application Deadlines

The Joint Program Committee will consider completed applications for the regular degree program on the following dates:

Admission Term:	Materials Due:
Fall	January 15, priority; July 1, final
Spring	November 1, priority; Dec. 1, final
Summer	January 15, priority; April 1, final

Applications will be considered year round for non-degree students.

Program Requirements

The Master of Arts is conferred upon those candidates who successfully complete an approved program of study consisting of at least 30 semester hours of graduate credit with a cumulative GPA of 3.0. Specific requirements are listed below:

- ENGL-511 (Intro to Graduate English Studies), three hours
- Pre-1800 Literature, three hours - (ENGL 500 / 501 / 502 / 504 / 506 / 507 / 512 / 520 /522 / 574 / 703)
- Post-1800 Literature, three hours – (ENGL 509 / 510 / 512 / 521 / 523 / 524 / 525 / 526 / 527 / 528/ 529 / 531 / 532/ 533 / 534 / 535 /537 / 573 / 575 / 704)
- Electives – 21 hours
- Final Portfolio

Thesis Option:
The student may elect to compose a thesis for a total of six credit hours, thus reducing the number of required elective hours to fifteen.

Notes:
- At least twelve hours must be taken at each campus.
- Electives will normally be graduate courses in English. Other courses will be considered on a case-by-case basis by the Joint Program Committee.
- No more than nine hours of English 698 (three), 699 (three), and 701 (six) in any combination may count toward the required 30 hours.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

ENGL-500 Old and Middle English Literature
ENGL-501 Chaucer
ENGL-502 Shakespeare
ENGL-504 Poetry and Prose of the English Renaissance
ENGL-505 Milton
ENGL-506 Restoration and Eighteenth Century Drama
ENGL-507 Poetry and Prose of the Restoration and Eighteenth Century
ENGL-509 Romantic Literature
ENGL-510 Victorian Literature
ENGL-511 Introduction to Graduate Studies in English. Co-requisite for all entering students.
ENGL-512 Southern Literature
ENGL-517, 518 Special Topics in Literature
ENGL-520 A Survey of World Literature I
ENGL-521 A Survey of World Literature II
ENGL-522 Colonial and Revolutionary American Literature
ENGL-523 Nineteenth-Century American Literature I—Romanticism
ENGL-524 Nineteenth-Century American Literature II—Realism
ENGL-525 Eighteenth Century British Novel
ENGL-526 Victorian Novel
ENGL-527 British Fiction: 1900 to 1945
ENGL-528 American Fiction: 1900 to 1945
ENGL-529 American Fiction: 1945 to the Present
ENGL-531 British Poetry: 1900 to Present
ENGL-532 American Poetry: 1900 to Present
ENGL-533 British Drama: 1900 to Present
ENGL-534 American Drama: 1900 to Present
ENGL-535 African American Literature
ENGL-537 Contemporary British Fiction
ENGL-550, 551 Special Topics in Composition or Language
ENGL-552 Adolescent Literature
ENGL-553 Modern English Grammar
ENGL-554 History of the English Language
ENGL-555 Literary Criticism
ENGL-556 Theory and Practice of Teaching Composition
ENGL-558 Technical and Professional Writing
ENGL-559 History and Theory of Rhetoric
ENGL-560 Film Studies
ENGL-562 Workshop in Advanced Composition
ENGL-564 Teaching with Technology
ENGL-573 Special Topics in African American Literature
ENGL-574 Special Topic in English Literature Before 1800
ENGL-575 Special Topics in English Literature After 1800
ENGL-576 Special Topics in American Literature
ENGL-595 Methods and Materials for English Language Arts
ENGL-698 Tutorial
ENGL-699 Independent Study
ENGL-700 Seminar
ENGL-701 Thesis
ENGL-702 Internship
ENGL-703 Seminar in English Literature Before 1800
ENGL-704 Seminar in English Literature After 1800
ENGL-705 Seminar in American Literature

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Master of Arts in History

Department of History
843-953-5073
www.citadel.edu/root/history-masters-program

Dr. Amanda R. Mushal,
mushala1@citadel.edu

Mission Statement

The Citadel and the College of Charleston offer a joint Master of Arts Degree in History, providing each student with advanced specialized work in one of the following areas: United States history, European history, or Asian/African/ Latin American history. The program has a special emphasis on the history of the American South, the South Carolina Lowcountry, and the Atlantic World. The program serves the needs of those interested in pursuing graduate studies in history. Teachers who complete the program have a greater command of the literature of a particular field. Others are prepared to do doctoral work or pursue other advanced degrees, enter the field of public history, or seek employment opportunities that require advanced training in the humanities. The management of the program is vested in a Joint Program Committee composed of representatives of the two history departments. The directorship rotates between the two institutions. Diplomas and other documents will indicate that the program is a joint endeavor and will include the names of both institutions.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Submission of official copy of the Graduate Record Examination (GRE) or Miller Analogies Test score. Applicants are expected to have a GRE verbal score exceeding 152 and a 4.0 for analytical writing. Admission test must have been taken within the last five years.
4. Applicants are expected to have a cumulative undergraduate grade point average of at least 2.5 and a 3.0 in the major. Ordinarily, applicants are expected to have completed and passed at least 9 hours of undergraduate coursework beyond the introductory level in history or an allied discipline.
5. Submission of two signed letters of recommendation, normally from former professors. Each reference should be as specific as possible in analyzing the applicant's potential for success in the program. References should address the student's ability to design, conduct, and present research without direct supervision, the ability to analyze complex data and issues, and the ability to write effectively.
6. Submission of evidence of ability to conduct research and present findings. A term paper, honors thesis, or critical essay from an upper-level or graduate course taken in college will suffice. The evidence of writing should reflect the ability to conceptualize a research theme, conduct research to support an argument, and reach a justified conclusion. The paper should demonstrate an ability to handle documentation of evidence.

*Applicants who do not meet the minimum admissions requirements above, may be admitted as conditional students at the discretion of the joint graduate committee. Upon completion of nine semester hours, with no more than three hours in independent study (HIST-770) and a minimum GPA of 3.25, the student may be admitted unconditionally. There is no guarantee that courses taken in a non-degree status will be credited towards a degree once a student gains provisional or regular admission. Coursework taken to meet admission prerequisites will not count towards degree requirements.

Application Deadlines

The Admissions Committee will consider complete applications for the program on the following dates:

Admission Term:	Materials Due:
Fall and Summer	March 1st
Spring	November 1st

Program Requirements

In consultation with an advisor, each degree candidate will develop a plan of study which includes course work at both institutions. The plan of study must be submitted to the Program Director upon completion of the first six hours or the first semester of graduate work.

In addition to lectures and examinations, graduate courses demand wide reading, thorough research, and advanced historical writing. Only graduate students admitted to the MA program will be automatically enrolled, but non-degree students and exceptional undergraduates—upper division majors in history and related disciplines—may be enrolled, in 500-level courses. For this, however, they will need permission from the instructor and are expected to have a minimum GPA of 3.4 in history courses. No more than two 500-level courses may be taken by an undergraduate. 600- and 700-level courses are for MA program students exclusively.

The Master of Arts in History is conferred upon those candidates who successfully complete an approved program of study consisting of a minimum of 33 semester hours of graduate credit with a cumulative GPA of 3.0. Twelve credit hours must be taken at the College of Charleston.

The program offers two tracks, according to students' career goals:

1. Thesis track students must take one research seminar, HIST-801 and HIST-802, and successfully defend their thesis.
2. Non-thesis track students must take one research seminar, preferably within their area of concentration, two elective

courses, HIST-803, and a comprehensive exam in two distinct areas.

For students who will write a Master's thesis, the distribution of courses follows this general scheme:

- Major area: 12 hours
- Minor area: 6 hours
- Historiography: 3 hours
- Third area: 3 hours*
- Electives: 3 hours**
- HIST-801, HIST-802, 6 hours

The coursework above must include one research seminar, preferably taken in the student's major area of concentration.

For students who will take the comprehensive examination, the distribution of courses follows this general scheme:

- Major area: 12 hours
- Minor area: 6 hours
- Historiography: 3 hours
- Third area: 3 hours*
- Electives: 6 hours**
- HIST-803, 3 hours

The coursework above must include one research seminar, preferably taken in the student's major area of concentration.

*All students must take at least three hours in each area offered by the program (US, Europe, World).
**In history or a related discipline in the humanities or social sciences. Students must obtain prior approval from their campus program director to take a non-history elective. A specific number of courses must be distributed between both institutions.

All students are encouraged to attain proficiency in a foreign language. There is no formal requirement for all students in the program to demonstrate language proficiency at a certain level. However, depending upon the program, a candidate may be required by the advisor to demonstrate mastery of an appropriate foreign language, indicated by the satisfactory use of source material or literature in the relevant foreign language in seminar or research work.

African American Studies Emphasis

Students who elect this option must meet all the normal requirements by the master's degree. In addition, they must complete one of the two courses of study below and all courses must meet the approval of the graduate program director.

Thesis Option:
- 6 hours in African American oriented history
- 3 approved hours in another discipline
- 6 hours in an African American oriented thesis

Non-Thesis Option:
- 9 hours in African American oriented history
- 3 approved hours in another discipline
- 3 hours in African American oriented independent study or similar (i.e., research seminar)

Three hours of independent study on an African American topic may be included as part of the nine hours of course work.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

COURSES

(Non-degree, M.A.T., and exceptional undergraduate students may enroll in 500 level courses only, space permitting.)

HIST-502 Colonial America and the American Revolution to 1789
HIST-504 Civil War and Reconstruction
HIST-506 The U.S. in the Twentieth Century
HIST-521 The American South
HIST-522 South Carolina History
HIST-523 Afro-American History
HIST-532 Ancient Greece
HIST-533 Ancient Rome
HIST-535 Medieval Europe
HIST-537 Renaissance and Reformation
HIST-541 Enlightenment and French Revolution
HIST-542 Nineteenth-Century Europe
HIST-543 Twentieth-Century Europe
HIST-545 History of Modern Russia
HIST-551 Women in the Western World
HIST-562 Colonial Latin America
HIST-563 Modern Latin America
HIST-572 Precolonial Africa
HIST-573 Modern Africa
HIST-577 Modern Middle East
HIST-582 China to 1800
HIST-583 Modern China
HIST-586 Japan to 1800
HIST-587 Modern Japan
HIST-590 Special Topics in U.S. History
HIST-591 Special Topics in European History
HIST-592 Special Topics in Latin American Asian/African History
HIST-593 Special Topics in Peace, War, and Diplomacy
HIST-610 Special Topics in U.S. History
HIST-620 Special Topics in Lowcountry Studies
HIST-630 Special Topics in Peace, War, and Diplomacy
HIST-640 Special Topics in European History
HIST-650 Special Topics in British History
HIST-670 Special Topics in Asian/African/ Latin American
HIST-691 Historiography
HIST-710 Research Seminar in U.S. History
HIST-720 Research Seminar in Lowcountry Studies
HIST-740 Research Seminar in European History
HIST-760 Research Seminar in Asian/ African/ Latin American History
HIST-770 Independent Study in History
HIST-801-802 Master's Thesis
HIST-803 INSERT NAME OF COURSE

Descriptions of courses are listed in the last section of this catalog.

Public History Concentration

Students opting to add a concentration in Public History must meet all the normal requirements for the master's degree. In fulfilling these requirements, they must complete the course of study below and all courses chosen must meet the approval of the graduate program director. Students enrolled in Public History Concentration must complete a public history-oriented thesis. (6 hours)

Program Requirements:

- 33 hours
- Comprehensive exam or thesis
- 12 hours at the College of Charleston

Program of Study

- 3 hours in Introduction in Public History
- 3 hours in Internship Experience
- 6 hours in approved Public History coursework (may be Interdisciplinary)
- 6 hours in Public History oriented thesis

COURSES

HIST-525	Introduction to Public History	3
HIST-590*	Special Topics in U.S. History	3
HIST-591*	Special Topics in European History	3
HIST-592*	Special Topics in Latin American Asian/African History	3
HIST-593*	Special topics in Peace, War, and Diplomacy	3
HIST-750	Internship Experience	3
HIST-801	Master's Thesis	3
HIST-802	Master's Thesis	3

Electives (6 hours)
Two electives will be required for students enrolled in Public History concentration.

HSPV-807	American Architecture	3
HSPV-808	History and Theory of Historic Preservation	3
HSPV-809	Historical Research Methods	3
HSPV-821	Historic Preservation and Public Memory	3
HSPV-823	Historic American Interiors	3
HSPV-833	Cultural and Historical Landscape Preservation	3
HIST-590	Special Topics in US History*	3

*Content in these courses must relate to public history and is subject to approval by the public history coordinator.

Total Credit Hours: 33

Master of Arts in Intelligence and Security Studies

Department of Intelligence and Security Studies
843-953-6886
http://www.citadel.edu/root/intelligence-and-security-studies-graduate-programs/master-of-arts

Dr. Larry Valero, lvalero@citadel.edu

Mission Statement

The Master of Arts (MA) degree program in Intelligence and Security Studies (ISS) prepares students to enhance national security through intelligence and homeland security leadership. Best practices for intelligence collection and analysis and national security combined with current theory, research, and experience give students the background necessary to cultivate critical thinking, concise writing, and effective briefing. By introducing applicable management principles and policy analysis, the program fosters the leadership skills to successfully address security and intelligence challenges facing the United States.

Unlike traditional graduate programs that take a theoretical and conceptual track in preparing students for further academic research, The Citadel's ISS program combines theory and practice to provide the real-world skills necessary to enter and advance in the public and private intelligence arenas.

This program is entirely online to provide maximum flexibility for students, and at the same time allow the ISS program to attract instruction from intelligence professionals located around the world.

By combining current theory, research, and experience, the program offers an intellectually rigorous course of study that emphasizes key skills related to analytical writing and research, critical thinking, and general international and domestic subject matter expertise. In addition, the master's program offers two concentrations, both of which lead to a certificate in addition to the MA degree. The courses in both of these concentrations count as electives for the MA degree in Intelligence and Security Studies.

- The Cybersecurity concentration is offered jointly by The Citadel's Department of Cyber and Computer Sciences and the Department of Computer Science at the College of Charleston;
- The Leadership concentration is offered by the Department of Leadership Studies.

GRADUATION REQUIREMENTS (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500
- Intelligence and Security Studies Student Portfolio and oral evaluation.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Students must be able to demonstrate an earned undergraduate degree from an accredited institution with a competitive grade point average.
3. Submission of a writing sample that demonstrates strong critical thinking and communication skills. Typically this can be met by submitting a research paper prepared for an advanced undergraduate or graduate course.
4. Submission of official scores from a valid (within five years) Millers Analogies Test (MAT) or Graduate Record Examination (GRE). This requirement may be waived for students who are non-residents of the United States or who already hold a graduate degree.
5. Resume
6. Students who wish to enroll in the cybersecurity concentration must meet additional admissions requirements as established by the Department of Cyber and Computer Sciences.

Application Deadlines

The Admissions Committee will consider complete applications for the program on the following dates:

Admission Term:	Materials Due:
Summer	April 15
Fall	July 15
Spring	November 29

Program Requirements

Required Core Courses (12 credit hours):
CRMJ-568/INTL-568/PSCI-568—International and Domestic Terrorism
INTL-570 – Homeland Security
INTL-580 – Introduction to Intelligence
INTL-581 – Intelligence Research and Analysis

Degree Electives: Foundation Courses (8 electives/24 credit hours required from this list -OR- 4 electives/12 credit hours required from this list for Cybersecurity concentration students-OR- 3 electives/9 credit hours required from this list for Leadership concentration students):
LDRS 722 Leadership in Organizations
CRMJ-501/PSCI-501 Research Methods in Social Science
CRMJ-510 Topics in Criminal Justice
CRMJ-515/INTL-515/PSCI-515 Topics in Homeland Security
CRMJ-555/PSCI-555 Leadership Application Course in Criminal Justice
CRMJ-562 Comparative Criminal Justice Systems
CRMJ-583 Transnational Organized Crime
HIST-591 Special Topics in European History
INTL-560 Intelligence and Homeland Security Administration
INTL-569/PSCI-569 National Security Policy

INTL-572 Legal and Ethical Dimensions of Intelligence and Homeland Security
INTL-582 Intelligence Theory Application
INTL-585 Topics in Intelligence
INTL-600 Intelligence Internship
INTL-601 Homeland Security Internship
LDRS-750 Evolution of Military Leadership Thought
LDRS-751 Survey of US Military Leaders
LDRS-752 Survey of World Military Leaders
LDRS-753 Strategic & Contemporary Military Leadership Issues
PSCI-564 US Foreign Relations
PSCI-565 International Politics
PSCI-566 International Political Economy
PSCI-571 Comparative Politics
PSCI-572 International Organization
PSCI-573 International Political Theory
PSCI-575 US Foreign Policy Leadership
PSCI-576 International Law

Cybersecurity Concentration (12 credit hours)
CSCI-614 Advanced Operating Systems
CSCI-631 Principles of Computer Security
CSCI-632 Data Communications and Network
CSCI-641 Advanced Cybersecurity

Leadership Concentration (15 credit hours)
Required Courses (6 credit hours)
LDRS-722 Leadership in Organizations
PSYC-570 Social and Cognitive Foundations of Interpersonal Behavior
Leadership Electives (6 credit hours)
Choose two (2) of the following:
LDRS 710 Ethics, Values, & Principled Leadership*
LDRS 711 Leading Change: Organization Development and Transformation*
LDRS 712 Leading Teams: Coaching, Culture, Diversity, and Globalization*
LDRS 723 or BADM 713 Communications for Leadership
PSYC 500 Human Growth and Development

Application of Leadership (3 credit hours)
Choose one (1) of the following:
LDRS-710 Ethics, Values, and Principled Leadership
LDRS-711 Leading Change: Organization Development and Transformation*
LDRS-714 Strategic Leadership, Vision, Mission, and com
LDRS-723 or BADM 713 Communications for Leadership

*LDRS-722 is a prerequisite for these courses.

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

Master of Arts in International Politics and Military Affairs

Department of Political Science
843-953-5069
www.citadel.edu/root/international-politics-military-affairs

Dr. Sarah Tenney Sharman: tenneys1@citadel.edu

Mission Statement

The Master of Arts in International Politics and Military Affairs at The Citadel is designed to meet the needs of the US military, federal governmental agencies, international governmental and non-governmental organizations, multinational business enterprises, and others interested in gaining greater knowledge about the field of international politics.

This program is designed to prepare international affairs professionals who wish to gain a broad understanding of the increasingly complex political, economic, and social issues that transcend national boundaries. It offers students an opportunity to expand their knowledge of the theoretical and policy issues affected by international politics and culture, the ideas and values that influence the behavior of state and non-state actors, and the leadership principles needed to wrestle with everyday political and organizational life. The program's design allows students to hone the critical thinking, analytical, leadership, and communication skills needed to successfully foster transnational relationships in an increasingly globalized environment.

Unlike 'traditional' graduate programs that tend to take a highly theoretical and conceptual track in preparing students for further academic research, The Citadel's master's program takes a 'nuts-and-bolts' approach to develop international affairs professionals with the practical skills needed to pursue careers as military officers, policy analysts, foreign service officers, international civil servants, and business leaders as well as positions related to economic development, nation building, and humanitarian affairs.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Provide a written statement of purpose setting forth your intentions, goals, and preparation for graduate study.
4. Successful completion of either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT).
5. Provide at least two academic letters of recommendation addressing the student's ability to undertake coursework at the graduate level.

The minimum for the GRE is a verbal and quantitative combination of 290. The minimum for the MAT is a score of 396. Students who score between 283-289 on the GRE or 380-395 on the MAT may apply for provisional status. Upon completion of the first six hours of degree coursework, with a minimum GPA of 3.50, the student will be fully admitted.

Admission to the Master of Arts in International Politics and Military Affairs program is a competitive process. The college has a right and responsibility to accept the best qualified persons, taking into account candidates' scholastic and professional achievement along with their aptitude for graduate study and experience.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

Required Core (two classes, three hours each)
PSCI-500 Seminar in Social Science
PSCI-501 Research Methods in Social Science
*NOTE: These six hours must be included in the first 12 hours taken in the program.

Electives (10 classes, three hours each)
CRMJ 581 / INTL 581 Intelligence Research and Analysis
LDRS 712 Leading Teams, Coaching, Culture, Diversity and
PSCI 510 Special Topics in Political Science
PSCI 562 East Asian Affairs
PSCI 563 South Asian Affairs
PSCI 564 US Foreign Policy
PSCI 565 International Politics
PSCI 566 International Political Economy
PSCI 567 Global Democracy
PSCI 569 National Security Policy
PSCI 571 Comparative Politics
PSCI 572 International Organization
PSCI 573 Politics of Economic Development*
PSCI 574 Global Issues
PSCI 575 US Foreign Policy Leadership
PSCI 576 International Law
PSCI 577 Conflict Studies
PSCI 592 International Political Theory

*Must be pre-approved by the degree program director

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

In addition to the course requirements, the program offers two tracks, according to students' career goals:

1. Thesis track - students must submit a thesis presenting original research on a topic in the field.
2. Non-thesis track - students must complete a guided internship within their area of concentration and present a reflection paper on their experience.

Master of Arts in Military History

Department of History
843-953-5073
www.citadel.edu/military-history

Dr. David Preston, Program Director
prestond1@citadel.edu

Mission Statement

The Citadel's online Master of Arts in Military History provides advanced historical study of the theory and practice of warfare, the institutions and operations of military forces, and the impact of militaries and warfare on societies. The degree equips graduates with a holistic understanding of the history and evolution of warfare—from the strategic to the operational and tactical levels. The Citadel's History Department and affiliated fellows bring together award-winning and experienced scholars in the fields of war studies and military history. The MA in Military History advances The Citadel's central institutional mission of educating and commissioning officers into the United States Armed Forces. The degree is designed to provide for the continuing educational needs of military officers; government officials in the fields of diplomacy, national defense, homeland security, and intelligence; public historians; corporate and business leaders; and public school teachers. Graduates will be equipped to utilize military history in analysis, operations, research, writing, and teaching within the U.S. Armed Forces, the federal government, public history, public education, and the private sector.

Admission Requirements

The Military History Program is a competitive program with a limited number of seats each term. Applications are welcome for consideration from all qualified prospective students.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from all degrees earned from previous colleges or universities. Students must be able to demonstrate an earned undergraduate degree from an accredited institution with a competitive grade point average. Applicants are expected to have a cumulative undergraduate GPA of at least 2.5 and at least a 3.0 in the major. Students who fail to meet the minimum score requirement may be provisionally accepted into the MA degree program provided all other admission requirements have been met. Upon completion of the first nine hours of degree coursework, with a minimum GPA of 3.50, the student is considered fully admitted.
3. Submission of official scores from a valid (within five years) Millers Analogies Test (MAT) or Graduate Record Examination (GRE). This requirement may be waived for students who already hold a graduate degree. If waived, the applicant must submit a graduate-level writing sample in lieu of submitting the test score.
4. Submission of one letter of recommendation, ideally from a former professor. A recommendation from a commanding officer or employer will be accepted. The letter should be as specific as possible in analyzing the applicant's writing, research, and analytical skills and potential for success in the program.
5. Resume or C.V.

Program Requirements

In consultation with an advisor, each degree candidate will develop a course of study, define a particular track for completion of the Capstone Experience, and establish a potential field or topic of interest if the student is writing a master's thesis. Students pursuing a master's thesis are encouraged to begin research and discussion with their advisor at an early date.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

The distribution of course requirements follows this general scheme:
- Introduction to Military History (2 courses/6 hours)
- Foundations in Military History (3 courses/9 hours)
- Conflict Studies (2 courses/6 hours)
- War and Society (1 course/3 hours)
- Capstone Experience (2 courses/6 hours)

The program offers three tracks for fulfillment of the Capstone Experience, according to each student's goals:

1. **Thesis track** students must take MLTH 601 and 602 (Master's Thesis) and defend their thesis in a committee of three professors. This track enables students to produce a deeply researched piece of historical scholarship and to pursue publication.

2. **Non-thesis track** students must take MLTH 600 (Capstone Seminar) and one additional War and Society course (MLTH 550 or higher).

3. **Certificate in Military Leadership** students must take MLTH 600 (Capstone Seminar) and one of the following courses in the Leadership Studies department: Either LDRS 753: Strategy and Contemporary Military Leadership Issues -or- LDRS 711: Leading Change: Organization Development and Transformation. In addition, students must complete in their normal course of study MLTH 502 (Leadership in the Crucible of War), MLTH 503 (U.S. Military History), and MLTH 504 (Non-Western Military History) to receive the Certificate in Military Leadership.

All students are encouraged to attain proficiency in a foreign language. There is no formal requirement for all students in the program to demonstrate language proficiency at a certain level. However, depending upon the course of study, a candidate may be required by the advisor to demonstrate mastery of an appropriate foreign language, indicated by the satisfactory use

of source material or literature in the relevant foreign language in seminar or research work.

Courses

Introduction to Military History

MLTH-500 Methods and the Historiography of Military History
MLTH-501 Strategic Thinkers and Military Intellectuals

Foundations in Military History

MLTH-502 Leadership in the Crucible of War
MLTH-503 U.S. Military History
MLTH-504 Non-Western Military History
MLTH-505 Irregular Warfare
MLTH-506 Naval and Amphibious Warfare
MLTH-507 Airpower History

Conflict Studies

MLTH-511 Greco-Roman Warfare
MLTH-512 Hundred Years' War
MLTH-513 French and Indian War (Global Seven Years' War)
MLTH-514 The American Revolution
MLTH-515 Napoleonic Wars
MLTH-516 American Civil War
MLTH-517 American Indian Wars
MLTH-518 World War I
MLTH-519 World War II in Europe and the Mediterranean
MLTH-520 World War II in the Pacific
MLTH-521 The Resistance in World War II
MLTH-522 The Red Army
MLTH-523 The Vietnam War
MLTH-524 The Global Cold War
MLTH-525 Global War on Terrorism
MLTH-526 Arab-Israeli Conflict
MLTH- 530 Special Topics in Conflict Studies

War and Society

MLTH-550 History of War and Society in China
MLTH-551 The Samurai and the Japanese Military Tradition
MLTH-552 The Viking Military Tradition
MLTH-553 King Alfred's Wars
MLTH-554 War and Society in Early Modern Europe, 1350-1650
MLTH-555 The Dutch Revolt
MLTH-556 War and Society in the Age of Total War
MLTH-557 The Double-V Campaign: African-Americans in World War II
MLTH-558 Social Movements in the Vietnam Era
MLTH-559 The Modern Middle East
MLTH-560 Military Coups and Dictators in Latin America
MLTH-561 History of the U.S./ Mexico Borderland
MLTH-565 Special Topics in War and Society

Capstone Experience

MLTH-600 Capstone Seminar
MLTH-601-602 Master's Thesis

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Master of Arts in Social Science

Department of Political Science
843-953-5069
www.citadel.edu/root/mass

Dr. Terry Mays: terry.mays@citadel.edu

Mission Statement

The degree is designed to allow students to advance their knowledge of the social sciences through an interdisciplinary study of political science, criminal justice, sociology, anthropology, psychology, leadership, and related disciplines.

This program offers students the opportunity to acquire a broad interdisciplinary background in the social sciences and includes a familiarization with the perspectives, processes, and methods used in the study of social phenomena. Designed for students and professionals from all walks of life, the program allows one to tailor the emphasis of the course of study to fit a variety of individual and career interests.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program of Study

The Master of Arts in Social Science (MASS) is a 36 credit hour program consisting of the following requirements:

REQUIRED CORE COURSES (six hours)
PSCI-500/ CRMJ-500 Seminar in Social Science *
PSCI-501/ CRMJ-501 Research Methods in Social Science *
*NOTE: these six hours must be included in the first 12 hours taken in the program.

CLUSTER A: FOUNDATION COURSES (15 hours)
Students should select five courses from the political science, criminal justice, intelligence, sociology, or anthropology courses the School of Humanities and Social Science offers and are listed in the Cluster A box.

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PSCI-502 The American Federal System
PSCI-503 The Politics of American Democracy: Political Behavior, Interest Groups, and Political Parties
PSCI-506 Legislative Process
PSCI-507 American Presidency
PSCI-509 Urban Politics
PSCI-510 Topics in Political Science
PSCI-521 Advanced Placement: American Government
PSCI-555 Topics in Political Science Leadership Application
PSCI-561 Law and Legal Process
PSCI-564 U.S. Foreign Relations
PSCI-565 International Politics
PSCI-566 International Political Economy
PSCI-567 Global Democracy
PSCI-568 International and Domestic Terrorism
PSCI-569/CRMJ-569 National Security Policy
PSCI-570 The Civil Rights Movement
PSCI-571 Comparative Politics
PSCI-572 International Organization
PSCI-573 International Political Theory
PSCI-574 Global Issues
PSCI-575 US Foreign Policy Leadership
PSCI-576 International Law
PSCI-577 Conflict Studies
PSCI-662 Constitutional Law: Civil Rights and Liberties
CRMJ-510 Topics in Criminal Justice
CRMJ-515/PSCI-515 Topics in Homeland Security
CRMJ-555 Leadership Application Course in Criminal Justice
CRMJ-560 Homeland Security and Criminal Justice Administration
CRMJ-561 Drugs and Crime
CRMJ-562 Comparative Criminal Justice Systems
CRMJ-563 Criminal Evidence
CRMJ-564 Juvenile Justice
CRMJ-565 Corrections
CRMJ-568/PSCI 568 International and Domestic Terrorism
CRMJ-570 Homeland Security
CRMJ-572 Ethics and Integrity in Homeland Security
CRMJ-581 Intelligence Research and Analysis
CRMJ-582 Intelligence Theory Application
CRMJ-583 Transnational Organized Crime
CRMJ-585 Topics in Intelligence
INTL-560 Intelligence and Homeland Security Administration
INTL-570 Homeland Security
INTL-572 Legal and Ethical Dimensions of Intelligence and Homeland Security
INTL-580 Introduction to Intelligence
INTL-581 Intelligence Research and Analysis
INTL-582 Intelligence Theory Application
INTL-585 Topics in Intelligence
SOCI-501 Social Determinants of Modern Life
ANTH-501 Physical and Cultural Adaptations
ANTH-505 Special Topics in Anthropology

CLUSTER B: ELECTIVE COURSES (15 hours)
Students should select five courses from those listed in this cluster, three of which must be Psychology graduate courses (9 hours). Options for the other two electives are listed below.

PSYC-500 Human Growth and Development
*PSYC-501 Principles of Cognitive & Behavioral Change
*PSYC-507 General Psychopathology
*PSYC-508 Counseling and Personality Theories

PSYC-553	Introduction to Family Dynamics
*PSYC-555	Special Topics in Psychology
*PSYC-561	Cultural Issues in Psychological Practice
PSYC-570	Social and Cognitive Foundations of Interpersonal Behavior *With Instructor Permission Only
BADM-704	Foundations of Economics
BADM-713/LDRS-723	Communication for Leadership
EDUC-500	Foundations of American Education
EDUC-561	Counseling Diverse Populations
EDUC-600	Professional Negotiations
ENGL-512	Southern Literature
ENGL-520	Survey of World Literature I
ENGL-521	Survey of World Literature II
ENGL-535	African-American Literature
ENGL-558	Technical and Professional Writing
GEOG-511	World Geography

Any 500 level History course EXCEPT:

HIST-560	History of Non-Western World (M.A.T. only)
HIST-594	Historiography for Social Science Teachers (M.A.T. only)
HESS-502	Drug and Substance Abuse
HESS-503	Human Sexuality
HESS-504	Public Health
LDRS-712	Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS-714	Strategic Leadership, Vision, Mission and Contemporary Issues

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

MASS with Graduate Certificates in Leadership and/or Intelligence Analysis

Students accepted for the MASS degree program may enroll in the Graduate Certificate in Leadership or the Graduate Certificate in Intelligence Analysis.

Each certificate involves a separate application and acceptance. Students dually enrolled in the MASS degree and Graduate Certificate in Leadership may apply the five required courses for the certificate as the Cluster B of the MASS degree. Students dually enrolled in the MASS degree and Graduate Certificate in Intelligence Analysis may apply the five required courses for the certificate as the Cluster A of the MASS degree.

If a student is dually enrolled for the MASS degree and a Graduate level certificate and then opts to drop out of the certificate program, the Cluster requirement(s) revert to that of stand-alone MASS degree program. See Graduate Certificate in Leadership and Graduate Certificate in Intelligence Analysis for details.

Online Completion of the MASS Degree

It is possible to complete the MASS degree partially or entirely online. Students completing the entire MASS degree online should do the following:

1. Complete the core courses PSCI/CRM 500 and CRMJ 501 online.
2. Complete five PSCI, CRMJ, INTL, ANTH, or SOCI online courses for the Cluster A.
3. Complete three PSYC online courses and two of the approved online courses in the other departments for the Cluster B or the online courses for the simultaneous graduate certificate in Leadership as discussed in the Graduate Certificate in Leadership option in the previous section.

Online courses offered each semester and summer term are listed in the Citadel's schedule of courses. It is important to coordinate online course selection with the MASS adviser before enrolling each term to ensure students remain on schedule for graduation.

Department of Psychology Graduate Programs

The Department of Psychology offers two graduate psychology programs, one in Clinical Counseling (MA only) and the other in School Psychology (Ed.S.). The two programs share 24 credit hours. These courses reflect the Department's recognition that all branches of psychology revolve around a common knowledge base with specializations being an extension beyond that base.

The Department of Psychology espouses a philosophical perspective of training and practice that stresses an empirical and applied approach to addressing psychosocial problems of clients. Most faculty members are engaged in clinical practice, research efforts, or both. Faculty members' activities are guided by a scientist-practitioner model, which emphasizes a scholarly approach to applications of psychology.

The Clinical Counseling program offers graduate education at the master's degree level for those interested in becoming professional counselors in community agencies, including college counseling centers, hospitals, mental health, and social services agencies. The program is accredited by the State Department of Education in South Carolina and the Masters in Psychology and Counseling Accreditation Council (MPCAC). Students enrolled in the Clinical Counseling program work to achieve a Master of Arts in Psychology degree by completing a total of 60 credit hours. The program includes 30 credit hours of core courses, 10 hours of advanced courses, 3 credit hours in addictions coursework, 5 credit hours in career counseling, 9 hours of fieldwork, and 3 hours of electives. Fieldwork is completed in agencies throughout the tri-county area and involves a 100-hour practicum and 600-hour internship. Students completing the Clinical Counseling program meet the educational requirements for licensure as Professional Counselors and may for licensure as an Addictions Counselor in South Carolina.

The School Psychology program is built around the model of the data-based problem-solver at the individual, organizational, and systems levels in schools, with an emphasis on the efficacy of outcomes for clients served. The program involves 75-semester hours of credit, and it leads to the Education Specialist (Ed.S.) degree and certification as a "School Psychologist II" in South Carolina and National Certification as a School Psychologist. The School Psychology program is fully accredited by the National Association of School Psychologists (NASP). Students can apply for the award of a Master of Arts in Psychology degree after completing 39 semester hours from the School Psychology Program of Studies and receiving the approval of the Director of the School Psychology program and the Head of the Department of Psychology. PSYC-599, Thesis, MUST be completed as part of those 39 hours. It should be noted that students are not eligible for certification as a school psychologist at the Masters level (i.e., this is not a terminal degree). Information regarding both of these programs can be found on The Citadel's Psychology Department website at www.citadel.edu/psychology/graduate.html.

Master of Arts in Psychology: Clinical Counseling

Department of Psychology
843-953-5320 http://www.citadel.edu/root/psychology

Dr. Genelle Sawyer: genelle.sawyer@citadel.edu

Mission Statement

The mission of the Clinical Counseling MA program is to prepare students to become ethical, multiculturally-competent, evidence-informed practitioners of psychological counseling in a variety of mental health settings. The Program's training model emphasizes the application of theories of human development, psychopathology, multiculturalism and cognitive behavior change to psychosocial problems and advocates a scholarly perspective that integrates evidence-based and professional competencies with a compassionate, culturally sensitive and ethical orientation to clinical work. Through a blend of didactic and practice-based experiences, students will acquire an empirical and culturally competent approach to assessment, conceptualization, intervention, and evaluation of psychological services. The objectives of the program are designed to enable the student to:

1. Understand principles of psychology and their application to real world clinical situations and settings.
2. Recognize and appreciate the importance of a multicultural perspective.
3. Demonstrate understanding of professional and ethical principles as they apply to competent professional practice.
4. Understand evidence-based practice and function as scholarly practitioners when approaching assessment, conceptualization and intervention.
5. Acquire assessment and intervention skills to be used with a diverse range of clients and problems.

Admission Requirements

Admission to the Clinical Counseling Program is based on a competitive review of all application materials.

1. Completion of the online graduate application along with the non-refundable application fee
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended. Applicants are expected to have a grade point average of 3.0 (or graduate grade point average of 3.0) and 9 credit hours in psychology (with a minimum of a C grade). A score of 600 on the GRE Subject Examination in Psychology is acceptable in lieu of the credit hour requirement.
3. Submission of official Graduate Record Examination (GRE) or Millers Analogy Test (MAT) score. A minimum score of 150 on the Verbal Reasoning, 147 on the Quantitative Reasoning, and 3.5 Analytical Writing is preferred for the GRE or a score of 397 or higher on the MAT. Admission test

must have been taken within the last five years. Standardized test requirement will be waived for those with a cumulative GPA of 3.8 or higher.
4. Submission of a completed Admissions Questionnaire
5. Submission of two letters of recommendation

Students requesting a transfer from another Master's program must provide documentation of a GRE or MAT score (copies are acceptable) in order to complete requirements for application to the program.

Application Deadlines

The Admissions Committee will consider complete applications for the program on the following dates:

Admission Term:	Materials Due:
Summer/Fall	March 1
Spring	October 1

Program Requirements

The Master of Arts in Psychology: Clinical Counseling curriculum provides instruction in the theory and practice of counseling from a psychological perspective. The curriculum consists of a total of 60 credit hours, including 30 credit hours of core courses, a three credit hour course in addictions, a three credit hour course in career counseling, 10 hours of advanced courses, five hours of electives, and nine hours of fieldwork. Fieldwork is completed in agencies throughout the tri-county area and involves a 100-hour practicum and 600-hour internship. Students who successfully complete this program meet the educational requirements for professional licensure as a Professional Counselor in South Carolina and may meet the requirements for a Licensed Addictions Counselor in South Carolina. While some graduates have sought and gained admission to doctoral programs, the program is designed as a terminal master's degree program. The program is accredited by the Masters in Psychology and Counseling Accreditation Council (MPCAC). Students must abide by the Ethical Principles of Psychologists and Code of Conduct of the American Psychological Association throughout their enrollment.

The MA degree will be conferred on students who have successfully completed the requirements of the program with a minimum GPA of 3.0. All students must successfully complete a comprehensive examination after completing their ten core courses (see below) and must complete a written and oral presentation of a case study for a panel of faculty members as part of the internship requirement in order to complete the program. Students must complete all course requirements within a 5-year period from the date of initial enrollment. No more than 8 hours of graduate credit taken as a non-degree seeking student will be applied toward program requirements.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Required Program for Clinical Counseling Students

CORE COURSES (30 hours)

PSYC-500	Human Growth and Development
PSYC-501	Principles of Cognitive and Behavioral Change
PSYC-507	General Psychopathology: Assessment and Differential Diagnosis
PSYC-508	Counseling and Personality Theories
PSYC-514	Ethics and Professional Issues in Counseling
PSYC-523	Statistics and Research Design
PSYC-526	Clinical Counseling: Basic
PSYC-528	Evidence Based Practice, Case Conceptualization and Treatment Planning
PSYC-549	Foundations of Psychometrics
PSYC-561	Cultural Issues in Psychological Practice

OTHER REQUIRED COURSES (6 hours)

PSYC-540	Theories and Biology of Addiction
EDUC-550	Career Counseling

Students completing the Clinical Counseling curriculum must successfully complete a comprehensive examination to be permitted to take the following Advanced Courses:

ADVANCED COURSES (19 hours)

PSYC-611	Clinical and Professional Issues in Counseling
PSYC-629	Practicum: Clinical Counseling
PSYC-643	Advanced Clinical Counseling: Assessment
PSYC-644	Advanced Clinical Counseling: Intervention
PSYC-645	Advanced Clinical Counseling: Group
PSYC-651	Internship I
PSYC-652	Internship II

ELECTIVES (5 hours)

PSYC-527	Child Psychopathology & Treatment
PSYC-553	Introduction to Family Dynamics
PSYC-555	Special Topics in Psychology
PSYC-557	Counseling & Psychotherapy for Couples
PSYC-602	Social and Biological Basis of Child and Adolescent Behavior
PSYC-603	Affective and Cognitive Interventions: Child/Adolescent
PSYC-609	Evidence Based Treatment of Addictions

Total Credit Hours: 60

Descriptions of courses are listed in the last section of this catalog.

Field Placement Requirements

Clinical Counseling students complete one 100-hour practicum and one 600-hour internship providing clinical services in a community agency. Field placement opportunities are available in many agencies within the tri-county area. Field placement sites may require a background

check prior to beginning training.

Students who have completed graduate work elsewhere but who desire admission to one of the Clinical Counseling practicum/internships for licensure or professional development reasons must receive formal approval by the Clinical Counseling Committee. Additionally, such students will be required to take the following four courses at The Citadel prior to admission to practicum:

PSYC-507	General Psychopathology: Assessment and Differential Diagnosis
PSYC-643	Advanced Clinical Counseling: Assessment
PSYC-644	Advanced Clinical Counseling
PSYC-645	Advanced Clinical Counseling: Group

The Citadel has adopted this policy because of its ethical responsibilities to practicum agencies, the clients of the agencies, and to the students. Without this background of experience with students, The Citadel is not in a viable position to attest to the student's readiness for the practicum/internship placement.

Specialist in Education in School Psychology

Department of Psychology
843-953-5320
www.citadel.edu/root/psychology

Dr. Timothy A. Hanchon: tim.hanchon@citadel.edu

Mission Statement

The mission of the Specialist in Education (Ed.S.) program in School Psychology is to prepare students to become scientist-practitioners. This model sees the school psychologist as a data-based problem solver at the individual, group, and systems levels. The concept includes the interaction of the student in the classroom, the school system, the family, and the community. The Ed.S. degree emphasizes application of psychological principles, knowledge, and skills in relating to the process and problems of education. The program is approved by the South Carolina Department of Education, and graduates are eligible for certification at the School Psychologist Level II in South Carolina. The program is also approved by the National Association of School Psychologists (NASP, 2003).

Admission Requirements

Admission to the School Psychology Program is based on a competitive review of application materials.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended. Minimum requirements for consideration include an overall undergraduate grade point average of 3.0 (or graduate grade point average of 3.0)
3. Submission of official Graduate Record Examination (GRE) or Miller Analogies Test (MAT) score. No minimum score is required to be considered for admission. Admission test must have been taken within the last five years.
4. Submission of a completed Admissions Questionnaire.
5. Submission of two letters of recommendation.

Application Deadline

The Admissions Committee will consider complete applications for the program on the following date:

Admission Term:	Materials Due:
Summer/Fall	March 1

Program Requirements

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

The Ed.S. degree in School Psychology consists of 75 semester hours with four interacting components.

CORE COURSES
Focus on psychological foundations with emphasis on the role, functions, and scope of the profession of school psychology (27 hours).

PSYC-500	Human Growth and Development
PSYC-501	Principles of Behavior and Cognitive Change
PSYC-507	General Psychopathology: Assessment & Differential Diagnosis
PSYC-508	Counseling and Personality Theories
PSYC-512	Ethics, Roles, & Law
PSYC-523	Statistics & Research Design
PSYC-525	Basic Counseling Techniques
PSYC-549	Foundations of Psychometrics
PSYC-561	Cultural Issues in Psychological Practice

ADVANCED COURSES
Applied courses with emphasis on the knowledge and skills more specific to educational settings (33 hours)

PSYC-502	Psychological & Educational Exceptionalities: Child/Adolescent
PSYC-503	Objective Assessment
PSYC-504	Special Techniques in Assessment
PSYC-505	Personality, Social, & Emotional Assessment
PSYC-602	Social & Biological Basis of Child and Adolescent Behavior
PSYC-605	Systems Theory & Consultation: Prevention and Intervention*
PSYC-606	Educational Interventions*
PSYC-607	Behavioral and Emotional Interventions*
PSYC-608	Advanced Counseling Techniques for School Psychologists
PSYC-612	Reading Assessment and Interventions
PSYC-620	Contemporary Issues in School Psychology

*Course taught in conjunction with Practicum in Consultation. Students are required to complete a consultation project in the public schools.

DATA-BASED PROBLEM SOLVING
Courses critical to functioning as a data-based problem-solver which provide supervised, hands-on training in assessment and intervention skills within school settings (12 hours)

Prerequisite: Students cannot begin this block of courses until they have officially been admitted into the School Psychology Program and completed all prerequisites.

PSYC-615 Practicum in School Psychology I
PSYC-616 Practicum in School Psychology II
PSYC-617 Consultation & Intervention Practicum I
PSYC-618 Consultation & Intervention Practicum II
PSYC-621 Internship in School Psychology I
PSYC-622 Internship in School Psychology II
*NOTE: PSYC 615/617 & 616/618 are co-requisites

SCIENTIST PRACTITIONER
Experience as a scientist practitioner in gathering, analyzing, and interpreting data (three hours)

PSYC-599 Thesis (must be completed prior to award of the MA)

Students in the School Psychology program who successfully complete the 75 semester hours and other Program requirements (see School Psychology Program Handbook) are awarded the Ed.S. degree. Students must complete all course requirements within a 4-year period from the date of initial enrollment. Internship requirements must be completed within 2 years of the completion of course work or 6 years from date of initial enrollment. Students may apply for a Master of Arts in Psychology degree after completion of 39 semester hours from the School Psychology Program of Studies, 3 of which must include PSYC 599 (Thesis).

No more than 8 hours of graduate credit taken as a non-degree-seeking student will be applied toward program requirements.

Field-Based Placement Requirements

School Psychology students must complete all course work before placement in an internship setting (including Thesis). Students are required to spend a minimum of 1200 clock hours in a supervised internship and complete all internship requirements within 2 years.

To meet South Carolina certification requirements, students who plan to complete an internship must apply through the South Carolina Department of Education (SCDOE) for an internship certificate (Level I certification). To meet these requirements, internship candidates must submit an Application for Internship, Teacher Certification Application, SCDOE required fees, a copy of their social security card, and fingerprints for FBI/SLED background check to the Internship Coordinator of School Psychology for submission to the South Carolina Office of Educator Certification.

Other field-based experiences may require a criminal background check prior to field placement.

Total Credit Hours: 60

Program Sequence

PSYC 503, 504, 505, and 615/616 must be taken in the prescribed sequence, with each course building on the preceding one incrementally. The intervention courses (PSYC-605, 606, 607, 608, 612, and 617/618) must be taken concurrently with PSYC- 615/616 (Practicum in School Psychology I/II) to allow for further practical experience with intervention skills within the schools. Please note that ALL full-time school psychology students must be enrolled in PSYC 503 and PSYC 512 during their first Fall semester in order to avoid an extension of their course work by one year.

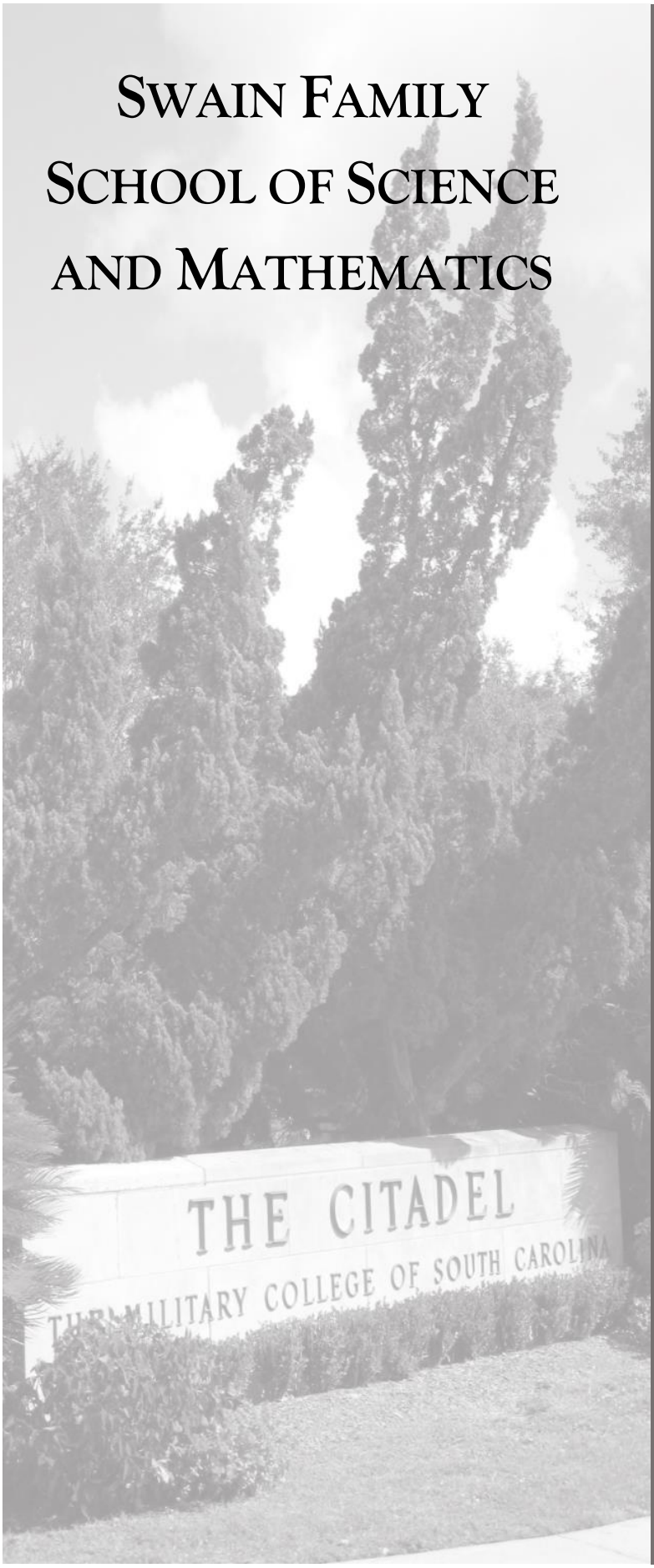
Descriptions of courses are listed in the last section of this catalog.

Attendance Policy

The Catalog of The Citadel Graduate College delineates a general policy regarding class attendance. Students are expected to be familiar with this general attendance policy.

The graduate program in School Psychology is, by its nature, an applied practitioner program leading to an anticipated passing score on the PRAXIS II School Psychology subject test and certification as a Level II School Psychologist in South Carolina. A number of the courses are designed to facilitate the acquisition of hands-on experiences with various diagnostic, evaluation, and intervention techniques where skill acquisition is based on instructor demonstrations and modeling, guided individual and group practice and participation by the student, role playing, and group activities, such as simulations, that build the necessary foundations for the acquisition of the basic skills necessary to the practice of the profession of School Psychology. In these courses, a strict absence policy has been adopted to ensure that learning experiences are not compromised. Specifically, courses that fall under this absence policy are as follows: PSYC-503, PSYC-504, PSYC- 505, PSYC-512, PSYC 612, PSYC-615/616, PSYC-617/618, PSYC-605, PSYC-606, PSYC-607, PSYC-608, PSYC-621, and PSYC-622. Students enrolled in these classes are advised to consult their syllabus and instructor for more specific details.

Swain Family School of Science and Mathematics



Master of Arts

- Biology
- Accelerated Biology
- Sport Management

Master of Science

- Computer and Information Sciences
- Health, Exercise, & Sport Science
- Health, Exercise, & Sport Science: Concentration in Tactical Performance and Resiliency

Master of Arts in Biology

Department of Biology
843-953-5203
www.citadel.edu/root/biology

Dr. Paul Nolan, 843-953-7076
paul.nolan@citadel.edu

Mission Statement

The Master of Arts in Biology degree is designed to advance the knowledge of students in a variety of biological disciplines. The purpose of this degree is to offer certified secondary school teachers, business people and other professionals the opportunity to advance their knowledge in the rapidly expanding discipline of biology. For teachers, the degree enhances their ability to teach a variety of courses within the discipline. For other professionals, the program allows individuals to construct a program for professional advancement in their field.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended.
3. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) score. Minimum acceptable score for the GRE is a verbal and quantitative combination of 290. The minimum for the MAT is a raw score of 396.* Admission test must have been taken within the last five years.

*Students who score between 283 and 289 on the GRE or between 380 and 395 on the MAT may be provisionally accepted into the MA degree program provided all other admission requirements have been met. A student with provisional status who completes the first eight hours of degree coursework with a 3.50 GPA will be classified as regular-degree seeking status.

Environmental Studies graduate certificate students who have successfully completed 9 graduate hours may apply to waive the ***testing requirement* for admission to the Master of Arts in Biology program. Successful completion requires a minimum 3.0 GPA with no course grades below B-.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Master of Arts in Biology program requires a minimum of eight graduate level courses totaling 32 credit hours. At least 20 credit hours must be in biology courses chosen from the list below. With the approval of the graduate advisor, students in the MA in Biology program may apply up to 12 credit hours in allied areas toward their graduation requirements. These allied areas may include, but are not limited to, education, chemistry, geology, psychology, and physics. Students admitted to the program are not required to have an undergraduate major in biology, however it is assumed that students have had at least eight hours in college level biology courses. Prospective students who do not have the recommended eight hours in undergraduate biology must confer with the department head or graduate advisor prior to beginning the program. All students must meet with the graduate advisor prior to beginning their course of study.

Courses

BIOL-502—Comparative Vertebrate Anatomy
BIOL-505—Biometry
BIOL-506—Ecology
BIOL-508—Genetics
BIOL-509—Marine Biology
BIOL-510—Vertebrate Natural History
BIOL-512—Descriptive Histology
BIOL-518—Ornithology
BIOL-519—Economic Botany
BIOL-526—Freshwater Biology
BIOL-532—Developmental Biology
BIOL-601—Evolution of Animals
BIOL-602—Morphological Survey of the Plant Kingdom
BIOL-603—General Physiology
BIOL-604—Marine Invertebrates
BIOL-605—Laboratory Methods in Biology
BIOL-606—Field Methods in Biology
BIOL-607—Microbiology
BIOL-609—Seminar in Environmental Studies
BIOL-610—Special Topics in Biology
BIOL-611—Graduate Research
BIOL-612—Cell and Molecular Biology
BIOL-621—Aquatic Toxicology
BIOL-624—Molecular Genetics and Recombinant DNA:
BIOL-625—Tropical Rainforest and Reef Ecology
BIOL-631—Environmental Physiology

Total Credit Hours: 32

Descriptions of courses are listed in the last section of this catalog.

Accelerated Master of Arts in Biology

Department of Biology
843-953-5203
www.citadel.edu/root/biology

Dr. Paul Nolan, 843-953-7076
paul.nolan@citadel.edu

Mission Statement

The Accelerated Master of Arts in Biology program is designed to provide Citadel undergraduate students an accelerated route to obtain a Master's degree in Biology. The purpose of this program is to offer advanced undergraduate students the opportunity to begin taking graduate-level courses during their senior year, and have those courses be applied toward an MA in Biology degree.

After earning a Bachelor's degree, students in this program will continue their graduate coursework until completing the requirements for the MA in Biology program. It is expected that students in this program will complete the requirements for both the Bachelor's degree and the Master's degree in a total of five years. Undergraduates in this program will acquire a broader and deeper education in modern biology through additional advanced coursework. An advanced degree in Biology can provide employment opportunities that the Bachelor's degree alone cannot provide. This program will also provide students looking to strengthen their application credentials to professional schools, including medical and dental schools, an opportunity to pursue an advanced degree in an accelerated timeframe.

Admission Requirements

The program is available to Citadel undergraduate students majoring in any discipline as long as they have successfully completed a minimum of eight credit hours in biology coursework. Students interested in this program should apply during their junior or senior year. However, students are encouraged to apply by the end of their junior year to help ensure that they have the full subsequent year, including the summer, to begin taking courses for graduate credit. This program is not available to undergraduates enrolled at other institutions, or who have completed a Bachelor's degree or advanced degree at another institution.

1. Complete and return an online application form along with the non-refundable application fee to The Citadel Graduate College.
2. Applicants are expected to have a cumulative undergraduate GPA of 3.5 or higher.
3. Senior (1A) classification

Program Requirements

Program requirements for the Accelerated Master of Arts in Biology are identical to that of the Master of Arts in Biology program. A student enrolled in the Accelerated Master's Program can register for up to two graduate level courses during the summer and one graduate level course during each of the fall and spring semesters. Undergraduate students enrolled in graduate classes will be held to The Citadel Graduate College policies in those classes. Cadets in graduate classes will continue to be subject to the honor system as prescribed by "The Honor Manual of the South Carolina Corps of Cadets." Following successful completion of the requirements for the Bachelor's degree, students would be classified as graduate students by The Citadel Graduate College and follow all of their policies and procedures.

At the discretion of the graduate program director and the student's undergraduate major dean/department head, the student may have up to two courses, or eight credit hours, waived from their undergraduate major degree requirements for completing graduate level courses with a grade of B or higher.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Courses

BIOL-502—Comparative Vertebrate Anatomy
BIOL-505—Biometry
BIOL-506—Ecology
BIOL-508—Genetics
BIOL-509—Marine Biology
BIOL-510—Vertebrate Natural History
BIOL-512—Descriptive Histology
BIOL-518—Ornithology
BIOL-519—Economic Botany
BIOL-526—Freshwater Biology
BIOL-532—Developmental Biology
BIOL-601—Evolution of Animals
BIOL-602—Morphological Survey of the Plant Kingdom
BIOL-603—General Physiology
BIOL-604—Marine Invertebrates
BIOL-605—Laboratory Methods in Biology
BIOL-606—Field Methods in Biology
BIOL-607—Microbiology
BIOL-609—Seminar in Environmental Studies
BIOL-610—Special Topics in Biology
BIOL-611—Graduate Research
BIOL-612—Cell and Molecular Biology
BIOL-621—Aquatic Toxicology
BIOL-624—Molecular Genetics and Recombinant DNA:
BIOL-625—Tropical Rainforest and Reef Ecology
BIOL-631—Environmental Physiology

Total Credit Hours: 32

Descriptions of courses are listed in the last section of this catalog.

Master of Science in Computer and Information Sciences

Department of Cyber and Computer Sciences
843-953-5048
http://www.citadel.edu/ccs

Dr. Shankar Banik, Department Head
843-953-5039, shankar.banik@citadel.edu
Dr. Michael Verdicchio, Program Director
843-953-6987, mv@citadel.edu

Mission

The Master of Science in Computer and Information Sciences is designed to offer professionals an opportunity to attain an advanced degree in the computer science field while upgrading their skills and knowledge. The Computer and Information Sciences program is a joint program with the College of Charleston.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each accredited college and university.
3. Applicants are expected to have an undergraduate grade point average of at least 3.0.
4. Submission of official Graduate Record Examination (GRE) score. Minimum combined score of 300 on the verbal and quantitative sections of the general test (minimum of 1000 under the old grading system) and a minimum score of 4.0 on the writing assessment is required. Admission test must have been taken within the last five years.
5. Competency, demonstrated through coursework, approved work experience, or a program administrated competency exam, in the areas of basic Computer Architecture, Object-oriented Programming, Discrete Mathematics, and Data Structures.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Degree Requirements

The Master of Science in Computer and Information Sciences degree is conferred upon those candidates who successfully complete an approved program of study consisting of a minimum of 33 semester hours of graduate credit (of which no more than nine may be transfer credit) with a cumulative GPA of 3.0. At least 11 credit hours must be taken at each institution.

All degree candidates must:

1. Complete the following **four core courses** for a total of 12 hours.
   CSCI-601 Data Modeling and Database Design
   CSCI-602 Foundations of Software Engineering
   CSCI-604 Distributed Computer Systems Architecture
   CSCI-605 Applied Algorithms

2. Declare an area of specialization from among Computer Science, Cybersecurity, Information Systems, or Software Engineering, and complete four courses in that area (12 credit hours).

- Degree candidates in the Computer Science specialization must complete four courses from the courses numbered 612, 614, 616, 618, 632, 638, 674, or 690 when approved by the department head or program director. Three of the four courses must be from the courses numbered 612, 614, 616, or 618.
  CSCI-612 Advanced Computer Organization
  CSCI-614 Advanced Operating Systems
  CSCI-616 Automata
  CSCI-618 Programming Languages
  CSCI-632 Data Communications and Networking
  CSCI-638 Implementation of Database Management Systems
  CSCI-674 Introduction to Computer Graphics
  CSCI-690 Special Topics in Computing
- Degree candidates in the Cybersecurity specialization must complete the following four courses: 614, 631, 632, and 641.
  CSCI-614 Advance Operating Systems
  CSCI-631 Privacy and Security Issues
  CSCI-632 Data Communications and Networking
  CSCI-641 Advanced Cybersecurity
- Degree candidates in the Information Systems specialization must complete four courses from the courses numbered 631, 632, 634, 636, 638, 659, 672, or 690 when approved by the department head or program director. Two of the courses must be 631 and 632.
  CSCI-631 Principles of Computer Security
  CSCI-632 Data Communications and Networking
  CSCI-634 Project Change and Management
  CSCI-636 Information Technology Policy, Strategy, and Governance
  CSCI-638 Implementation of Database Management Systems
  CSCI-659 Service-Oriented Computing
  CSCI-672 Human-Computer Interaction
  CSCI-690 Special Topics in Computing
- Degree candidates in the Software Engineering specialization must complete four courses from the courses numbered 634, 635, 654, 656, 657, 658, 659, 672, or 690 when approved by the department head or program director. Two of these courses must selected from 654/656/658, and two of the courses must be selected from 634/635/654/656/657/658/659/672/690. A student cannot take both CSCI 634 and CSCI 635 to complete this specialization.
  CSCI-634 Project Change and Management (Cross-listed as PMGT 650)
  CSCI 635 Fundamentals of Agile Project Management (Cross-listed as PMGT 663)
  CSCI-654 Software Requirements Analysis and Specifications
  CSCI-656 Software Systems Design and Implementation
  CSCI-657 Embedded Systems Design
  CSCI-658 Software Testing and Maintenance
  CSCI-659 Service-Oriented Computing
  CSCI-672 Human-Computer Interaction
  CSCI-690 Special Topics in Computing

3. Complete **one of the following three options** (nine hours).
   - CSCI-699 Research thesis (six hours) plus one elective.
   - CSCI-698 Project Thesis (three hours) plus two electives.
   - Three electives (nine hours).

PMGT 650, Overview of Technical Project Management, may be

substituted for CSCI 634 in satisfying degree requirements for the M.S. in Computer and Information Science. PMGT 663, Foundations of Agile Project Management, may be substituted for CSCI 635 in satisfying degree requirements for the M.S. in Computer and Information Science. When only one CSCI 634 and CSCI 635 is permitted, the same restrictions shall extend to these substitutions.

Total Credit Hours: 33

Descriptions of courses are listed in the last section of this catalog.

Department of Health & Human Performance

Mission Statement

The goals of the MS in Health, Exercise, & Sport Science and MA in Sport Management are to provide an exemplary educational environment and experiences leading to advanced skills, knowledge, and attitudes within domains of human movement; healthful living; individual growth and development; and management and administration of sport, exercise, and recreation programs.

These programs provide scholarly approaches to the study of professions in health science, exercise science, sport science, human performance, sport administration, sport marketing, and promotions of sport and related organizations. These advanced degree programs prepare graduates for leadership positions including those within the sport and recreation industry, college and university sports, intramurals, recreation, sport club programs, resort programming, wellness and fitness industries, human performance laboratories, health and physical performance organizations, and health, sport, and athletic administration.

Master of Science in Health, Exercise & Sport Science

Department of Health & Human Performance
www.citadel.edu/root/hhpprograms/graduate/master-of-science-health-exercise-sport- science

Dr. Christopher J. Sole, Program Director
843-953-6386, csole@citadel.edu

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended.
3. Submission of official Miller Analogies Test (MAT) or Graduate Record Examination (GRE) scores.* Admission test must have been taken within the last five years.
4. Submission of three (3) signed letters of recommendation. These may be from faculty members of the applicant's undergraduate institution and/or from associates in business, government, education, or military service.
5. Submission of a resume detailing previous work experiences.
6. A one-page letter describing your career goals and why you are interested in the Master of Science in Health, Exercise, & Sport Science program.

*Minimum acceptable score for the MAT is 396. Minimal acceptable GRE score is a combined verbal and quantitative score of 290. Applicants who score between 283 and 289 on the GRE may apply for provisional status provided all other requirements have been met. A student with provisional status who completes 6 graduate semester hours in one semester and maintains a 3.5 grade point ratio will be classified as a regular degree-seeking student.

Program Requirements

The program consists of thirty-six (36) semester credit hours. The core curriculum consists of twenty-one (21) hours derived from seven (7) required core courses. The remaining hours (15) consist of approved electives. Within the broad scope of courses offered, each program of study is individually structured to accommodate the needs and interests of the student while assuring mastery of the disciplines of health science, exercise science, and sport science. Each student enrolled in this program is expected to integrate components of research, apply contemporary technological and/or computer expertise, and practice effective oral and written communications skills through each phase of the program. During the last semester of program work, each student is required to take a written and oral exit competency examination. Questions for the written phase are drawn from coursework completed by each student in the Department of Health, Exercise, & Sport Science.

After the written exam is evaluated, each student may undergo an oral exam consisting of questions selected by members of the departmental faculty. Any student who does not satisfactorily complete the exit competency examination may be required to retake the exam or take additional courses or accomplish individualized study to strengthen identified areas.

GRADUATION REQUIREMENTS (non-credit bearing)

1. The Citadel Principled Leadership Seminar – LDRS 500
2. Written and Oral Competency Exam
3. Thesis Defense Presentation (*thesis-track students only*)

Core Course Requirements

HESS-501 Nutrition
HESS-505 Motor Development and Motor Learning
HESS-506 Applied Exercise Physiology
HESS-510 Biomechanics of Sport Techniques
HESS-540 Research Techniques & Methods of Analyzing Research in Health, Exercise, & Sport Science I
HESS-544 Exercise Testing
HESS-542 Practicum in Health, Exercise, & Sport Science

Note: For thesis-track students, HESS 542 is fulfilled by one of the thesis electives (HESS 560, 598, or 599).

Approved Electives

HESS-502 Drug & Substance Abuse
HESS-504 Public Health
HESS-508 Epidemiology
HESS-511 Special Topics in Health, Exercise, & Sport Science (Exercise Science)
HESS-534 Accommodating Persons with Disabilities in Sport & Physical Activity
HESS-541 Current and Future Trends in Health, Exercise, & Sport Science
HESS-543 Consumer Health
HESS-546 Environmental Physiology *
HESS-547 Techniques of Conditioning for Sport & Physical Fitness
HESS-554 Analysis of Sport Skills & Techniques
HESS-560 Research Techniques & Methods of Analyzing Research Health, Exercise, & Sport Science II**†
HESS-598 Thesis I in Health, Exercise & Sport Science** †
HESS-599 Thesis II in Health, Exercise & Sport Science** †
PSYC-500 Human Growth & Development
PSYC-516 Psychological Resiliency for Tactical Athletes
SMGT-513 Sport Facility & Event Management
SMGT-514 Principles & Practices of Sport Management
TAPR-640 Tactical Strength & Conditioning

** HESS-506 is a prerequisite for this course*
*** HESS-540 is a prerequisite or co-requisite for this course*
†This course or equivalent is required for thesis-track students.

- Opportunities exist for development of specialized programs of study within Health and Exercise Science.
- Common threads of effective written and oral communication skills, research methodology, applied contemporary technology and computer expertise, collaboration and cooperation with other disciplines, and reflective learning will be incorporated within each course in the Master of Science curriculum.

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

Master of Science in Health, Exercise & Sport Science: Concentration in Tactical Performance and Resiliency

Department of Health & Human Performance
www.citadel.edu/root/hhpprograms/graduate/master-of-science-health-exercise-sport- science

Dr. Chris Bellon, Program Director
843-953-1652, cbellon@citadel.edu

Mission Statement

The mission of the MS in Health, Exercise, & Sport Science with the Concentration in Tactical Performance and Resiliency is to develop practitioners prepared to assume a full-time assistant or head tactical strength and condintioning role within the military, paramilitary, law enforcement, fire and rescue, or private-sector setting. Tactical athletes include military personnel, first responders, and veterans. This program will expand skills and knowledge well beyond that offered by professional certifications alone. Graduate of this program will have completed a rigorous program of study, will have acquired a minimum of three professional certifications, and will have had rich practical experiences.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended.
3. Submission of official Miller Analogies Test (MAT) or Graduate Record Examination (GRE) scores.* Admission test must have been taken within the last five years.
4. Submission of three signed letters of recommendation. These may be from faculty members of the applicant's undergraduate institution and/or from associates in business, government, education, or military service.
5. Submission of a resume detailing previous work experiences.
6. A one-page letter describing why you are interested in the concentration in Tactical Performance and Resiliency.

*Minimum acceptable score for the MAT is 396. Minimal acceptable GRE score is a combined verbal and quantitative score of 290. Applicants who score between 283 and 289 on the GRE may apply for provisional status provided all other requirements have been met. A student with provisional status who completes 6 graduate semester hours in one semester and maintains a 3.5 grade point ratio will be classified as a regular degree-seeking student.

Program Requirements

The MS in Health Exercise & Sport Science: Concentration in Tactical Performance and Resiliency consists of thirty-six (36) semester credit hours. Eighteen (18) of those credit hours come from core courses from health, exercise, and sport science. Additionally, fifteen (15) credit hours are derived from courses specific to the Concentration in Tactical Performance and Resiliency, while three (3) credit hours come from one of approved elective course based on the direction you wish to take with your degree.

Prior to the capstone internship experience, the candidate must satisfy the following criteria:

1. Complete 300 field experience hours, all of which must be documented and meet the criteria set forth by the Department of Health and Human Performance. Prior to beginning field experience hours, candidates must pass the FBI/SLED background check requiring all including fees, social security card copy, and fingerprints.
2. Apply for an experience that is approved by the Department of Health and Human Performance no less than 2-months prior to the start date.
3. Gain any necessary clearance documentation required to be permitted at the internship site.
4. Successfully pass the Certified Personal Trainer (CPT), Tactical Strength and Conditioning Facilitator (TSAC-F), or Certified Strength and Conditioning Specialist (CSCS) exam through the National Strength and Conditioning Association (NSCA).
5. Obtain a current American Red Cross certificate in First Aid and CPR/AED.

GRADUATION REQUIREMENTS (non-credit bearing)
• The Citadel Principled Leadership Seminar – LDRS 500
• Successful completion of the **Tactical Strength and Conditioning-Facilitator** certification (National Strength and Conditioning Association)
• Proof of current Certification in Mental Heal First Aid
One (1) or more professional certifications from the list below:
- **Certified Personal Trainer** (National Strength and Conditioning Association)
- **Certified Strength and Conditioning Specialist** (National Strength and Conditioning Association)

Course Requirements

CORE COURSES (21 credit hours)
HESS-501 Nutrition
HESS-505 Motor Development and Motor Learning
HESS-506 Applied Exercise Physiology
HESS-510 Biomechanics of Sport Techniques
HESS-540 Research Techniques & Methods of Analyzing Research in Health, Exercise, & Sport Science
HESS-544 Exercise Testing & Assessment
TAPR-601 Introduction to Human Performance

CONCENTRATION COURSES (12 credit hours)
PSYC-516 Psychological Resiliency for Tactical Athletes
TAPR-610 Applied Exercise Physiology and Nutrition
TAPR-640 Tactical Strength and Conditioning
TAPR 699 Capstone Internship in Tactical Performance & Resiliency

APPROVED ELECTIVE COURSES (3 credit hours, choose one course)
HESS-534 Accommodating Persons with Disabilities in Sport & Physical Activity
HESS-546 Environmental Physiology
HESS-550 Instructional Aspects of Teaching Physical Education
HESS-560 Research Techniques & Methods II
PSYC-604 Applied Principles of Behavior Change for Tactical Athletes

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog.

Master of Arts, Sport Management

Department of Health & Human Performance
https://www.citadel.edu/root/hhp-programs/graduate/master-of-arts-sport-management

Dr. Tim Bott, Interim Program Director
(843) 953-4852, tbott@Citadel.edu

Mission Statement

The mission of the Master of Arts (M.A.) in Sport Management is to cultivate principled leaders for the global sport business industry. The program achieves its mission through the advanced curriculum and academic professionalism that provides students exemplary scientific and practical experiences.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from each accredited college or university and transcripts from all postgraduate institutions attended.
3. Submission of two letters of recommendation that address the student's ability to undertake coursework at the graduate level.
4. Submission of a resume detailing previous academic and work experiences and a cover letter that addresses academic and professional career goals.

Note. Students accepted to the M.A. in the Sport Management program will automatically be enrolled in the Graduate Certificate in Sport Management. Please see the certificate section of the catalog for more information.

Program Requirements

The program consists of thirty-three (33) credit hours. The students are required to complete a minimum of twenty-seven (27) credit hours derived from the seven required core courses and the option to choose between the thesis or the internships. For the remaining six (6) credit hours students should choose two approved elective courses (please see the table with the Approved Elective courses). Within the broad scope of courses offered, each course is individually structured to accommodate the needs and interests of the student while assuring mastery of the discipline of sport management. Each student enrolled in this program is expected to integrate components of research, apply contemporary technological and computer expertise, and practice oral and written communication skills through each phase of the program.

During the last semester of program work, graduating students are required to present and defend a Sport Management Program Portfolio that includes academic as well as professional and other artifacts, as per demands by the M.A. in Sport Management degree program. Requirements for the Portfolio will be communicated to the student after acceptance in the program.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

CORE COURSE REQUIREMENTS (27 credit hours)

SMGT-513	Sport Facility & Event Management
SMGT-514	Principles and Practice of Sport Management
SMGT-518	Sport Marketing
SMGT-523	Sport Leadership and Organizational Behavior
SMGT-555	Sport Law
SMGT-556	Sport Finance
SMGT-559	Research Methods in Sport Management

GRADUATION REQUIREMENT

HESS-598	Thesis I **and** HESS-599 Thesis II
	OR
SMGT-538	Internship in Sport Management*

APPROVED ELECTIVE COURSES

Each student is required to choose a minimum of two (2) courses (6 credit hours) from the following list of approved elective courses.

Health and Human Performance (HESS)

SMGT-520	Special Topics in Sport Management
SMGT-521	The Art of Selling in Sport
SMGT-529	Independent Study in Sport Management
SMGT-530	Practicum in Sport Management
SMGT-539	Sport Public Relations and Promotions
SMGT-549	Sport Sociology
SMGT-552	Sport Fundraising
SMGT-553	Sport Information Management
SMGT-558	Sport Advertising
HESS-501	Nutrition
HESS-534	Accommodating Persons with Disabilities in Sport & Physical Activity
HESS-543	Consumer Health
HESS-550	Instructional Aspects of Teaching Physical Education
HESS-560	Research Techniques & Methods II
TARP-601	Introduction to Human Performance

Business Administration (BADM)

BADM-713 or LDRS-723	Communications for Leadership
BADM-719	Information Technology Management
BADM-762	Negotiation Strategies
BADM-766 or LDRS -766	Human Resource Development

Leadership (LDRS)

LDRS-711	Leading Change: Org. Develop. & Transformation
LDSR-712	Leading Teams: Coaching, Cult., Div., & Glob.
LDRS-723 or BADM-713	Communications for Leadership

Psychology (PSYC)

PSYC-516 Psychological Resiliency for Tactical Athletes
PSYC-604 Applied Principles of Behavior Change for Tactical Athletes

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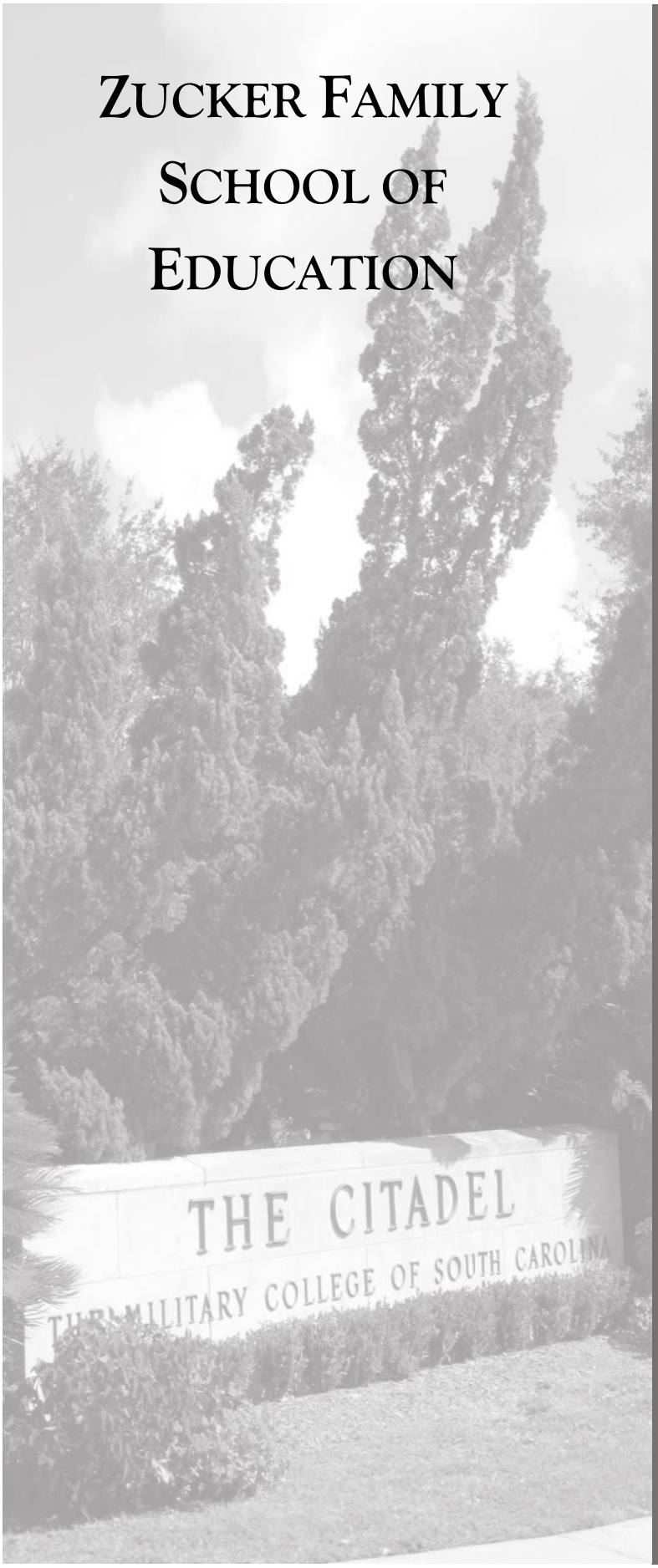
Total Credit Hours: 33

Descriptions of courses are listed in the last section of this catalog.

* If the Internship option is chosen by the sport management students, they should complete 350 hours minimum with a sport organization.



Zucker Family School of Education

Master of Arts in Teaching

- Secondary
- Middle Grades
- Physical Education

Master of Education

- Counselor Education
- Educational Leadership
- Higher Education
- Instructional Design
- Interdisciplinary STEM Education
- Literacy Education

specialist in education

- educational Leadership

Zucker Family School of Education
Graduate Programs

The purpose of the graduate programs of the Zucker Family School of Education is to serve the people of the Lowcountry, the state of South Carolina, and the Southeast by providing high quality programs in the areas of professional education and school counseling. The School offers programs to prepare school teachers, school counselors, literacy teachers, literacy coaches, and educational administrators.

The Citadel has been involved in the preparation of teachers since the creation of the School of Education and Psychology in 1929. In 1954, the School of Education was approved as a separate department. Master's degree programs for teachers and Master's degree programs for prospective counselors were authorized in 1968. Master's degree programs for school administrators were authorized in 1970. The Educational Specialist degree in educational administration was approved in 1975, and the Educational Specialist degree in School Psychology was approved in 1980.

Prior to 1974, the South Carolina State Department of Education (SCDE) approved The Citadel's Educator Preparation programs. In 1974, all professional education programs offered by The Citadel were initially accredited by the National Council for Accreditation of Teacher Education (NCATE). Both state-approved program status and national accreditation have been continuous since they were initially granted. The most recent SCDE, Commission on Higher Education (CHE), and NCATE/CAEP program reviews, conducted in the spring of 2013, resulted in continuing program accreditation approval. The Council for Accreditation of Counseling and Related Educational Programs (CACREP) granted accreditation in July 2005 to the School Counseling Programs which offers a Master of Education in Counselor Education.

Statement of Philosophy

The philosophy of the Zucker Family School of Education at The Citadel is based on five fundamental propositions. These propositions serve to orient the mission and conceptual base of the School, guide the actions and value system of the faculty, shape the curricula of the various programs, and provide to its faculty their sense of purpose and meaning for teaching, scholarship, and professional service. These five propositions are:

1. The faculty is committed to promoting education for all individuals to the fullest extent possible. With the implementation of appropriate teaching and assessment strategies, a fundamental guiding belief is that all students, though having unique learning styles and experiences, are capable of learning.
2. It is the educator's responsibility, with the aid of appropriate resources and support, to establish a mutually respectful environment where effective learning occurs for all students.
3. Education is a systematic effort to facilitate the knowledge, skills, attitudes, and values necessary for the student to function in a diverse society.
4. The faculty is committed to upholding the highest professional standards in all situations in which they model these standards to students through their teaching, research, and service endeavors.
5. The faculty is committed to an open interchange of ideas wherein the perspectives of all are valued.

The School's Conceptual Model

The Citadel's Professional Education Unit prepares principled educational leaders to be knowledgeable, reflective, and ethical professionals. Candidates completing our programs are committed to ensuring that all students succeed in a learner- centered environment.

Rationale:
- Society is in need of principled educational professionals committed to ensuring all students learn;
- All children and young adults require high quality educational experiences that enable them to compete and prosper in the global economy; and
- Such high quality educational experiences require a transformed educational system focused on fostering twenty–first century knowledge and skills in all children and young adults.

The Citadel's Professional Education Unit is committed to the simultaneous transformation of the preparation of educational leaders and of the places where they work. Specifically, The Citadel's Professional Education Unit seeks to develop principled educational leaders who:
- Have mastered their subject matter and are skilled in using it to foster student learning;
- Know the self who educates (Parker J. Palmer) and integrate this self-knowledge with content knowledge, knowledge of students, and in the context of becoming professional change agents committed to using this knowledge and skill to ensure that all students succeed in a learner-centered environment; and
- Exemplify the highest ethical standards by modeling respect for all human beings and valuing diversity as an essential component of an effective learner-centered environment.

Through our initial program for teacher candidates for P-12 schools and our advanced programs for professional educators in P-20 schools, The Citadel's Professional Educational Unit shapes cadets and graduate students into principled educational leaders capable of and committed to transforming our schools into learning communities where all succeed.

The Citadel's Professional Educational Unit has identified 15 performance indicators for candidates to demonstrate that they are principled educational leaders who are knowledgeable, reflective, and ethical professionals:

Knowledgeable Principled Educational Leaders...

1. Have mastered the subject matter of their field of professional study and practice;
2. Utilize the knowledge gained from developmental and learning theories to establish and implement an educational program that is varied, creative, and nurturing;
3. Model instructional and leadership theories of best practice;
4. Integrate appropriate technology to enhance learning;
5. Demonstrate a commitment to lifelong learning;

Reflective Principled Educational Leaders...

1. Develop and describe their philosophy of education and reflect upon its impact in the teaching and learning environment;
2. Develop and manage meaningful educational experiences that address the needs of all learners with respect for their individual and cultural experiences;
3. Construct, foster, and maintain a learner-centered environment in which all learners contribute and are actively engaged;
4. Apply their understanding of both context and research to plan, structure, facilitate, and monitor effective teaching and learning in the context of continual assessment; and
5. Reexamine their practice by reflectively and critically asking questions and seeking answers.

Ethical Principled Educational Leaders...

1. Demonstrate commitment to a safe, supportive, learning environment;
2. Embrace and adhere to appropriate professional codes of ethics;
3. Value diversity and exhibit a caring, fair, and respectful attitude and respect toward all cultures;
4. Establish rapport with students, families, colleagues, and communities;
5. Meet obligations on time, dress professionally, and use language appropriately.

The Professional Education Board

To facilitate the college-wide mission of preparing principled leaders for professional education, The Citadel established the Professional Education Board (PEB). The Citadel PEB's primary focus is to foster academic environments that promote the development of principled leaders for the education profession and to facilitate the continuing improvement of professional education programs across the institution. In pursuing these goals, the PEB will concentrate on communication, assessment, and governance issues. The Citadel's Dean of the Zucker Family School of Education chairs the Board, which is comprised of representatives from all of The Citadel's professional education constituencies, including faculty, staff, students, and our P-12 colleagues. PEB members are appointed by the Dean of the School of Education in collaboration with the Deans of Humanities and Social Science, of Science and Mathematics, and of The Citadel Graduate College. Beginning in September 2006, the Professional Education Board meets monthly during each academic year.

The School's Website

The Zucker Family School of Education has a diverse faculty with a wide array of teaching and research interests. Additional information on these interests, as well as other departmental highlights, initiatives, and activities, can be viewed online: www.citadel.edu/education.

Admission Test Policy

Admission tests are required for all M.A.T. and Counselor Education degree programs. The minimum acceptable score for admission for degree programs is a score of 396 on the Miller Analogies Test (MAT) or 290 (combined score on verbal and quantitative sections) on the Graduate Record Examination (GRE).

Provisional Status – Applicants for all M.A.T. and Counselor Education degree programs who score between 380 and 395 on the MAT or between 283 and 289 on the GRE may apply for provisional status. A student accepted provisionally will have completed all admission requirements and will have been reviewed by the respective department. Once admitted the student must complete six semester hours and maintain a 3.50 GPA and then will be classified as degree-seeking status (see respective programs for additional requirements). Additionally, applicants for the M.A.T. Secondary Education degree program with a GPA between 2.5 and 3.0 may be accepted on a provisional basis if all other criteria have been met. Admission tests must be current within five (5) years of application and official score sent directly to the CGC office at the request of the student.

Requesting a Waiver - Applicants for all M.A.T. and Counselor Education degree programs who possess a master's degree or doctorate degree from an accredited institution may *request* permission to waive the requirement to supply an admissions test score. An applicant must request the waiver in writing at the time of application from the appropriate academic program director.

LiveText Account

Zucker Family School of Education degree-seeking students (and those approved for certification only in counseling or educational leadership programs) must purchase a LiveText account at The Citadel's Bookstore. LiveText makes it possible for education students to have secure access to their portfolios and other important materials. Through LiveText, faculty members and administrators collect data, generate reports from the data, and use this information to make informed program and unit decisions.

Appeals Process

Education students who have extenuating circumstances may request to appeal policies by writing to the School's Admission, Retention, and Certification committees. Appeal letters should be addressed to the Dean of the School, who will direct it to either the Initial Programs Committee or the Advanced

Programs Committee for recommendation. The committees' recommendations regarding appeals will be forwarded to the Dean of the School who will review and work with the Provost and/or her designee for final action.

Transfer Credit

No more than 12 hours may be transferred from other accredited colleges or universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.). Only graduate credit hours in which grades of "B" or higher have been earned are transferable. Some programs allow fewer hours of transfer credit. Students should check the requirements for specific programs for the maximum number of credit hours that may be transferred into his or her program at The Citadel. Please refer to CGC policy section for complete transfer credit details.

Master of Arts in Teaching (M.A.T.) Secondary Education (Grades 9-12)

- Biology
- English
- Mathematics
- Social Studies

Zucker Family School of Education
843-953-5097
schoolofeducation@citadel.edu
www.citadel.edu/root/teacher-education

Content Area Advisors:
Biology:
Dr. Kristy Johnson, johnsonk1@citadel.edu
English:
Dr. Tom Thompson, thompsont@citadel.edu
Mathematics:
Dr. Richard Robinson, rrobins4@citadel.edu
Social Studies:
Dr. Katherine Grenier, grenierk@citadel.edu

Education Advisors:
Dr. Christopher Dague, cdague@citadel.edu
Dr. Soo Joung Kim, soojoung.kim@citadel.edu

Program Field Experiences, Internships and Support Services:
To Be Determined

Mission Statement

The Master of Arts in Teaching (M.A.T.) program is designed for students seeking initial teacher certification in the fields of Biology and General Science, English Language Arts, Mathematics, Physical Education, or Social Studies. The program shares the philosophy and conceptual base of the Zucker Family School of Education: Preparing Principled Educational Leaders who are knowledgeable, reflective, and ethical. In addition, students must demonstrate an understanding of essential knowledge and its application to the classroom through field experiences and a professional internship. Some of those areas of knowledge include human development, education foundations and research, as well as an understanding of the academic content the student proposes to teach.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each accredited college and university.
3. Applicants are expected to have a 3.0 cumulative undergraduate grade point average. Applicants with a GPA between 2.5 and 3.0 may be accepted on a provisional basis if all other criteria are met.
4. Submission of the official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) scores. GRE minimum acceptable score is a verbal and quantitative combination of 290. MAT minimum is a raw score of 396. Admission test must have been taken within the last five (5) years. See page 81 for provisional status information.

Program Requirements

The program assumes a substantial undergraduate preparation in the proposed certification area. It is the responsibility of the student, and a requirement of the degree program, to submit official transcripts of previous academic work to The CGC office. Through a dual advisement system that includes content and education faculty, transcripts will be evaluated and a program of study will be developed for each student. Additional undergraduate course work may be required. The program of study will include work in professional education and a content field. At the outset, it should be recognized that programs of study are highly individualized based on the prior preparation of the teacher candidate, and hours for completion vary among students. *Registration cannot take place until program of study is complete.*

Prior to the internship in teaching, the teacher candidate must:

- Apply for the internship no later than two semesters prior to the Student Teaching Internship.
- Successfully complete all required field experiences – a minimum of 75 hours prior to the student teaching internship.
- Complete the teacher certification application via this website, https://EdSc.gov/educators/teaching-in-south-carolina/aspiring-educators/applying-for-certification/, with state- required fees, social security card copy, and fingerprints for FBI/SLED background check.
- Be cleared by the South Carolina State Department of Education.
- Successfully complete the Praxis II Content Specialty Exam. Candidates are encouraged to take the specialty exam two semesters prior to beginning the internship. A passing score, using South Carolina standards (www.ets.org/praxis /prxsc.html), must be achieved prior to placement in the Professional Internship.

•The Praxis II Principles of Learning and Teaching (PLT) pedagogy exam is required prior to the issuance of an initial certificate. Candidates are encouraged to take the PLT exam upon completion of the following education courses: EDUC 500, EDUC 514, and 536.
- Negative TB test prior to the internship.
- M.A.T. interns must successfully pass Red Cross Blood Borne Pathogens training prior to internship.
- M.A.T. PE candidates must provide proof of current American Red Cross certification in First Aid and CPR prior to internship.
- Successfully complete 60 consecutive full days during the student teaching internship.

Successful completion of the approved program will qualify the student for a South Carolina teaching certificate/license in their chosen discipline and appropriate grade level(s).

Co-requisite: PSYC 500 - Human Growth and Development (or verifiable undergraduate preparation in psychology).

Core Education Requirements

It is recommended that the following courses be taken prior to any other professional education courses. Courses in the content field may be taken prior to or concurrent with this required core. (For Physical Education, see specific Professional Education Courses listed under that section.) Candidates should consult with their education advisor for course sequencing.

1. EDUC-500 Foundations of American Education (A minimum grade of B must be earned to move from pre-teacher education to teacher education.)
2. EDUC-514 The Exceptional Child in the School
3. EDUC-536 Educational Psychology
4. EDUC-512 Data Collection and Analysis
5. EDUC-588 Foundations of Literacy

Professional Education Methods Course Requirements

The professional requirement courses should be taken after the Core Education Courses have been completed. Content courses may be taken prior to or in conjunction with all of these courses except the Professional Internship. The student must recognize that the Professional Internship requires that a minimum of 60 full days be spent in the school. During the Internship, it will not be possible for the student to take any additional courses or be employed.

1. EDUC-501 Methods and Materials of Middle and High School Teaching
2. EDUC-592 Content Area Reading and Writing
3. EDUC-520 Professional Internship

Content Area Preparation Requirements

Transcripts will be evaluated against the following list of required courses in the possible certification areas of the M.A.T. program. Guidelines from the South Carolina State Department of Education, NASPE, NCSS, NCTE, NCTM, NMSA, and NSTA are

used to determine courses for each program which students have taken in either graduate or undergraduate levels.

Each student is assigned an advisor from the School of Education and from the respective Content Area that he or she has chosen. Both advisors examine transcripts and develop a program of study for the student. To be eligible for the Student Teaching Professional Internship, program completion, and recommendation for licensure, in addition to education courses, students must have taken all of the content area courses below. Further, it is the responsibility of the teacher candidates to make sure that they have credit for prerequisites for each required course. In the event that all of the following have been taken prior to matriculation into this program, the content area advisor will recommend additional graduate work in the content field for program completion.

Field Experiences and Clinical Practice/Internship Semester Expectations

As is expected for all South Carolina graduate teacher preparation programs, candidates in this program will spend a minimum of 75 hours in school settings prior to their internship semester participating in activities that range from focused observation to assisting small groups to teaching whole classes. These pre-internship experiences are an integral part of the core education courses. During the internship semester, teacher candidates in this program will spend 60 full days in a High School setting with content area certified teachers who are ADEPT trained.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Master of Arts in Teaching – Biology (Grades 9-12)

Note: *Along with required Education Courses listed above, completion of this degree program includes a minimum of 2 Graduate level Science courses from transcript analysis as well as Biology Methods – BIOL 605, 606, or 609.*

Expected Science Content Area Required Courses:
- Behavior of Organisms and their Relationship to Social Systems (one course): ANTH-201, ANTH-202, or ANTH-501
- Biology Survey with lab (two courses): BIOL-101 with BIOL 111 **and** BIOL-102 with BIOL-112 or BIOL-130 with BIOL 140 **and** BIOL-131 **and** BIOL-141
- Chemistry with lab (two courses): CHEM-103 with CHEM-113 **and** CHEM-104 with CHEM-114 or CHEM-151 with CHEM-161 **and** CHEM-152 with CHEM-162
- Geology with lab (one course): EART-201 or EDUC-587-Special Topics
- Introduction to Physics with lab (one course required, two recommended) PHYS-203 **and** PHYS-253 or PHYS-204 **and** PHYS-254 or PHYS-221**and** PHYS-271 or PHYS-222 **and** PHYS-272
- Cell Biology with lab (one course): BIOL-205 or BIOL-612
- Ecology with lab (one course): BIOL-406 or BIOL-506
- Evolution (one course): BIOL-208 or BIOL-601
- Genetics with lab (one course): BIOL-204 or BIOL-308 or BIOL-508
- Anatomy/Physiology with lab (one course): BIOL-403 or BIOL-317 with BIOL-327 or BIOL-318 with BIOL-328 or BIOL-502 or BIOL-603

• Microbiology with lab (one course): BIOL-290 or BIOL-607
• Biology Methods (one course): BIOL-605 Laboratory Methods in Biology or BIOL-606 Field Methods in Biology or BIOL-609 Seminar in Environmental Science

*Two other graduate level Biology courses in addition to a Biology Methods course should be chosen if all science content course requirements were met in the undergraduate program.

Master of Arts in Teaching – English (Grades 9-12)

Note: *A minimum of four graduate level English courses is required. ENGL-564 and 595 and at least two of the other courses listed below must be completed successfully on the graduate level. Each candidate's content area program of studies is based on an analysis of his or her undergraduate transcript in relation to NCTE/CAEP standards.*

English Language Arts Content Area Requirements:

- British Authors (two courses): ENGL-201 and ENGL-202
- American Literature (one course): ENGL-215
- Public Speaking (one course): ENGL-205 or ENGL-206
- World Literature (two courses): ENGL-218 or ENGL-520 and ENGL-219 or ENGL-521
- African American Literature (one course): ENGL-535
- Adolescent Literature (one course): ENGL-552
- Modern English Grammar (one course): ENGL-414 or ENGL-553
- History of the English Language (one course): ENGL-415 or ENGL-554
- Literary Criticism (one course): ENGL-555
- Film Studies (one course): ENGL-209 or ENGL-560
- Advanced Composition (one course): ENGL-413 or ENGL-562
- Teaching with Technology (one course): ENGL-564
- Methods and Materials for English Language Arts (one course): ENGL-595

For M.A.T. English majors, participation in community arts and humanities functions and documentation of integration of the arts into lesson plans created for use in K-12 settings (EDUC 501, 592, 595, and 520) are mandatory.

Master of Arts in Teaching – Mathematics (Grades 9-12)

Note: *Teacher candidates are expected to complete undergraduate content requirements as advised by mathematics content advisors based on transcript analysis. Calculus I and II must be completed prior to enrolling in any graduate mathematics class.*

Math Content Area Requirements:

- Analytical Geometry & Calculus I: MATH-131 or equivalent
- Analytical Geometry & Calculus II: MATH-132 or equivalent
- Analytical Geometry & Calculus III: MATH-231 or equivalent
- Linear Algebra: MATH-240
- MATH-521 Modern Geometry
- MATH-542 Probability and Statistics
- MATH-514 Methods for Middle/Secondary Mathematics
- MATH-545 Applications of Discrete Mathematics
- MATH-532 Modern Algebra

Master of Arts in Teaching – Social Studies (Grades 9-12)

Note: *At least three of the course requirements listed below must be completed successfully on the graduate level.*

Social Studies Content Area Requirements:

- History of World Civilization or Western Civilization (two courses): HIST-105 and HIST-106 or HIST-103 and HIST-104
- Survey of U.S. History (two courses): HIST-201 and HIST-202
- Introduction to Sociology (one course): SOCI-201
- Principles of Macroeconomics (one course): BADM-201
- American National Government (one course): PSCI-102 or PSCI-502
- Cultural Anthropology (one course): ANTH-202 or ANTH-501
- Historiography (one course): HIST-594
- Urban Politics (one course): PSCI-302 or PSCI-509 or PSCI-306 or PSCI-506 or PSCI-307 or PSCI-401
- World Geography (one course): GEOG-209 or GEOG-511
- History of the Non-Western World (one course): HIST-560
- Special Topics: EDUC-587

Descriptions of courses are listed in the last section of this catalog.

Master of Arts in Teaching (M.A.T.)
Middle Grades (Grades 5-8)

- English
- Mathematics
- Science
- Social Science

Zucker Family School of Education

843-953-5097, schoolofeducation@citadel.edu

http://www.citadel.edu/root/teacher-education

Content Area Advisors:

English:

Dr. Tom Thompson, tom.thompson@citadel.edu

Mathematics:

Dr. Richard Robinson, rrobins4@citadel.edu

Science:

Dr. Kristy Johnson, johnsonk1@citadel.edu

Social Science:

Dr. Katherine Grenier, grenierk@citadel.edu

Education Advisors:

Dr. Christopher Dague, cdague@citadel.edu

Dr. Soo Joung Kim, soojoung.kim@citadel.edu

Program Field Experiences, Internships and Support Services:

To Be Determined

Mission Statement

The mission of this program is development of individuals who will teach Middle Grades who are knowledgeable about all aspects of the teaching- learning process and who are effective, ethical, and reflective educators prepared to assume leadership roles in the profession and community.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each accredited college and university.
3. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
4. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) scores. GRE minimum acceptable score is a verbal and quantitative combination of 290. MAT minimum is a raw score of 396. Admission test must have been taken within the last five years. See page 81 for provisional status information.
5. Submission of three letters of recommendation.

Program Requirements

Required Education Course: (three semester hours)

- Introduction to Educational Technology: EDFS 687 (CofC) or an Equivalent Educational Technology course
  – For English Candidates: Teaching with Technology ENGL 564 (The Citadel)
  – For Math Candidates: Mathematical Technology Resources for STEM Education (The Citadel) MATH 618 or Applications Across the Mathematics Curriculum with Technology (CofC) SMFT 516

--Completion of a program of study with content and education advisors upon acceptance. *Registration cannot take place until program of study is complete.*

Core Education Graduate Hours: (21 semester hours)

- Foundations of American Education (The Citadel): EDUC-500 or Social and Philosophical Foundations of Education (CofC): EDFS-652
- The Exceptional Child in School (The Citadel): EDUC-514 or Introduction to Exceptional Children (CofC): EDFS-710
- Creating Effective Learning Communities: EDEE 690 (CofC)
- Middle Grades Organization and Curriculum (CofC): EDEE-515
- Foundations of Literacy (The Citadel): EDUC-588 or EDEE 604 (CofC)

Middle Grades Practicum: (six semester hours, must be taken together at the same institution)

- Educational Psychology (The Citadel): EDUC-536

  and
- Methods and Materials of Middle and High School Teaching (The Citadel): EDUC-501

  or
- Human Growth and Development (CofC): EDFS-654

  and
- Application of Methods and Materials in a Middle Level Field Grades 5-8 (CofC): EDMG-658

Literacy Skills

Content Area Reading and Writing (The Citadel): EDUC-592

Culminating Professional Experiences in Middle School:
60 continuous full days during the internship, nine semester hours, must be taken together at the same institution. During the Internship, it will not be possible for the student to take any additional courses or be employed.

Professional Internship (The Citadel): EDUC-520; and
Transition to the Profession Seminar (The Citadel): EDUC-525
Or Clinical Practice in Middle Grades (CofC): EDEE-699 and
Transition to the Profession Seminar (CofC): EDMG-698

Prior to the Internship in Teaching, the Teacher Candidate must:
-Apply for the internship no later than two semesters prior to the Student Teaching Internship.
-Successfully complete all required field experiences – a minimum of 75 hours prior to the student teaching internship.
Complete the teacher certification application with state- required fees, social security card copy, and fingerprints for FBI/SLED background check.
-Successfully complete the Praxis II Content Specialty Exam. Candidates are encouraged to take the specialty exam two semesters prior to beginning the internship. A passing score, using South Carolina standards (www.ets.org/praxis /prxsc.html), must be achieved prior to placement in the Professional Internship.
-The Praxis II Principles of Learning and Teaching (PLT) pedagogy exam is required prior to the issuance of an initial certificate. Candidates are encouraged to take the PLT exam upon completion of the following education courses: EDUC 500, EDUC 514, and EDUC 536.
-Be cleared by the South Carolina State Department of Education.
-Negative TB test.
-M.A.T. interns must successfully pass Red Cross Blood Borne Pathogens training prior to internship.
-M.A.T. PE candidates must provide proof of current American Red Cross certification in First Aid and CPR; must be submitted prior to the internship.
-Successfully complete 60 full days during the student teaching internship.
-Successful completion of the approved program will qualify the student for a South Carolina teaching certificate/license in their chosen discipline and appropriate grade level(s).

Middle Grades Content Preparation:
This program assumes substantial undergraduate preparation in the specific content area the person is seeking credentials. Any of the following undergraduate content area courses not taken prior to admission to the program are added to the candidate's minimum program completion hours.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Master of Arts in Teaching – English (Grades 5-8)

Expected Undergraduate Content:
- Adolescent Literature (one course)
- World Literature (two courses)
- American Literature (one course)
- Media Studies (one course)
- Modern English Grammar (one course)
- Creative Writing (short story, poetry, etc.) (one course)

Required Graduate English Courses (12 semester hours):
- Teaching Writing in the Middle Grades (CofC): EDMG-657
- Special Methods in Teaching in the Content Area-English: EDUC 623
- Instruction and Assessment of Older Literacies Learners (CofC): MTLA 678
- Reading: Literacy Assessment and Instruction (The Citadel): EDUC-590

Master of Arts in Teaching – Mathematics (Grades 5-8)

Expected Undergraduate Content:
- Algebra and Trigonometry (one course)
- Geometry (one course)
- Probability and Statistics (one course)
- Discrete Math (one course)

Note: All undergraduate mathematics prerequisites must be completed before taking The Citadel mathematics class, MATH-514.*

Required Graduate Mathematics Courses (nine semester hours):
- Introduction to Problem Solving (CofC): SMFT-510
- Methods for Teaching Middle/Secondary Mathematics (The Citadel): MATH-514*
- Applications Across the Mathematics Curriculum with Technology (CofC): SMFT-516

Master of Arts in Teaching – Science (Grades 5-8)

Expected Undergraduate Content:
Undergraduate preparation is expected in each of the following content areas: biology, chemistry, geology or earth science, and physics.

Required Graduate Science Courses - (nine semester hours):
Nature of Science, Mathematics, and Science/Mathematics Education (CofC): EDFS-660
Science methods course (The Citadel): one course based on prior preparation and experience

Laboratory Methods in Biology: BIOL-605
Field Method in Biology: BIOL-606
Seminar in Environmental Science: BIOL-609

Recommended elective(s) to have preparation in all science areas (EDUC and BIOL are Citadel Courses and SMFT are CofC courses):

Special Topics: EDUC 587 or SMFT-523
Topics in Botany for Teachers: BIOL 514 or SMFT-537
Atomic Theory of Matter from Lucretius to Quarks: SMFT-548
Applications of Physics for Teachers: How Things Work: SMFT-555
Genetics and Molecular Biology for Teachers: SMFT-639 or BIOL 508
Physics of Force and Motion for Teachers: SMFT-645
Determination of Structure and Matter: SMFT-647
Space Science for Teachers: SMFT-524

Master of Arts in Teaching – Social Studies (Grades 5-8)

Expected Undergraduate Content:
- World History or Western Civilization (two courses)
- US History (two courses)
- South Carolina History (one course)
- Anthropology or Sociology (one course)
- Microeconomics (one course)
- Political Science that covers American Govt. (one course)

Required Graduate Social Studies Courses (nine semester hours):
Two of the following based on transcript review:
- World Geography
- The American South
- South Carolina History
- Historiography and Historical Geography: GEOG-511, HIST-521, HIST-522, HIST-594, HIST-693, Special Topics: EDUC 587

Descriptions of Citadel courses are listed in the last section of this catalog.

Master of Arts in Teaching (MAT) in Physical Education (Grades K-12)

Department of Health & Human Performance
843-953-5060
http://www.citadel.edu/root/teacher-education

Content Area Advisor:
Dr. Ryan Sacko, rsacko@citadel.edu

Education Advisors:
Dr. Christopher Dague, cdague@citadel.edu
Dr. Soo Joung Kim, soojoung.kim@citadel.edu

Physical Education Program Director
Dr. Tim Bott, bottt1@citadel.edu
Department of Health and Human Performance
203 Deas Hall
(843) 953-7959

Program Field Experiences, Internships and Support Services:
Dr. Tim Bott, bottt1@citadel.edu

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each accredited college or university. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
3. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) score. GRE minimum acceptable score is a verbal and quantitative combination of 290. MAT minimum is a raw score of 396. Admission test must have been taken within the last five years.
4. Completion of a program of study with their MAT-PE program advisor upon acceptance. Registration for classes cannot take place until Program of Study is complete.

Program Requirements

This is a 42 hour graduate program, of which, at least 33 hours must be completed at the graduate level. A maximum of twelve (12) hours of graduate courses may be transferred to The Citadel from other accredited colleges/universities. A maximum of nine (9) hours of undergraduate courses may be applied to coursework in the program. These nine hours may be substituted for three of the following courses: HESS 505, 525, 535, and 561. To qualify, these undergraduate courses must have been completed within the last three years with a grade of "B" or better. This program assumes a substantial undergraduate preparation in the proposed certification area. It is the responsibility of the student, and a requirement of the degree program to submit official transcripts of previous academic work to the program advisor via the CGC office. Through a dual advisor system that includes physical education and education faculty, transcripts will be evaluated and a program of study developed for each student. This program of study will include work in professional education and a content field.

In addition to regular admission requirements of the CGC, each MAT-PE student must successfully pass the PRAXIS II Examination, Physical Education: Content and Design (5095). A passing score, using South Carolina standards, must be achieved prior to placement in the Professional Internship. Students are encouraged to discuss when to take the specialty exam with their Physical Education advisor.

Prior to the internship in teaching, the teacher candidate must:

- Apply for the internship no later than two semesters prior to the Student Teaching Internship.
- Complete the teacher certification application with state-required fees, social security card copy, and fingerprints for FBI/SLED background check.
- Successfully complete the PRAXIS II Content Specialty Exam.
- Be cleared by the South Carolina State Department of Education.
- Successfully complete all required field experiences – a minimum of 75 hours prior to the student teaching internship.
- Submit negative TB test results.
- Successfully pass Red Cross Blood Borne Pathogens training prior to MAT internship.
- Submit proof of current American Red Cross certification in First Aid and CPR prior to the internship.

To graduate and be recommended for certification,
Teacher candidates must have a minimum grade point average of 3.0 and must have successfully completed the PRAXIS II and Principles of Learning and Teaching certification tests for the State of South Carolina. The candidate must also successfully complete 60 consecutive full days during the student teaching internship. Completion of the approved program will qualify the student for a teaching license in physical education, grades K-12.

Prerequisites or Co-requisites:
Competency demonstrated through coursework, approved work experience, or program administered competency exam in the areas of Functional Anatomy and Physiology and Developmental Psychology.

Transcripts will be evaluated against the following list of required courses in physical education. Guidelines from SHAPE America (CAEP) are used to determine courses that students take in either graduate or undergraduate programs. The M.A.T. in Physical Education will require forty-two (42) hours. Each student is assigned an advisor from Physical Education as well as a School of Education Advisor. Both advisors examine transcripts and assist as candidates move through their program. Questions regarding sequencing of Physical Education courses should be directed to the Physical Education advisor. Education advisors are able to assist with questions related to EDUC courses as well as provide support as candidates prepare for the Praxis Principles of Learning and Teaching. To be eligible for the Student Teaching Professional Internship, program completion, and recommendation for licensure, students must have successfully met all of the requirements listed below.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

REQUIRED KINESIOLOGY COURSES (12 CREDITS)

HESS 505	Motor Development and Motor Learning*
HESS 525	Scientific Principles of Physical Education and Health, Exercise, & Sport Science*
HESS 534	Accommodating Persons with Disabilities in Sport & Physical Activity
HESS 547	Techniques of Conditioning for Sport and Physical Fitness

REQUIRED EDUCATION COURSES (6 CREDITS)

EDUC 536	Educational Psychology
EDUC 592	Content Area Reading and Writing

REQUIRED PHYSICAL EDUCATION COURSES (18 CREDITS)

HESS 528	Foundations of Developing Literacy Skills through Content and Methods of Teaching Physical Education
HESS 533	Content and Methods of Teaching Elementary School Physical Education
HESS 535	History, Philosophy, and Curriculum of Physical Education*
HESS 550	Instructional Aspects of Teaching Physical Education
HESS 551	Content & Methods of Teaching Secondary Physical Education
HESS 561	Advanced Measurement and Evaluation in Physical Education*

Capstone: (6 CREDITS)

HESS 620	Professional Internship (60 FULL DAYS)

*Undergraduate and graduate transcripts may be evaluated for application to coursework in the program.

TOTAL PROGRAM REQUIREMENTS: 42 Credit Hours

Descriptions of Citadel courses are listed in the last section of this catalog.

Master of Education in Counselor Education (Elementary and Secondary)

Zucker Family School of Education
843-953-5097
schoolofeducation@citadel.edu
http://www.citadel.edu/root/counselor-education

Dr. Tara Hornor, tara.hornor@citadel.edu
Dr. Guy Ilagan, gilagan@citadel.edu
Dr. Aaron H. Oberman, Program Coordinator
aaron.oberman@citadel.edu
Dr. George T. Williams, williamsg@citadel.edu

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) has granted accreditation to The Citadel School Counseling Programs which offer Master of Education degrees in Counselor Education since July 2005. The current accreditation is effective until October 31, 2021.

Mission Statement

The mission of the Counselor Education Programs at The Citadel is to prepare elementary and secondary school counselors to have the knowledge, skills, and dispositions to be principled educational leaders who are knowledgeable, reflective, and ethical professionals, committed to the provision of an educational environment focused toward a learner-centered education.

The Division of Counselor Education offers seven program options: M.Ed. in Elementary School Counseling, M.Ed. in Secondary School Counseling, Elementary School Counseling Certification only, Secondary School Counseling Certification only, M.Ed. in Higher Education Leadership, and Graduate Certificates in Student Affairs and Higher Education Leadership.

Admission Requirements

Applicants from diverse academic, social, and cultural backgrounds committed to advancing the profession of school counseling are encouraged to apply. Applicants who do not meet a specific requirement (e.g., GPA), but show strength in other requirements will be considered on an individual basis. Admission is not based on any single factor, but on a composite assessment of the application materials.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript directly from each accredited college or university from which a degree has been earned. Applicants are expected to have a 3.0 cumulative undergraduate grade point average.
3. Submission of official Graduate Record Examination (GRE) or the Miller Analogies Test (MAT) scores. MAT minimum acceptable score of 396 or GRE minimum verbal and quantitative combined score of 290. Admission test must have been taken within the last five years. See page 81 for provisional status information.
4. Submission of a detailed personal statement (1,500 - 3,000 words) which informs the faculty about the applicant's personal and educational background and strengths/weaknesses, as they are related to career goals, aptitude for graduate level study, potential for success as a counselor, and respect for cultural differences.

Prior to meeting with an advisor, each student should become familiar with the current applicable semester's class schedule, The Citadel Graduate College catalog, and the Division of Counselor Education Handbook. Students are also expected to attend Counselor Education Town Hall Gatherings each semester.

Students must be initially advised in order to register and to plan a schedule for completion of required courses. This plan of study takes into account the prerequisites and sequencing of coursework for successful completion of the program.

Coursework taken prior to official program admission or coursework taken in other programs does not count toward the school counseling program/degree without written approval from the faculty advisor and the Dean of the School of Education. Students who hold full-time employment should not register for more than 6 semester hours in any given term.

All school counseling students (i.e., degree seeking and certification only seeking) must purchase a LiveText account at The Citadel's Bookstore. LiveText makes it possible for school counseling students to have secure access to their portfolios and other materials. Through LiveText, faculty members and administrators collect data, generate reports from the data, and use this information to make informed program and unit decisions.

Admission Requirements for Certification Only

Applicants who hold a master's degree in another area of professional education or counseling, but wish to add school counseling certification (elementary or secondary), must provide the same admission materials.

Division of Counselor Education Handbook

All prospective and enrolled School Counseling and College Student Affairs Specialists students are expected to read the latest edition of The Citadel, School of Education, Division of Counselor Education Handbook online at:
http://www.citadel.edu/root/counselor-education-programs/med-counselor- education under "Forms and Handbooks".

Program Objectives

1. Reflect current knowledge and positions from lay and professional groups concerning the counseling and human development needs of a pluralistic society;

2. Reflect the present and projected needs of a pluralistic society for which specialized counseling and human development activities have been developed;
3. Reflect input from all persons involved in the conduct of the program, including program faculty, current and former students, and personnel in cooperating agencies;
4. Are directly related to program activities; and
5. Are written so that they can be assessed.

Graduates of the Counselor Education Programs are expected to possess:

- An understanding of counseling as an intervention that contributes to the ability of individuals to respond effectively to developmental issues and tasks;
- An understanding of leadership for learner-centered education as a conceptual framework;
- An understanding of the counseling process;
- An ability to integrate theory and research into practice;
- A commitment to preventive, developmental approaches as the keystone of school counselor identity and practice;
- An understanding of how historical, philosophical, and political influences have shaped and affected the development of counseling practice;
- Effective oral and written communication skills;
- Skills to work in a rapidly changing and diverse society including differences as gender, age, socioeconomic status, ethnicity, race, and religion;
- Skills required to work effectively with students' parents, teachers, school staff, and the community;
- An ability to assist clients in responding to stresses and crises generated by changes in family, personal relationships, the school, and the community;
- Skills needed to effectively use technology;
- Leadership qualities in education at the local, state, regional, and national levels;
- A commitment to lifelong personal and professional development; and
- An ability to model the highest professional and ethical standards through counseling, guidance, research, and service.

The School Counseling Programs have also been designed to produce graduates who are able to demonstrate the competencies identified in The South Carolina System for Assisting, Developing, and Evaluating Professional Teaching (ADEPT) Performance Dimensions (PDs) for School Guidance Counselors (October 2003) as they relate to "Comprehensive Developmental Guidance and Counseling" that include:

- APS 1: Long-Range Planning
- APS 2: Short-Range Planning of Guidance and Counseling Activities
- APS 3: Development and Use of Assessments
- APS 4: Providing Guidance and Counseling Services
- APS 5: Providing Consultation Services
- APS 6: Coordinating Guidance and Counseling Services
- APS 7: Professional Responsibilities

Counselor Education Program Requirements

Students in either the elementary or secondary school counseling program complete both a School of Education core and a Counseling core for a total of 51 credit hours. Part of the coursework includes a 600 clock-hour internship (internship I and II) in either an elementary (K-8) or a secondary (6-12) school counseling settings. Students are required to earn a minimum score of 156 on the PRAXIS II (the Professional School Counselor) test for guidance and counseling prior to enrolling in the practicum (EDUC-629). This must be on file at The Citadel Graduate College.

Transfer of Credits

Counselor Education M.Ed. degree applicants may transfer a maximum of 12 credit hours of graduate coursework taken at other accredited institutions (see School of Education transfer policy).

Field Experience Requirements

Counselor Education students must formally request permission from the faculty advisor or clinical coordinator to enroll in practicum or internship. This request is submitted in the form of an application for field experience, which must be completed during the term prior to the field experience. The clinical coordinator of the field experiences must approve all field experience applications, which are due by the last Friday in September for spring placements and by the last Friday in January for fall placements.

Practicum is the first extended field experience. Students are placed in a school site and work under the supervision of a site supervisor as well as The Citadel instructor. Students are required to spend a minimum of 100 clock-hours in a public school setting as well as attend weekly seminars with other practicum students and The Citadel instructor. Additionally, the Praxis II test score for Professional School Counselor must be on file at the office for The Citadel Graduate College prior to application for a practicum placement.

Counselor Education students must complete all coursework before placement in an internship setting. Students will be required to spend a minimum of 600 supervised hours in a school setting for internship. The focus of the internship is on experiences that involve the full scope of the school counselor's role and function. Interns are expected to continue the development of skills in individual and group intervention, participate in classroom guidance, assessment, scheduling, records and other activities that, while not specifically counseling-related, are necessary to support the school counseling and guidance program. The field site supervisor, as well as The Citadel instructor, supervise interns.

Requirements for Graduation

Students pursuing M.Ed. degrees in Counselor Education must complete all course requirements within a 6-year period from the date of initial enrollment. It is a student's responsibility to initiate a meeting with a faculty advisor to modify a study plan schedule and to have any changes documented in writing with the faculty advisor's signature.

Students are required to take the Counselor Preparation Comprehensive Examination (CPCE) while enrolled in the Internship I course (i.e., EDUC-650 and EDUC-651). Students considering becoming a Licensed Professional Counselor (LPC) are encouraged to take the CPCE and earn a passing score determined by The Citadel Counselor Education program norms.

Elementary and Secondary School Counseling students are required to present their professional electronic portfolio at the end-of-the-semester Counselor Education Professional Portfolio Presentation Day(s) prior to completion of the Internship II course (i.e., EDUC-652 and EDUC-653).

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Licensed Professional Counselor (LPC) National Certified Counselor (NCC)

School Counseling students completing the program meet the majority of curriculum requirements through the South Carolina Board of Examiners for the Licensure of Professional Counselors, Marriage and Family Therapists, and Psycho- Educational Specialists for Licensed Professional Counselor (LPC) and for certification as a National Certified Counselor (NCC) by the National Board for Certified Counselors (NBCC). Requirements for LPC and NCC include additional graduate coursework in psychopathology and assessment and treatment of psychopathology, an additional 1500 clinical hours (including 150 supervision hours) over a two year period, approved supervision, and successful performance on the National Counselor Examination for licensure and certification. The Zucker Family School of Education offers two courses during the summer that meet the psychopathology and assessment and treatment of psychopathology course requirements: These courses are EDUC-568: DSM-5 (diagnosis) or EDUC-567: Assessment of Abnormal Behavior (assessment and treatment of psychopathology).

ELEMENTARY AND SECONDARY SCHOOL COUNSELING (51 Credit Hours)

SCHOOL OF EDUCATION CORE (15 Credit Hours)

PSYC-500	Human Growth and Development
EDUC-500	Foundations of American Education
EDUC-514	The Exceptional Child in the Schools
EDUC-522	Critical Educational Issues in a Multicultural Society
EDUC-592	Content Area Reading and Writing

ELEMENTARY AND SECONDARY SCHOOL COUNSELOR EDUCATION CORE (36 Credit Hours)

Foundations (18 Credit Hours)

EDUC-515	Introduction to the Counseling Profession
EDUC-521	Program Planning, Management, and Evaluation in School Counseling
EDUC-550	Career Counseling and Development
EDUC-551	Counseling Theories and Practice
EDUC-552	Group Counseling
EDUC-561	Counseling Diverse Populations

Research/Appraisal (6 Credit Hours)

EDUC-512*	Data Collection and Analysis
EDUC 549*	Applied Measurement Techniques

*Students are expected to complete at least one of these two courses in the first 18 hours of the program.

Helping Relationships (12 Credit Hours)

EDUC-624	Basic Counseling Skills
EDUC-629	Practicum in School Counseling
EDUC-650*	Elementary School Counseling Internship I
and	
EDUC-652	Elementary School Counseling Internship II
or	
EDUC-651*	Secondary School Counseling Internship I
and	
EDUC-653	Secondary School Counseling Internship II

*The internship (i.e., Internship I and II) in school counseling consists of 16 weeks of full-time placement and a total of 600 clock hours. Internships may be arranged with the faculty advisor to be completed during two sequential academic semesters. Students choosing to complete an internship in one semester, register for both Internship I and II (i.e., either EDUC 650 and EDUC 652 or EDUC 651 and EDUC 653) while students completing an internship in two semesters, first register for Internship I one semester and Internship II the following semester.

TOTAL PROGRAM REQUIREMENTS: 51 Credit Hours

Descriptions of courses are listed in the last section of this catalog.

Master of Education in Educational Leadership - Elementary or Secondary School Administration and Supervision

Zucker Family School of Education
843-953-5097
www.citadel.edu/root/educational-leadership

Dr. Lee Westberry, Program Coordinator,
lwestber@citadel.edu
Dr. Kent Murray, kent.murray@citadel.edu

The Zucker Family School of Education's Administration and Supervision programs are nationally accredited by the Council for the Accreditation of Educator Preparation (CAEP) and the Educational Leadership Constituent Council (ELCC) to confer Master's Degrees in Elementary and Secondary Administration. At program completion, candidates will be eligible for South Carolina licensure as school building administrators. Accreditation, for the Administration and Supervision programs accreditation, is effective through October 31, 2021.

Mission Statement

The mission and goals of the Master of Education in Educational Leadership, Elementary School Administration and Supervision and Secondary Administration and Supervision are to teach:

- Knowledge of human and public relations problems in education
- Curricular developments and trends
- Practical applications of educational research skills
- Application of principles of human and group behavior in problem situations
- Knowledge and competencies in staff personnel administration
- Leadership and diverse management styles to foster a clear understanding and working knowledge of Learner- Centered Education

Admission Requirements

1. Complete the online graduate application and pay the non-refundable application fee.
2. Submit official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Applicants, who have not earned a Master's Degree, are expected to have a 2.5 cumulative undergraduate grade point average or a 2.7 ratio for the last 60 credit hours of undergraduate work.
4. Submission of a valid South Carolina elementary or secondary professional teaching certificate and must be in good standing with the State Board of Education at the time of admission.
5. Applicants must submit a copy of the South Carolina Professional Certificate, verifying three-years teaching experience to qualify for Advanced-Level certification. The candidate must verify at least one year of teaching experience, at the appropriate level of desired endorsement, at the time of admission.

Admission Requirements for South Carolina Certification Only

Applicants who hold a valid SC teaching certificate and a Master's Degree with a minimum 3.25 GPA in a different area of professional education but wish to add administration certification must provide the following admission materials:

1. A completed online graduate application and payment of the non-refundable application fee.
2. Submit official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.
3. Submission of a valid South Carolina elementary or secondary professional teaching certificate. Applicants must be in good standing with the State Board of Education at the time of admission.
4. Applicants must submit a copy of a South Carolina Professional Certificate, verifying three years teaching experience, to qualify for Advanced-Level certification. The candidate must verify at least one year of teaching experience, at the appropriate level of desired endorsement, at the time of admission.

Note: Courses taken prior to official admission or courses taken through other programs will not count toward an Administration and Supervision program/degree without written approval from the Dean, Zucker Family School of Education.

Program Requirements

A total of 39 semester hours must be completed for the M.Ed. in Educational Leadership. In addition to completing all courses, candidates applying for certification as an administrator must:

1. Present a minimum qualifying score on the Praxis, South Carolina's Supervision and Administration Examination, prior to enrolling in an internship.
2. Present a Valid South Carolina Teaching Certificate that posts three years teaching experience including at least one year of teaching at the certification level requested.
3. Complete required courses, 33 hours and two internships (EDUC 661 and EDUC 662 or EDUC 663 and EDUC 664), six hours (9-12 internship hours per week over a six-month period) for a total of 39 credit hours. Candidates for administrative internships must:

a. Complete 27 credit hours prior to submitting an internship application for faculty review.
b. Earn a passing score on the Praxis, South Carolina's

Supervision and Administration Examination.

c. Meet with advisor to review request for admission to an internship and review degree audit.
d. Apply to CGC to register for an internship.

Applicants for fall administrative internships should file an application with their advisor no later than August 1 of the preceding semester. Applicants for spring administrative internships should file an application with their advisor no later than December 1 of the preceding semester. Applicants for summer administrative internships should file an application with their advisor no later than March 1 of the preceding semester. In order to register for internships, authorized applications must be on file in the CGC office, along with the valid South Carolina state administrator's examination score.

*Proviso—Candidates filing applications and applying for administrative internships after the December, March, and August deadlines cannot be guaranteed enrollment.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

M.Ed. REQUIRED PROGRAM

CORE REQUIREMENTS (nine credit hours)
All core requirements must be completed prior to or concurrently with registration for any other courses.

EDUC-512 Data Collection and Analysis
EDUC-514 The Exceptional Child in the School
EDUC-522 Critical Educational Issues in a Multicultural Society

PROFESSIONAL REQUIREMENTS (30 credit hours)
EDUC-524 Techniques of School Supervision
EDUC-527 Finance and Business Management
EDUC-528 School Administration
EDUC-529 Emerging Technologies for School Administration
EDUC-531 Principles of Elementary Curriculum Development
OR
EDUC-532 Principles of Middle or High Curriculum Development
EDUC-601 School Law
EDUC-602 Staff Personnel Administration
EDUC-616 Political Process of Public Education
EDUC-661 Internship in Elementary Administration
OR
EDUC-663 Internship in Middle or High Administration
EDUC-662 Internship in Elementary Administration
OR
EDUC-664 Internship in Middle or High Administration

TOTAL REQUIRED COURSES: 39 Credit Hours

Descriptions of courses are listed in the last section of this catalog.

CERTIFICATION-ONLY REQUIRED PROGRAM

PROFESSIONAL REQUIREMENTS (30 credit hours)
EDUC-524 Techniques of School Supervision
EDUC-527 Finance and Business Management
EDUC-528 School Administration
EDUC-529 Emerging Technologies for School Administration
EDUC-531 Principles of Elementary Curriculum Development
OR
EDUC-532 Principles of Middle or High Curriculum Development
EDUC 601 School Law
EDUC-602 Staff Personnel Administration
EDUC-616 Political Process of Public Education
EDUC-661 Internship in Elementary Administration
OR
EDUC-663 Internship in Middle or High Administration
EDUC-662 Internship in Elementary Administration
OR
EDUC-664 Internship in Middle or High Administration

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Note: It is suggested that students who hold full time jobs take no more than six (6) credit hours per a semester.

REQUIREMENTS FOR INITIAL CERTIFICATION AT THE ADVANCED LEVEL

I. ADMINISTRATION
   A. Elementary or Secondary School Principal and Supervisor (Tier 1)
      1. Master's degree
      2. Valid South Carolina Educator's Profession l Certificate at the elementary or secondary level
      3. Minimum qualifying score(s) on the area examinations required by the State Board of Education
      4. Verification of three years teaching experience, including at least one year of teaching in grades pre-K-8 for elementary, 7-12 for secondary
      5. Completion of an advanced program approved by the State Board of Education for the training of elementary or secondary principals and supervisors South Carolina Regulation 43-64

Transfer of Credits

Candidates who apply for transfer credits from other accredited institutions (see School of Education transfer policy) to the Zucker Family School of Education's Administration and Supervision programs may transfer a maximum of six graduate credit hours, two courses, of graduate coursework.

Capstone Internship Requirements

Educational Leadership candidates must formally request permission from the faculty advisor to enroll in a capstone internship. Candidates must be within two courses of the internship and have earned a passing score on the Administration and Supervision PRAXIS to apply. This request is submitted in the form of an application which must be completed prior to the internship courses: EDUC-661/662 or EDUC-663-664. The Division of Educational Leadership must approve all field experience applications.

Master of Education in Higher Education Leadership

Zucker Family School of Education
843-953-5097
schoolofeducation@citadel.edu
https://go.citadel.edu/counselor-education/graduate-programs/med-higher-education-leadership/

Dr. Tara Hornor, Program Coordinator
tara.hornor@citadel.edu
Dr. Guy Ilagan, gilagan@citadel.edu
Dr. Aaron H. Oberman, Division Coordinator
aaron.oberman@citadel.edu
Dr. George T. Williams, williamsg@citadel.edu

Mission Statement

The mission of the Counselor Education Programs at The Citadel is to prepare elementary and secondary school counselors, college student affairs specialists, and higher education leaders to have the knowledge, skills, and dispositions to be principled educational leaders who are knowledgeable, reflective, and ethical professionals, committed to the provision of an educational environment focused toward a learner-centered education.

The Division of Counselor Education offers an M.Ed. in Higher Education Leadership and Graduate Certificates in Student Affairs and Higher Education Leadership.

Admission Requirements

Applicants from diverse academic, social, and cultural backgrounds committed to advancing the higher education field are encouraged to apply. Applicants who do not meet a specific requirement (e.g., GPA), but show strength in other requirements will be considered on an individual basis. Admission is not based on any single factor, but on a composite assessment of the application materials.

1. Completion of the online graduate application along with the non-refundable application fee.

2. Submit official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Applicants are expected to have a 3.0 cumulative undergraduate grade point average.

3. Submission of a detailed personal statement (500-1,000 words) which informs the faculty about the applicant's personal and educational background, strengths and weaknesses, understanding of and motivation and suitability for entering into the higher education profession, and long-term professional goals.

Prior to meeting with an advisor, each student should become familiar with the current applicable semester's class schedule and The Citadel Graduate College catalog. Students must be initially advised in order to register and to plan a schedule for completion of required courses. This plan of study takes into account the prerequisites and sequencing of coursework for successful completion of the program.

Coursework taken prior to official program admission or coursework taken in other programs does not count toward the higher education leadership program/degree without written approval from the faculty advisor and the Dean of the Zucker Family School of Education. Students who hold full-time employment should not register for more than 6 semester hours in any given term.

All higher education students must purchase a LiveText account at The Citadel's Bookstore. LiveText makes it possible for higher education students to have secure access to their portfolios and other materials. Through LiveText, faculty members and administrators collect data, generate reports from the data, and use this information to make informed program and unit decisions.

Division of Counselor Education Handbook

All prospective and enrolled Higher Education Leadership students are expected to read the latest edition of The Citadel, School of Education, Division of Counselor Education Handbook online at: http://www.citadel.edu/root/counselor-education-programs/med-counselor- education under "Forms and Handbooks".

Program Objectives

1. To provide students with theoretical and practical knowledge essential to understanding the variety of leadership roles within higher education settings.
2. To instill the ethical and professional values essential to work within the field of higher education.
3. To provide students with practical experiences in the development of their skills as leaders.
4. To instill in students the value of lifelong learning and a desire for continuous professional improvement and renewal.
5. Are directly related to program activities; and
6. Are written so that they can be assessed.

Graduates of the Higher Education Programs are expected to possess:

- An understanding of how historical, philosophical, and political influences have shaped and affected the development of higher education professional practice;
- An understanding of leadership for learner-centered education as a conceptual framework;
- An ability to integrate theory and research into practice;
- An understanding of the counseling process;
- Effective oral and written communication skills;

- Skills to work in a rapidly changing and diverse society including differences as gender, age, socioeconomic status, ethnicity, race, and religion;
- Skills required to work effectively with students, faculty and staff, administrators, and the community;
- An ability to assist students in responding to stresses and crises generated by changes in family, personal relationships, the school, and the community;
- Skills needed to effectively use technology;
- Leadership qualities in education at the local, state, regional, and national levels;
- A commitment to lifelong personal and professional development; and
- An ability to model the highest professional and ethical standards through professional practice, research, and service.

Higher Education Leadership Program Requirements

Students enrolled in the Master of Education in Higher Education Leadership degree program complete the Higher Education Leadership Core and College Counselor Education Courses for a total of 36 credit hours.

Students enrolled in the Graduate Certificate in Student Affairs complete four courses (EDUC-537, EDUC-538, EDUC- 539, and EDUC-613) focusing on the areas of student services, student development, historical and contemporary aspects of higher education, and administration. Students have the option to complete course EDUC-634—Practicum in Student Affairs and College Counseling.

Students enrolled in the Graduate Certificate in Higher Education Leadership complete four courses (EDUC-539, EDUC-530, EDUC-533, and EDUC-534) focusing on the areas of administration, higher education finance, strategic planning and assessment, and leadership.

The majority of these courses are also required of the MEd in Higher Education Leadership degree program. However, students considering applying to the MEd in Higher Education Leadership program will need to meet the admissions requirements before being accepted into the program. (See Graduate Certificate section for details.)

Transfer of Credits

Higher Education Leadership M.Ed. degree applicants may transfer a maximum of 12 credit hours of graduate coursework taken at other accredited institutions.

Field Experience Requirements

Higher Education Leadership students must formally request permission from the faculty advisor or clinical coordinator to enroll in practicum or internship. This request is submitted in the form of a proposal for field experience, which must be completed during the term prior to the field experience.

Practicum is an extended field experience designed for students already working at an advanced level in higher education. Students work under the supervision of a site supervisor as well as The Citadel instructor. Students are required to spend a minimum of 100 clock-hours in a higher education setting, complete a course project, as well as participate in weekly online discussions with other practicum students and The Citadel instructor.

Higher Education Leadership students must complete all coursework before placement in an internship setting. Students will be required to spend a minimum of 300 supervised hours in a higher education setting for internship. Interns are supervised by the field site supervisor, as well as The Citadel instructor.

Requirements for Graduation

Students pursuing the M.Ed. in Higher Education Leadership must complete all course requirements within a 6-year period from the date of initial enrollment. It is a student's responsibility to initiate meeting with a faculty advisor to modify a study plan schedule and to have any changes documented in writing with the faculty advisor's signature.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

HIGHER EDUCATION LEADERSHIP CORE
(27 Credit Hours)

EDUC-512	Data Collection and Analysis
EDUC-537	Student Development Services in Higher Education
EDUC-539	Higher Education Administration
EDUC-550	Career Counseling and Development
EDUC-551	Counseling Theories and Practice
EDUC-562	Legal & Ethical Leadership Issues in Education
EDUC-613	Foundations of American Higher Education
EDUC-622	Critical Multicultural Issues in Higher Education
EDUC-624	Basic Counseling Skills

ELECTIVES (6 Credit Hours)

EDUC-530	Strategic Planning and Assessment in Higher Education
EDUC-533	Higher Education Finance

EDUC-534 Advanced Leadership in Higher Education
EDUC-538 Theories of Student Development in Higher Education

FIELD EXPERIENCE (3 Credit Hours)

EDUC-634 Practicum in Higher Education Administration
EDUC-635 Practicum in Higher Education Student Affairs
EDUC-655 Internship in Higher Education Administration*
EDUC-658 Internship in Higher Education Student Affairs*

* The internships in Higher Education Administration and Higher Education Student Affairs consists of 16 weeks of part-time placements and a total of 300 clock hours. Internships may be arranged with the faculty advisor to be completed during two sequential academic semesters or both courses may be taken concurrently in one semester.

Total Credit Hours: 36

Descriptions of courses are listed in the last section of this catalog

Master of Education in Interdisciplinary STEM Education

Zucker Family School of Education, 843-953-5097
The STEM Center of Excellence, 843-953-6091
www.citadel.edu/root/stemcenter-medstem

Dr. Jennifer Albert, Program Coordinator
jalbert@citadel.edu

Mission Statement

The Master of Education in Interdisciplinary STEM Education is **entirely online** and is designed for current educators who seek to advance their skillset in the STEM disciplines. The goal of the program is to create 21st century STEM educators and leaders by facilitating a broader understanding of the interdisciplinary nature of STEM, a deeper knowledge of discipline-specific content, and new integrative approaches for the teaching and learning of STEM content.

The coursework has been designed to inspire a passion in teachers for STEM and equip them with the tools necessary to teach STEM content in an engaging way with career and industry applications. **The MEd in Interdisciplinary STEM Education does not lead to certification**, but is instead designed to improve teacher effectiveness in STEM education. A graduate successfully completing this degree program will be adept at creating relevant projects for use in their classrooms and utilizing project-based instructions to more effectively engage their students in the STEM disciplines.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate and graduate work directly from each accredited college or university. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
3. A bachelor's degree demonstrating appropriate preparation in STEM.

Students must meet with their advisor for program advisement and course sequence planning. This advisement meeting must take place before registration can occur for the first semester of enrollment.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The program assumes appropriate undergraduate preparation in STEM. The 34-credit hour MEd in Interdisciplinary STEM Education is organized into two areas - core and electives. The coursework will consist of nineteen (19) hours of core coursework and fifteen (15) hours of electives. Students will work with academic advisors to individualize the program based on their prior preparation and areas of interest. The curriculum is targeted for working professionals with coursework delivered online in asynchronous format, allowing students to progress though the program at their own pace.

Although the program is designed for current educators, **teaching certification is not required to be admitted to the program** as other STEM professionals may complete the degree to better prepare themselves for roles in places such as informal education centers.

CORE COURSES (19 credit hours)

EDUC-543	Teaching, Learning and Assessing with Technology
EDUC-544	Project Based Learning and Interdisciplinary Teaching
EDUC-545	Developing STEM Disciplinary Literacy Skills
EDUC-546	Leadership and Critical Issues in STEM Education
EDUC-547	Research and Statistics for STEM Applications
EDUC-670	Foundations in STEM I
EDUC-680	Foundations in STEM II

ELECTIVE COURSES (15 credit hours)

Students will select 5 (five) elective courses, chosen from the following list or as approved by program faculty.

BIOL-540	Biotechnology for STEM Educators
BIOL-610	Immunology (must have undergraduate preparation in Cell Biology and Genetics)
CHEM-520	The Chemistry of Art
CHEM-521	Forensic Science
CHEM-522	Nanotechnology for STEM Educators
CSCI-555	STEM Education Through Robotics
CSCI-663	Programming for STEM Educators
EDUC-548	Special Topics: Multidisciplinary Experimental Design and Implementation
EDUC-587	Special Topics
MATH-618	Mathematical Technology Resources for STEM Education
PHYS-510	Engineering Applications in STEM

Other face to face options are available in conjunction with The Citadel Graduate College's offerings. Please check with the program coordinator for approval.

THE CAPSTONE

Embedded in the coursework is a capstone. Students will prepare an online portfolio that captures evidence of achievement. The Portfolio will consist of their developed project-based lessons, an analysis of lesson implementation, and statistical analysis of student impact. A panel of instructors will review student's work and evaluate their capstone project.

Total Credit Hours: 34

Description of courses are listed in the last section of this catalog.

Master of Education in Literacy Education

Zucker Family School of Education
843-953-5097
www.citadel.edu/root/literacy-education-program

Dr. Britnie Delinger Kane, Program Coordinator
Britnie.kane@citadel.edu
Dr. Soo Joung Kim
soojoung.kim@citadel.edu
Dean Evan Ortlieb
eortlieb@citadel.edu

Mission Statement

Through quality field experiences and a strong theoretical foundation, candidates who pursue this degree develop a comprehensive knowledge of the field of literacy education. This understanding parallels the school's vision of creating "principled educational leaders who are knowledgeable, reflective, and ethical professionals."

The Master of Education in Literacy Education is nationally recognized by the International Literacy Association.

The general goals and objectives of the program are to support candidates in developing:

- A knowledge and mastery of all aspects of the literacy process;
- A knowledge of those skills necessary to select, administer, and interpret informal and formal assessments used to examine children's and adolescents' literacy strengths and weaknesses;
- A knowledge of how to effectively support English Language Learners (ELLs);
- A knowledge of and ability to design literacy environments to support culturally and linguistically diverse learners;
- A knowledge of the abilities and skills which enhance a teacher- student-parent relationship in working with students;
- A knowledge of those skills necessary to recognize and accommodate for individual differences in literacy instruction;
- A knowledge of how to plan, supervise, and enhance programs as a literacy coach;
- A knowledge of how to effectively support and mentor educators and serve as a literacy coach;
- A knowledge of the relationship of literacy skills to subject-matter content areas; and
- A knowledge of significant research conducted in literacy education.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree and all other undergraduate and graduate work directly from each accredited college or university. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
3. Submission of valid teaching certificate issued by South Carolina or another state.

Students must meet with their advisor for program advisement and course sequence planning. This advisement meeting must take place before registration can occur for the first semester of enrollment.

Students accepted into the Master of Education in Literacy Education are automatically enrolled in the Graduate Certificate in Literacy Education.

Transfer Credit

Course work taken prior to official program admission or course work taken in other programs does not count toward the Master of Education in Literacy Education program/degree without written approval from the faculty advisor and the Dean of the Zucker Family School of Education.

Program Requirements

The Master of Education in Literacy Education is a 30-hour program, consisting of one professional core requirement and nine literacy education courses. A program of study which details the degree requirements is completed by the student and the advisor. The candidate for the Master of Education in Literacy Education degree must satisfactorily complete the Praxis II examination, Teaching Reading. Additionally, candidates will be required to complete a program completion portfolio prior to graduation. Recommendation and verification for certification are completed by the School of Education upon graduation and a passing score on the Praxis II.

Upon completion of coursework, a satisfactory score on the Praxis II, and the requisite years of teaching experiences, a candidate completing the MEd in Literacy Education is recommended for certification as a Literacy Teacher, Literacy Coach, and R2S Literacy Teacher provided the candidate already possesses a valid teaching certificate in the state of South Carolina. Recommendation for certification as a Literacy Teacher in South Carolina requires two years teaching experience.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

The following courses should be taken in sequence as in the program of study.

PROFESSIONAL CORE REQUIREMENTS (3 credit hours)
EDUC-512 Data Collection and Analysis

PROFESSIONAL EDUCATIONAL SPECIALIZATION (27 credit hours)
EDUC-570 Teaching Reading and Writing with ELLs and Students from Historically Marginalized Communities
EDUC-588 Foundations in Literacy
EDUC-590 Literacy Assessment and Instruction
EDUC-591 Practicum in Literacy Education
EDUC-592 Teaching Language and Literacy across Content Areas
EDUC-594 Internship in Literacy Education
EDUC-608 Literature for Children and Adolescents
EDUC-642 Coaching in Literacy Education
EDUC-643 Action Research in Literacy Coaching

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Master of Science in Instructional Systems Design and Performance Improvement

Zucker Family School of Education
843-953-5097 schoolofeducation@citadel.edu
http://www.citadel.edu/root/counselor-education

Dr. Tara Hornor tara.hornor@citadel.edu

Mission Statement

The mission of the Master of Science in Instructional Systems Design and Performance Improvement (MS-ISPI) program is to provide students with the knowledge, skills, and experiences needed to create effective instructional materials for a variety of learning environments, from corporate environments to public school and college classrooms. Organizations are utilizing web-based courses, social media, visual simulations, social networks, and mobile learning in their education and training programs, and highly skilled instructional specialists are needed to design, implement, and assess these programs. The MS-ISPI curriculum focuses on the development of this complex expertise by drawing on the knowledge bases of instructional design, learning science, and performance improvement. Students will explore best practices in the field of learning design, engage in problem-based learning activities, and develop immediately applicable solutions for today's evolving classrooms in P-12, higher education, military, healthcare, corporate, and community settings.

The target audience for the MS-ISPI program includes trainers, curriculum specialists, and those involved in corporate training, education, and other forms of instructional design. The ideal candidates for the degree program will hold a bachelor's degree in business, healthcare, computer science, education, engineering, or other related fields.

Admission Requirements

Applicants from diverse academic, social, and cultural backgrounds committed to learning to design innovative learning environments and engaging in performance improvement are encouraged to apply. Applicants who do not meet a specific requirement (e.g., GPA), but show strength in other requirements will be considered on an individual basis. Admission is not based on any single factor, but on a composite assessment of the application materials.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript directly from each accredited college or university from which a degree has been earned. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
3. Submission of a detailed personal statement or letter of intent (500 - 1500 words) which informs the faculty about the applicant's personal and educational background, strengths and weaknesses, and understanding of and motivation for entering the MS-ISPI program.

Students must be initially advised in order to register and to plan a schedule for completion of required courses. This plan of study takes into account the prerequisites and sequencing of coursework for successful completion of the program. Prior to meeting with an advisor, each student should become familiar with the current applicable semester's class schedule, and The Citadel Graduate College catalog.

Coursework taken prior to official program admission or coursework taken in other programs does not count toward the MS-ISPI program/degree without written approval from the faculty advisor and the Dean of the School of Education. Students who hold full-time employment should not register for more than 6 semester hours in any given term.

Program Objectives

1. To prepare professionals for roles as highly skilled learning specialists capable of developing systems-based learning environments focused on performance improvement.
2. To provide students with theoretical and practical knowledge essential to understanding instructional processes for varied learners in a range of settings.
3. To instill the ethical and professional values essential to work within the field of education, training, and development.
4. To provide students with practical experiences in the development of learning tools and environments.
5. To instill in students the value of lifelong learning and a desire for continuous professional improvement and renewal.

MS-ISPI Program Requirements

Students enrolled in the MS-ISPI degree program complete a total of 30 credit hours.

Transfer of Credits

MS-ISPI degree applicants may transfer a maximum of 12 credit hours of graduate coursework taken at other accredited institutions (see School of Education transfer policy).

Requirements for Graduation

Students pursuing the MS-ISPI degree must complete all course requirements within a 6-year period from the date of initial enrollment. It is a student's responsibility to initiate meeting with a faculty advisor to modify a study plan schedule and to have any changes documented in writing with the faculty advisor's signature

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

M.S. in Instructional Systems Design and Performance Improvement
(30 Credit Hours)

INSTRUCTIONAL SYSTEMS DESIGN AND PERFORMANCE IMPROVEMENT CORE COURSES
(24 Credit Hours)

ISPI-500	Foundations and Principles of Instructional Systems Design and Performance Improvement
ISPI-510	Learning and Cognition
ISPI-520	Instructional Systems Design
ISPI-540	Principles of Learning Architecture and Environments
ISPI-550	Leadership in Instructional Systems Design and Performance Improvement
ISPI-555	Training and Performance Improvement
ISPI-560	Performance Improvement, Systems Assessment, and Usability
ISPI-565	Product Development and Performance Improvement

ELECTIVES (3 Credit Hours)

PMGT-650	Overview of Technical Project Management
PMGT-651	Technical Project Planning and Scheduling
ISPI-535	Coding and Digital Applications
ISPI-545	User Experience and Design Thinking

CAPSTONE (3 Credit Hours)

ISPI-570 Capstone in Instructional Systems Design and Performance Improvement

Total Credit Hours: 30

Descriptions of courses are listed in the last section of this catalog.

Specialist in Educational Leadership - School Superintendent

Zucker Family School of Education
http://www.citadel.edu/root/educational-leadership

Dr. Lee Westberry, Program Coordinator, lwestber@citadel.edu
Dr. Kent Murray, kent.murray@citadel.edu

Mission Statement

The Zucker Family School of Education's Specialist in Educational Leadership - School District Superintendent program is nationally accredited by the Council for the Accreditation of Educator Preparation (CAEP) and the Educational Leadership Constituent Council (ELCC). These accrediting bodies allow the Zucker Family School of Education's Licensing Agent, the Dean of ZFSOE to recommend candidates for certification as a school district superintendent in South Carolina upon program completion. The Specialist in Educational Leadership - School Superintendent program's accreditation is effective through October 31, 2021.

The Specialist in Educational Leadership (Ed.S.) Degree is an advanced graduate degree between the Master's and Doctoral degrees. In accordance with South Carolina Certification Regulations, The Citadel offers an Ed.S. major that prepares candidates for SC endorsement at the superintendent's level.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts for conferred bachelor degree and transcripts from all post-graduate work from each accredited college or university attended (including a Master's Degree in educational leadership or a Master's Degree in another educational area along with certification in educational leadership) with minimum 3.25 grade point average.
3. Possession of a South Carolina State Professional Teaching Certificate with school administrator endorsement that is valid at elementary, middle, or secondary levels. Students may submit official PRAXIS scores demonstrating passing scores in administration along with a valid S.C. teaching certificate if their endorsement has not yet posted.
4. Verification of a total of three years' experience as a pre-K-12 or post-secondary teacher.

Note: Specialist in Educational Leadership courses taken prior to official program admission will not count toward the degree without written approval from the Dean of the Zucker Family School of Education.

Program Requirements

A total of 33 semester hours must be completed for the Specialist in Educational Leadership. In addition to the general goals of the school's graduate program, the objectives of the Specialist in Education degree are knowledge of school law, curricular trends, school building trends, and program budgeting; skill in using various techniques for goal setting and problem diagnosis in such areas as instructional programs, staff development, and community relations; skill in decision- making and in evaluating decisions on the basis of subsequent information; knowledge of research in administration, curriculum, human development and staffing; performance behavior in a job setting; knowledge of the role of the school in modern America and the multicultural currents influencing the school; knowledge and skills for per-forming in a political setting; and, a clear understanding and working knowledge of Principled Educational Leaders. A student, who applies for certification as a school district administrator, must meet the following:

1. A minimum qualifying score on the state administrator's examination prior to entrance into the internship
2. Three years teaching experience
3. Program audit showing completion of 33 credit hours:
   a. Required courses, 27 credit hours
   b. Two internships, EDUC 632 and EDUC 633, (9-12 internship hours per week over a six-month period), six credit hours

Candidates for administrative internships must:

1. Complete 21 credit hours prior to submitting an internship application for faculty review.
2. Earn a passing score on the PRAXIS, South Carolina's Supervision and Administration Examination.
3. Meet with an advisor to review request and receive approval for admission to an internship.4.

Applicants for spring administrative internships should file an application with their advisor no later than December 1 of the preceding semester. Applicants for fall administrative internships should file an application with their advisor no later than August 1 of the preceding semester. Applicants for summer administrative internships should file an application with their advisor no later than March 1 of the preceding semester. In order to register for internships, authorized applications must be on file in the CGC office, along with the valid South Carolina state administrator's examination score.

*Proviso—Candidates filing applications and applying for administrative internships after the December, March, and August deadlines cannot be guaranteed enrollment.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

PROFESSIONAL REQUIREMENTS (33 credit hours)

EDUC-535	Organizational Theory and Behavior
EDUC-598	Curriculum Project (Prerequisite EDUC 531/532)
EDUC-600	Professional Negotiations
EDUC-603	School Plant Seminar
EDUC-606	Superintendency and School Organization
EDUC-610	Seminar on School Improvement
EDUC-612	Seminar in School Law (Prerequisite EDUC 601)
EDUC-614	Seminar in Educational Administration
EDUC-619	Assessment of School Programs
EDUC-632	Internship in Superintendency
EDUC-633	Internship in Superintendency

Total Credit Hours: 33
(beyond the Master's Degree)

*If EDUC-529, EDUC-531/532 or EDUC-616 were not taken in a master's program, the appropriate course must be taken as a requirement of the Ed. S.

Descriptions of courses are listed in the last section of this catalog.

REQUIREMENTS FOR INITIAL CERTIFICATION AT THE ADVANCED LEVEL

I. ADMINISTRATION
   C. District Superintendent
      1. Master's degree
      2. Valid South Carolina Teaching or Professional Certificate at the elementary, middle or secondary level
      3. Minimum qualifying score(s) on the area examination(s) required by the State Board of Education
      4. Verification of a total of three years' experience as a pre-K-12 or post-secondary teacher and two years as a school or school district administrator, post-secondary administrator, or school business administrator
      5. Completion of an advanced program approved by the State Board of Education for the training of school superintendents South Carolina Regulation 43-64.

South Carolina Teacher Certification Manuel R 43-64
REQUIREMENTS FOR CERTIFICATION AT THE ADVANCED LEVEL.

Graduate Certificate Programs

Graduate Certificate in Aeronautical Engineering

Department of Mechanical Engineering
843-953-5057
http://www.citadel.edu/root/me-graduate-programs/aeronautical

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

The Graduate Certificate in the Aeronautical Engineering program is designed to provide students with a unique perspective, essential knowledge, and advanced engineering skills needed by todays practicing mechanical engineer. The courses are design focused for immediate transference to design applications in current industry and research.

Admission Requirements

Successful applicants must meet the following criteria for admission into the Aeronautical Engineering Certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

*Students who have been admitted to the MSME with an aeronautics focus need to apply for the Aeronautical Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSME program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Aeronautical Engineering Graduate Certificate program. An undergraduate engineering degree from an ABET accredited engineering program is required or approved degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first mechanical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Aeronautical Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Graduation Requirements (Course Requirements)
All certificate candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete four courses (12 hours) from the aeronautical engineering area of study below.

Required Course:
MECH 631 Advanced Engineering Mathematics

At least three of the following courses:
MECH 611 Advanced Fluid Mechanics
MECH 670 Applied Aerodynamics
MECH 771 Compressible Flow
MECH 772 Computational Methods in Thermal Sciences

Course/ Certificate Availability: The courses / certificates will be offered based on student preferences / overall demand indicated in the plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of the program of study.

Graduate Certificate in Built Environment and Public Health

School of Engineering, 843-953-5083
www.citadel.edu/root/cee-graduate-programs/environmental-public-health

Dr. William J. Davis, P.E.
jeff.davis@citadel.edu

The Graduate Certificate in Built Environment program is designed to provide students with a unique perspective and essential knowledge of interdisciplinary data, methods, objectives and outcomes in the fields of engineering, public health, physical activity, public administration, and city planning.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

All material must be received by the CGC office and evaluated by the department to receive consideration to the Built Environment and Public Health Graduate Certificate program. An undergraduate engineering degree is not required.

Program Requirements

Students are required to complete two courses (six credit hours) of graduate study within a three-year period from the time of registration in their first civil engineering graduate course at The Citadel and elective course as described herein. Students who fulfill the program requirements will earn a Graduate Certificate in Built Environment and Public Health.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All degree candidates must complete two courses at The Citadel:

Required Course:

CIVL 642	Public Health, Physical Activity, and Design of the Built Environment

At least one of the following courses:

CIVL 506	Geographic Information Systems
CIVL 640	Urban Mobility Infrastructure Policy and Planning

A max of two courses will be transferred in from the following list, or approved by the department head:

Medical University of South Carolina

PHHBP 700	Social and Behavioral Sciences
PHGEN 708	Principles of Environmental Health Sciences

Clemson University

CRP 8060	Urban and Regional Analysis
CRP 8010	Planning Process and Legal Foundations
CRP 8020	Site Planning & Infrastructure
RUD 8600	Urban Design Studio I
RUD 8630	Urban Design Studio II

College of Charleston

PUBA 502	Applications in GIS
PUBA 602	Public Policy
PUBA 611	Urban Policy
EVSS 601	Economic Theory for Policy Analysis
EVSS 659	Environmental Statistics

Transfer Credit: A maximum of two courses (6 credit hours) may be transferred in from an accredited college or university, provided: (1) grades of "B" or better were received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSCE program, and (3) each course has been approved by the department head.

Course/ Certificate Availability: The courses/ certificates will be offered based on student preferences/ overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course/ certificate offerings will be based on minimum class size enrollment. The Civil and Environmental Engineering Department will continually monitor student interest to expedite completion of your program of study.

Graduate Certificate in Composites Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate-programs/composites

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

The Graduate Certificate in the Composites Engineering program is designed to provide students with a unique perspective, essential knowledge, and advanced engineering skills needed by todays practicing mechanical engineer. The courses are design focused for immediate transference to design applications in current industry and research.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

*Students who have been admitted to the MSME with a composites focus need to apply for the Composites Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSME program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Composites Engineering Graduate Certificate program. An undergraduate engineering degree from an ABET accredited engineering program is required or approved degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first mechanical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Composites Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

All certificate candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete four courses (12 hours) from the composites engineering area of study below.

Required Course:

MECH 604	Advanced Mechanics of Materials

At least three of the following courses:

MECH 605	Materials and Process Selection
MECH 606	Fatigue and Fracture
MECH 702	Theory of Elasticity
MECH 703	Theory of Plasticity
MECH 708	Mechanics of Composite Materials

Course/ Certificate Availability: The courses / certificates will be offered based on student preferences / overall demand indicated in the plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of the program of study.

Graduate Certificate in Computer Engineering

Department of Electrical and Computer Engineering
843-953-5057
http://www.citadel.edu/root/ece

Dr. Mark McKinney,
mckinneym@citadel.edu

The Graduate Certificate in Computer Engineering is designed for students seeking advanced engineering techniques and professional development skills in the field of computer engineering.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an ABET accredited college or university or approved alternative and transcripts from all other undergraduate and graduate work directly from each accredited college or university.
3. Permission of the department head or program manager.

*Students who have been admitted to The Citadel's MSEE program and desire the certificate must also apply for the Graduate Certificate in Computer Engineering. The application fee will be waived for those already admitted to the MSEE program.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first electrical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Computer Engineering.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

CERTIFICATE REQUIREMENTS (Course Requirements)
All degree candidates must:
1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest
2. Complete four courses (12 hours) from the electrical and computer engineering areas of study below.

Computer Engineering

ELEC 635	Advanced Signal Processing
ELEC 645	Data Communications Networks
ELEC 655	Digital Communications
ELEC 675	Computer Architecture

Course/Certificate Availability: The above courses and certificates will be offered based on student preferences and overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course offerings will be based on minimum class size enrollment. The Electrical and Computer Engineering Department will continually monitor student interest to expedite completion of your program of study.

Graduate Certificate in Cybersecurity

Department of Cyber and Computer Sciences
843-953-5048
http://www.citadel.edu/ccs

Dr. Shankar Banik, Department Head
843-953-5039, shankar.banik@citadel.edu
Dr. Michael Verdicchio, Program Director
843-953-6987, mv@citadel.edu

With cybercrime on the rise, cybersecurity grows more vital with each passing day. Our nation's leaders recognize cybersecurity as a national imperative, and there is an immediate need for cybersecurity workforce development in the Lowcountry. Major employers of computing professionals and the defense and business industries in the Lowcountry are increasingly interested in employees specializing in cybersecurity.

Learning Outcomes

The Citadel's Graduate Certificate in Cybersecurity prepares you to play a critical role in the world of Internet security. By the end of this program, students will be able to:

- Describe basic components of cybersecurity
- Characterize the security profile of different types of networks
- Analyze and use classical and public key cryptography algorithms
- Secure a system from different kinds of attacks
- Analyze security of a cybersystem and perform risk assessment
- Discuss legal and ethical issues relating to cybersecurity

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript reflecting the highest degree earned from a regionally accredited college or university.
3. Applicants are expected to have an undergraduate grade point average of 3.0.*
4. Approval from the Program Director or Department Head before registering for any graduate Computer Science (CSCI) courses.
5. Competency, demonstrated through course work, approved work experience, or a program-administrated competency exam, in the areas of basic Computer Architecture, object-orientated Programing, Discrete Mathematics, and Data Structures.

*With the approval of the joint program admissions committee, students whose grade point average is less than 3.0 may be permitted to take up to six credit hours of courses in a non-degree seeking status and then apply for admission after successful completion of these courses.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Cybersecurity certificate program consists of four, three credit hour courses totaling 12 graduate credit hours. This program is offered jointly with the College of Charleston. At least 4 credit hours must be taken at each institution.

CSCI-614—Advanced Operating Systems
CSCI-631—Privacy and Security Issues
CSCI-632—Data Communications and Networking
CSCI-641—Advanced Cybersecurity (Prerequisites: CSCI 631 and CSCI 632)

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Environmental Studies

Department of Biology
843-953-5203
www.citadel.edu/root/biology-programs/grad-certificate-environmental-studies

Dr. Paul Nolan, 843-953-7076
paul.nolan@citadel.edu

Mission Statement

The mission of the Environmental Studies graduate certificate program is to advance the knowledge of students in a variety of broadly-based ecological and environmental topics. The graduate certificate is designed to complement an existing baccalaureate degree with an interdisciplinary in-depth analysis of the complex interactions between humans, other organisms, and the environment. The program is especially relevant for educators seeking to enhance their ability to teach about local and global environmental issues in the classroom, and professionals seeking an analytical basis to understanding the complex interactions between living organisms and their environment.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Additional transcripts may be required depending on undergraduate course requirements by program.

Students admitted to the program are not required to have an undergraduate major in biology, however it is assumed that students will have had at least twelve hours in college level biology courses, including a course in ecology. Prospective students who do not have the recommended undergraduate biology requirements must confer with the department head or graduate advisor prior to beginning the program.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

Courses taken as part of the Environmental Studies graduate certificate can be counted toward the Master of Arts in Biology. Successful completion requires a minimum 3.0 GPA with no course grades below B

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Graduate Certificate in Environmental Studies program requires a minimum of five graduate-level courses totaling at least 16 semester hours. Students are required to take BIOL 609 (Seminar in Environmental Studies). Each student is also required to choose a minimum of two courses at least one of which must be a 4 credit hour course with lab (minimum of 7 semester hours) from the following list of approved Biology courses, and a minimum of two courses (6 semester hours) from the following list of approved Engineering, Humanities, and Social Science courses.

Required Course (three credit hours)
BIOL-609 Seminar in Environmental Studies

Biology Elective Courses (2 courses, minimum of seven semester hours)
BIOL-505 Biometry
BIOL-506 Ecology*
BIOL-509 Marine Biology*
BIOL-514 The Vascular Flora of South Carolina*
BIOL-518 Ornithology*
BIOL-519 Economic Botany
BIOL-526 Freshwater Biology*
BIOL-604 Marine Invertebrates*
BIOL-606 Field Methods in Biology*
BIOL-607 Microbiology*
BIOL-611 Graduate Research**
BIOL-621 Aquatic Toxicology*
BIOL-625 Tropical Rainforest and Reef Ecology*
BIOL-631 Environmental Physiology
*four credit hours with lab
** variable credit hours

Engineering, Humanities, and Social Sciences Electives (two courses, six semester hours)
ANTH-501 Physical and Cultural Adaptations
CIVL-506 Geographic Information Systems
CIVL-602 Water Quality Modeling and Management
CIVL-604 Aquatic Chemistry
HIST-610 Special Topics in U.S. History
PSCI-509 Urban Politics

Total Required Courses: 16 credit hours

Descriptions of courses are listed in the last section of this catalog

Environmental Studies graduate certificate students who have successfully completed 9 graduate hours may apply to waive the ***testing requirement* for admission to the Master of

Graduate Certificate in Geotechnical Engineering

School of Engineering
843-953-5083

Dr. William J. Davis, P.E.
jeff.davis@citadel.edu

The Graduate Certificate in Geotechnical Engineering program focuses on applied advanced engineering skills needed by todays practicing geotechnical engineer. The courses are designed focused for immediate transference to design applications in the United States.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an ABET accredited engineering program or approved alternative.

*Students who have been admitted to the MSCE with a geotechnical focus need to apply for the Geotechnical Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSCE program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Geotechnical Engineering Graduate Certificate program. An undergraduate civil engineering degree from an ABET accredited engineering is required or approval degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first civil engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Geotechnical Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All degree candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete 4 courses (12 hours) from the geotechnical engineering areas of study below.

Geotechnical Engineering

CIVL 730	Geotechnical Earthquake Engineering
CIVL 731	Geo-environmental Engineering
CIVL 732	Advanced Soil Mechanics
CIVL 733	Advanced Foundations Design
CIVL 734	Soil Behavior

Course/ Certificate Availability: The courses/ certificates will be offered based on student preferences/ overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course/ certificate offerings will be based on minimum class size enrollment. The Civil and Environmental Engineering Department will continually monitor student interest to expedite completion of your program of study.

Graduate Certificate in Higher Education Leadership

Zucker Family School of Education
843-953-5097
https://go.citadel.edu/counselor-education/graduate-programs/higher-education-leadership-cert/
Dr. Tara Hornor, Program Coordinator
tara.hornor@citadel.edu
Dr. Guy Ilagan, gilagan@citadel.edu
Dr. Aaron Oberman, Division Coordinator,
obermana1@citadel.edu
Dr. George T. Williams, williamsg@citadel.edu

The Citadel Graduate College (CGC) and the Division of Counselor Education within the Zucker Family School of Education (ZFSOE) is committed to principled educational leadership in higher education, making The Citadel the ideal place for offering a program that aims to prepare higher education leaders.

The Graduate Certificate in Higher Education Leadership is designed to teach students aspiring to work (or currently working) in higher education how to:

- Use strategic planning and assessment processes to achieve institutional missions and goals.
- Analyze higher education leadership best practices and trends.
- Compare higher education governance models and trends in higher education administration.
- Identify higher education finance trends.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.

Once all admission requirements have been satisfied, review of the application will commence and the applicant will be notified of the admission decision. Coursework is not to begin until admission has been granted into the program and notification has been received from the Citadel Graduate College.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Higher Education Leadership graduate certificate program consists of four, three credit-hour courses totaling 12 graduate credit hours. Courses in the program are offered online.

EDUC-530 Strategic Planning and Assessment in Higher Education
EDUC-533 Higher Education Finance
EDUC 534 Advanced Leadership in Higher Education
EDUC-539 Higher Education Administration

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Hispanic Studies

Department of Modern Languages
www.citadel.edu/root/mlng-graduate-certificate-hispanic-studies

Dr. Sara Fernandez-Medina, 843-953-5065,
fernandezs@citadel.edu
Dr. Silvia Roca-Martinez, 843-953-6811,
srocamar@citadel.edu

The Citadel's Graduate Certificate in Hispanic Studies provides a panoramic approach to understanding the vast Hispanic world at the graduate level. The program is designed for native and non-native speakers of Spanish who wish to increase their knowledge of Hispanic language, culture, society, and literature. The program targets the regional needs of working professionals who wish to enhance their profession and increase employment potential amid the current demographic shifts in the Lowcountry.

The objectives of the programs are to:

- increase communicative and written competence in the Spanish language
- provide in-depth knowledge of the cultural, historic, political, and social milieus of the Spanish-speaking countries
- develop critical and real-world skills necessary for a broader understanding of the issues related to the Spanish-speaking societies of Latin America and Spain
- produce professionals in the field of Hispanic Studies

The program would benefit professionals throughout the community interested in enhancing current expertise or proving foreign language competency required for promotion and/or salary increases. Additional areas where the Graduate Certificate Program in Hispanic Studies would be beneficial include industries such as healthcare, law enforcement, social services, immigration and naturalization, human resources, and civic government.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Additional transcripts may be required depending on undergraduate course requirements by program.
3. Submission of letter of intent, no more than two pages, which answers the following questions:
   a. How has your experience/education prepared you for graduate courses in Hispanic Studies?
   b. How will your knowledge, skills, and experiences contribute to this program's learning community?
   c. What do you hope to gain from this Hispanic Studies graduate certificate program?
4. Submission of the names and contact information for three (3) references familiar with your work.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

Program Requirements

The Graduate Certificate in Hispanic Studies program will offer six graduate-level courses (18 credit hours) during fall and spring semesters as well as during both summer sessions. The courses will be offered in sequence and rotated accordingly. Students must complete 12 credit hours to earn the Graduate Certificate in Hispanic Studies.

The development of the curriculum is based largely on two key factors:

1. Spanish teachers at the level of secondary education will primarily constitute those students interested in the Graduate Certificate Program in Hispanic Studies.
2. The demographic these teachers have contact with is primarily Latin American students from Mexico, the Caribbean and Central America.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

PROGRAM REQUIREMENTS

SPAN-520	Mexico
SPAN-521	The Hispanic Presence in the United States
SPAN-522	Culture and Literature of Spain
SPAN-523	Advanced and Contrastive Grammar
SPAN-524	Recent Trends in Teaching Spanish as a Second Language
SPAN-525	Spanish for the Professional
SPAN-550	Special Topics: Culture and Literature of South America
SPAN-560	Hispanic Service Learning/Internship

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog

Graduate Certificate in History and Teaching Content

Department of History
843-953-5073 http://www.citadel.edu/root/history-graduate- certificate

Dr. Amanda R. Mushal,
mushala1@citadel.edu@citadel.edu

Mission Statement

The Certificate in History and Teaching Content will offer school teachers and other interested graduate students a current knowledge of world, western and United States history. The courses in the certificate program will place a special emphasis on relating content for the history classes and programs taught by elementary, middle and secondary-school teachers.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Additional transcripts may be required depending on undergraduate course requirements by program.
3. Submission of letter of intent, no more than two pages, which answers the following questions:
   a. How has your experience/education prepared you for graduate courses in history?
   b. How will your knowledge, skills, and experiences contribute to this program's learning community?
   c. What do you hope to gain from this graduate certificate program?
4. Submission of the names and contact information for three (3) references familiar with your work. At least two of these references must be from professional colleagues (e.g. head of department, school principal or other administrator).

One of the two options must apply for acceptance into the program:
1. Baccalaureate degree in Elementary Education, Social Studies Education or History.
2. Baccalaureate degree in a related Social Studies field (e.g. Political Science, International Relations, Geography, Sociology, etc.) with at least two years of teaching experience in a Social Studies department or Elementary School classroom.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Graduate Certificate in History and Teaching Content is a 12 credit hour program. Students must complete one required course and 3 elective courses, totaling four, three credit hour courses.

Required Course:
HIST-594—Histography for Social Studies Teachers

Elective Courses (select three):
HIST-560—History of the Non-Western World
HITC-501—History of the United States to 1877
HITC-502—History of the United States from 1877
HITC-503—South Carolina History
HITC-504—Europe and the World to 1500
HITC-505—Europe and the World from 1500
HITC-511—Special Topics in the History of the United States
HITC-512—Special Topics World History

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Intelligence Analysis

Department of Intelligence and Security Studies
843-953-6886
http://www.citadel.edu/root/intelligence-and-security-studies-graduate-programs/certificate-in-intelligence-analysis

Dr. Larry Valero, lvalero@citadel.edu

The Graduate Certificate in Intelligence Analysis is designed for working professionals who desire to increase their knowledge of Intelligence Analysis issues, who seek to understand the role and importance of effective leadership for national security, and who wish to apply leadership strategies and tactics to complex intelligence issues.

This program introduces applicable management principles, policy analysis, critical thinking and enhances critical leadership skills necessary to successfully address security and intelligence challenges facing the United States.

The program is well-suited to professionals working in state, local and, federal intelligence positions such as law enforcement, personnel, local and state agencies that partner with intelligence professionals and others seeking to increase their knowledge and competencies in the area of intelligence.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended. Additional transcripts may be required depending on undergraduate course requirements by program.
3. Submission of letter of intent, no more than two pages, which answers the following questions:
   a. How has your experience/education prepared you for graduate courses in intelligence analysis?
   b. How will your knowledge, skills, and experiences contribute to this program's learning community?
   c. What do you hope to gain from this Intelligence Analysis graduate certificate program?
4. Submission of the names and contact information for three (3) references familiar with your work.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

Program Requirements

Students must complete 15 hours of graduate study (5 courses). The program consists of three required intelligence courses (3 credit hours each) at the graduate level and each student must choose two electives from a specified list of criminal justice, political science, and homeland security courses. A stand-alone certificate in Intelligence Analysis is provided to individuals who are not enrolled in a degree program at The Citadel but are interested in receiving a Graduate Certificate in Intelligence Analysis.

Students who are simultaneously enrolled in both the Master of Arts in Social Science (MASS degree) and the Intelligence Analysis graduate certificate may count the five Intelligence Analysis courses as their Cluster A requirements for the MASS degree. Applicants for simultaneous MASS degree/Intelligence Analysis certificate must meet all the requirements (admission, declaration, by course completion without substitution) of the simultaneous MASS degree/Intelligence Analysis certificate.

Students may enroll in simultaneous MASS/Leadership and MASS/Intelligence Analysis certificate programs (since the former fills the Cluster B and the latter fills the Cluster A) as currently outlined in the CGC catalog. All courses can be applied to the MA program in Intelligence and Security Studies.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Required Courses:

INTL-580–Introduction to Intelligence
INTL-581–Intelligence Research and Analysis
INTL-582–Intelligence Theory Application

Elective Courses (select two):

CRMJ-515/INTL-515/PSCI-515 Topics in Homeland Security
CRMJ-555 Leadership Application Course in Criminal Justice
CRMJ-562 Comparative Criminal Justice Systems
CRMJ-568/INTL-568/PSCI-568 International and Domestic Terrorism
CRMJ-583 Transnational Organized Crime
HIST-591 Special Topics in European History
INTL-560 Intelligence and Homeland Security Administration
INTL-569/PSCI-569 National Security Policy
INTL-570 Homeland Security
INTL-572 Legal and Ethical Dimensions of Intelligence and Homeland Security
INTL-585 Topics in Intelligence
LDRS-750 Evolution of Military Leadership Thought
LDRS-751 Survey of US Military Leaders
LDRS-752 Survey of World Military Leaders
LDRS-753 Strategic & Contemp Military Leadership Issues

PSCI-510 Topics in Political Science
PSCI-564 US Foreign Relations
PSCI-565 International Politics
PSCI-566 International Political Economy
PSCI-571 Comparative Politics
PSCI-572 International Organizations
PSCI-573 International Political Theory
PSCI-575 US Foreign Policy Leadership
PSCI-576 International Law

Total Required Courses: 15 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Leadership

Department of Leadership Studies
843-953-8401
www.citadel.edu/root/graduate-certificate-in-leadership
leadership@citadel.edu

Faith Rivers James, J.D.
Associate Provost for Leadership,
Department Head & Professor of Leadership
friversjames@citadel.edu

The Graduate Certificate in Leadership supports the development of principled leaders. As a rigorous concentration in the various dimensions of leadership, this certificate helps students to understand and refine the qualities that businesses, charitable organizations, government agencies, and the military expect today. The courses, all offered online, examine the full spectrum issues pertaining to organizational leadership theory and practice.

The Certificate consists of five (5) three (3) hour courses at the graduate level. Students may receive a stand-alone Certificate in Leadership, or use the courses towards completion of the following graduate programs at The Citadel: Master of Business Administration; Master of Science in Project Management; Master of Arts in Intelligence and Security Studies, or Master of Arts in Social Science.

Leadership Certificate students who have successfully completed 9 hours may apply and waive the ***testing requirement*** for admission to the Masters of Science in Leadership. Successful completion requires a minimum 3.0 GPA with no course grades below C+. The five courses in the certificate program may be coupled with the following seven additional courses to complete the MS in Leadership degree.

- LDRS 710
- LDRS 712
- LDRS 715
- LDRS 723 or BADM 713
- LDRS 766 or BADM 766
- PSYC 570
- PSCI 501 or EDUC 512

Leadership Certificate students should complete LDRS 722 and either LDRS 711 or LDRS 714 prior to applying for admission to the MS in Leadership program.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.

All material must be received by the CGC office and evaluated by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

Those enrolled in the Master of Science in Leadership program will be automatically accepted into this certificate program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Graduate Certificate in Leadership is a 15 credit hour program consisting of the following requirements:

Required Courses (six Credit hours):
LDRS 722—Leadership in Organizations
PSYC 570—Social and Cognitive Foundations of Interpersonal Behavior

Electives (nine Credit hours), choose three (3) of the following:
LDRS 710—Ethics, Values, & Principled Leadership
LDRS 711—Leading Change: Organization Development and Transformation *
LDRS 712—Leading Teams: Coaching, Culture, Diversity, and Globalization
LDRS 714—Strategic Leadership, Vision, Mission and Contemporary Issues *
LDRS 723 **or** BADM 713—Communications for Leadership
BADM 740—Global Business Strategy **
(MBA students must take this course as one of the three Leadership Certificate electives)
PMGT 672—Applied Leadership Concepts ***
(MS Project Management students must take this course as one of the three Leadership Certificate electives)
PSYC 500—Human Growth and Development

* LDRS 722 is a prerequisite for these courses.
** If you are a MBA student, you must take BADM 740.
*** If you are a MS Project Management student, you must take PMGT 672.
Students planning to pursue an MS in Leadership must take either LDRS 711 or LDRS 714.

Graduate Certificate in Literacy Education

Zucker Family School of Education
843-953-5097
www.citadel.edu/root/literacy-education- program

Dr. Britnie Delinger Kane, Program Coordinator
Britnie.kane@citadel.edu
Dean Evan Ortlieb
eortlieb@citadel.edu
Dr. Soo Joung Kim
soojoung.kim@citadel.edu

Learning Outcomes

The general goals and objectives of the Graduate Certificate in Literacy Education program are to support candidates in developing:

- A knowledge and mastery of all aspects of the literacy process;
- A knowledge of those skills necessary to select, administer, and interpret informal and formal assessments used to examine children's and adolescents' literacy strengths and weaknesses;
- A knowledge of the abilities and skills which enhance a wholesome teacher-student-parent relationship in working with students identified as at-risk readers;
- A knowledge of those skills necessary to recognize and accommodate for individual differences in literacy instruction;
- A knowledge of and ability to design literacy environments to support culturally and linguistically diverse learners;
- A knowledge of the relationship of literacy skills to subject-matter content areas;
- A knowledge of significant research conducted in literacy education; and
- A knowledge of how to effectively support English Language Learners (ELLs).

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript directly from each accredited college or university from which a degree has been conferred. Applicants are expected to have a 2.5 cumulative undergraduate grade point average.
3. Submission of valid teaching certificate issued by South Carolina or another state.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

Students accepted into the Master of Education in Literacy Education are automatically enrolled in the Graduate Certificate in Literacy Education.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Graduate Certificate in Literacy Education consists of five, three credit hour courses to be taken in the following order:

EDUC-588 Foundations in Literacy
EDUC-589 Methods and Materials for Developing Literacy Skills
EDUC-590 Literacy Assessment and Instruction
EDUC-591 Practicum in Literacy Education
EDUC-592 Content Area Reading and Writing

Total Required Courses: 15 credit hours

Descriptions of courses are listed in the last section of this catalog.

*Recommendation for certification by the State of South Carolina requires a satisfactory score on the Praxis II Examination.

Non-Licensure Graduate Certificate in Literacy Education Option:

Students who are not licensed by the state may pursue the Graduate Certificate in Literacy Education, but certification will not be recommended from The Citadel nor from the SC State Department of Education.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of official transcripts from the undergraduate institution conferring the applicant's bachelor degree and transcripts from all postgraduate institutions attended.

Graduate Certificate in Manufacturing Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate-programs/manufacturing

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

The Graduate Certificate in the Manufacturing Engineering program is designed to provide students with a unique perspective, essential knowledge, and advanced engineering skills needed by todays practicing mechanical engineer. The courses are design focused for immediate transference to design applications in current industry and research.

Admission Requirements

Successful applicants must meet the following criteria for admission into the Manufacturing Engineering Certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

*Students who have been admitted to the MSME with a manufacturing focus need to apply for the Manufacturing Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSME program).
All material must be received by the CGC office and evaluated by the department to receive consideration to the Manufacturing Engineering Graduate Certificate program. An undergraduate engineering degree from an ABET accredited engineering program is required or approved degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first mechanical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Manufacturing Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All certificate candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete four courses (12 hours) from the manufacturing engineering area of study below.

REQUIRED COURSES:

MECH 625	Computer-Aided Design and Analysis
MECH 635	Computer-Aided Design and Analysis Laboratory (0 credit, required with MECH 625)
MECH 640	Manufacturing Process and Design
MECH 645	Machine Design
MECH 660	Advanced Design

Course/ Certificate Availability: The courses / certificates will be offered based on student preferences / overall demand indicated in the plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of the program of study.

Graduate Certificate in Mechatronics Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate-programs/mechatronics

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

The Graduate Certificate in the Mechatronics Engineering program is designed to provide students with a unique perspective, essential knowledge, and advanced engineering skills needed by todays practicing mechanical engineer. The courses are design focused for immediate transference to design applications in current industry and research.

Admission Requirements

Successful applicants must meet the following criteria for admission into the Mechatronics Engineering Certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

*Students who have been admitted to the MSME with a mechatronics focus need to apply for the Mechatronics Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSME program).
All material must be received by the CGC office and evaluated by the department to receive consideration to the Mechatronics Engineering Graduate Certificate program. An undergraduate engineering degree from an ABET accredited engineering program is required or approved degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first mechanical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Mechatronics Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All certificate candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete four courses (12 hours) from the mechatronics engineering area of study below.

REQUIRED COURSES:

MECH 650 Modeling, Analysis, and Control Systems
MECH 655 Advanced Mechatronics
MECH 750 Introduction to Modern Control Engineering
MECH 755 Nonlinear Control Engineering

Course/ Certificate Availability: The courses / certificates will be offered based on student preferences / overall demand indicated in the plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of the program of study.

Graduate Certificate in Military Leadership

Department of Leadership Studies
843-953-8401
www.citadel.edu/root/graduate-certificate-in-leadership
leadership@citadel.edu

Faith Rivers James, J.D.
Associate Provost for Leadership,
Department Head & Professor of Leadership
friversjames@citadel.edu

Dr. John Altick
Leadership Studies Advisor
843-953-2425, jaltick@citadel.edu

The Graduate Certificate in Military Leadership provides an opportunity for civilian and military students to pursue a course of study in military leadership. The courses, all offered online, examine world and U.S. military leaders from the perspective of effectiveness, style and practice. In addition, the program includes the study of the evolution of military leadership thought within the larger body of knowledge on leadership. Courses cover contemporary military leadership issues and strategy.

Military Leadership Certificate students who have successfully completed 9 hours may apply and waive the ***testing requirement*** for admission to the Masters of Science in Leadership. Successful completion requires a minimum 3.0 GPA with no course grades below C+. The five courses in the certificate program may be coupled with the following seven additional courses to complete the MS in Leadership degree.

- LDRS 710
- LDRS 712
- LDRS 715
- LDRS 723 or BADM 713
- LDRS 766 or BADM 766
- PSYC 570
- PSCI 501 or EDUC 512

Military Leadership Certificate students should complete LDRS 750/LDRS 722 and LDRS 711 prior to requesting admission to the MS in Leadership program.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript for the baccalaureate degree from an accredited college or university.

All material must be received by the CGC office and evaluated by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

REQUIRED COURSES

LDRS 711 – Leading Change: Organizational Development and Transformation*
LDRS 750 – Evolution of Military Leadership Thought
LDRS 751 – Survey of US Military Leaders
LDRS 752 – Survey of World Military Leaders
LDRS 753 – Strategy & Contemporary Military Leadership Issues

* LDRS 750 or LDRS 722 is a prerequisite for this course.

Total Required Courses: 15 credit hours

Descriptions of courses are listed in the last section of this catalog

Graduate Certificate in Power and Energy Engineering

Department of Mechanical Engineering
843-953-5057
www.citadel.edu/root/me-graduate-programs/power-and-energy

Dr. Robert J. Rabb, P.E.
rrabb@citadel.edu

The Graduate Certificate in the Power and Energy Engineering program is designed to provide students with a unique perspective, essential knowledge, and advanced engineering skills needed by todays practicing mechanical engineer. The courses are design focused for immediate transference to design applications in current industry and research.

Admission Requirements

Successful applicants must meet the following criteria for admission into the Power and Energy Engineering Certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.

*Students who have been admitted to the MSME with a power and energy focus need to apply for the Power and Energy Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSME program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Power and Energy Engineering Graduate Certificate program. An undergraduate engineering degree from an ABET accredited engineering program is required or approved degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first mechanical engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Power and Energy Engineering.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All certificate candidates must:

1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest.
2. Complete four courses (12 hours) from the power and energy engineering area of study below.

REQUIRED COURSES:

MECH 615	Applied Heat Transfer
MECH 617	Advanced Topics in Renewable Energy Systems
MECH 618	Energy Sources, Technology, and Policy
MECH 619	Power Systems Engineering

Course/ Certificate Availability: The courses / certificates will be offered based on student preferences / overall demand indicated in the plan of study to be submitted after acceptance. Students should be aware course / certificate offerings will be based on minimum class size enrollment. The Mechanical Engineering Program will continually monitor student interest to expedite completion of the program of study.

Graduate Certificate in Software Engineering

Department of Cyber and Computer Sciences
843-953-5048
http://www.citadel.edu/ccs

Dr. Shankar Banik, Department Head
843-953-5039, shankar.banik@citadel.edu
Dr. Michael Verdicchio, Program Director
843-953-6987, mv@citadel.edu

Learning Outcomes

The Citadel's Graduate Certificate in Software Engineering is designed to provide its students with the knowledge, skills, and abilities associated with software engineering. By the end of this program, students will be able to:

- Demonstrate the use of good software development models and techniques
- Be able to evaluate alternative designs and architectures for a software application
- Demonstrate the ability to effectively work in a team

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript reflecting the highest degree earned from a regionally accredited college or university.
3. Applicants are expected to have an undergraduate grade point average of 3.0.*
4. Approval from the Program Director or Department Head before registering for any graduate Computer Science (CSCI) courses.
5. Competency, demonstrated through course work, approved work experience, or a program-administrated competency exam, in the areas of basic Computer Architecture, Object-orientated Programing, Discrete Mathematics, and Data Structures.

*With the approval of the joint program admissions committee, students whose grade point average is less than 3.0 may be permitted to take up to six credit hours of courses in a non-degree seeking status and then apply for admission after successful completion of these courses.

All material must be received by the CGC office and reviewed by the department to receive consideration for admission to this graduate certificate program. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)
•The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Software Engineering certificate program consists of four, three credit hour courses totaling 12 graduate credit hours. This program is offered jointly with the College of Charleston. At least 4 credit hours must be taken at each institution.

Required:
CSCI-602—Foundations of Software Engineering

Choose two of:
CSCI-654—Software Requirements Analysis and Specifications
(Prerequisite: CSCI 602)
CSCI-656—Software Systems Design and Implementations
(Prerequisite: CSCI 602)
CSCI-658—Software Testing and Maintenance
(Prerequisite: CSCI 602)

Choose one of:
CSCI 634—Project Change and Management
(Cross-listed as PMGT 650)
CSCI 635—Fundamentals of Agile Project Management
(Cross-listed as PMGT 663)
CSCI-654—Software Requirements Analysis and Specifications
(Prerequisite: CSCI 602)
CSCI-656—Software Systems Design and Implementations
(Prerequisite: CSCI 602)
CSCI 657—Embedded Systems Design
(Prerequisites: CSCI 602 and CSCI 604)
CSCI-658—Software Testing and Maintenance
(Prerequisite: CSCI 602)
CSCI 659—Service-Oriented Computing
CSCI 672—Human-Computer Interaction
CSCI 690—Special Topics in Computing
(When approved by program director or department head)

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

PMGT 650, Overview of Technical Project Management, may be substituted for CSCI 634 in satisfying requirements for the Graduate Certificate in Software Engineering. PMGT 663, Foundations of Agile Project Management, may be substituted for CSCI 635 in satisfying degree requirements for the Graduate Certificate in Software Engineering. When only one CSCI 634 and CSCI 635 is permitted, the same restrictions shall extend to these substitutions.

Graduate Certificate in Sport Management

Department of Health & Human Performance
https://www.citadel.edu/root/hhp-programs/graduate/graduate-certificate-sport-management

Tim Bott, Program Director
(843) 953-4852, tbott@citadel.edu

Mission Statement

The mission of the Sport Management graduate certificate is to advance the knowledge and skills of students who seek a career in the sport industry. The courses are designed to prepare professionals for leading positions in sport organizations.

Admission Requirements

Requirements and application procedures for admission into the
Sport Management program:

1. Contact the Program Coordinator of the Sport Management Program.
2. Completion of the online graduate application along with the non-refundable application fee.
3. Submission of an official transcript of the baccalaureate degree from an accredited college and university.
4. Submission of resume detailing previous work experience.
5. Submission of a cover letter that intents addressing the following questions:
   a. How have your past experiences prepared you for the graduate work in Sport Management?
   b. How will your knowledge, skills, and attitudes contribute to the Sport Industry?
   c. What do you hope to gain if accepted to the Graduate Certificate in Sport Management Program?

Program Requirements

The Graduate Certificate in Sport Management consisted by fifteen (15) credit hours from courses delivered in-class and online.

Note. All materials must be received by the CGC and evaluated by the department to receive consideration for entrance into the Sport Management Graduate Certificate Program. Coursework is not to begin until admission has been granted into the program.

Students accepted to the Master of Arts in Sport Management are automatically enrolled in this certificate program.

GRADUATION REQUIREMENT (non-credit bearing)
•The Citadel Principled Leadership Seminar – LDRS 500

Required Courses:

SMGT-513	Sport Facility and Event Management
SMGT-514	Principles and Practice of Sport Management

Choose three (3) of the following courses:

SMGT-518	Sport Marketing
SMGT-520	Special Topics in Sport Management
SMGT-521	The Art of Selling in Sport
SMGT-523	Sport Leadership and Organizational Behavior
SMGT-539	Sport Public Relations and Promotions
SMGT-549	Sport Sociology
SMGT-552	Sport Fundraising
SMGT-553	Sport Information Management
SMGT-555	Sport Law
SMGT-556	Sport Finance
SMGT-558	Sport Advertising

Total Required Courses: 15 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Structural Engineering

School of Engineering
843-953-5083
www.citadel.edu/root/cee-graduate-programs/structural-engineering

Dr. William J. Davis, P.E.
jeff.davis@citadel.edu

The Graduate Certificate in Structural Engineering program focuses on applied advanced engineering skills needed by todays practicing structural engineer. The courses are designed focused for immediate transference to design applications in the United States.

Admission Requirements

1. Successful applicants must meet the following criteria for admission into the Structural Engineering Graduate Certificate program.
2. Completion of the online graduate application along with the non-refundable application fee.
3. Submission of an official transcript of the baccalaureate degree directly from an ABET accredited engineering program or approved alternative.

*Students who have been admitted to the MSCE with a structural focus need to apply for the Structural Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSCE program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Structural Engineering Graduate Certificate program. An undergraduate civil engineering degree from an ABET accredited engineering is required or approval degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first civil engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Structural Engineering.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All degree candidates must:
1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest
2. Complete four courses (12 hours) from the structural engineering areas of study below.

Structural Engineering

CIVL 504	Designing for Natural and Manmade Hazards
CIVL 608	Structural Loads and Systems
CIVL 610	Wood Design
CIVL 655	Masonry Structural Design
CIVL 657	Indeterminate and Matrix Structural Analysis
CIVL 711	Design of Masonry, Wood and Cold Formed Steel Structures
CIVL 712	Design of Coastal Structures and Bridges
CIVL 713	Design of Civil Engineering Systems for Natural and Manmade Hazards
CVIL 714	Advanced Steel Design
CIVL 715	Advanced Reinforced Concrete Design
CIVL 716	Analysis and Design of Prestressed Concrete Members
CIVL 718	Matrix and Finite Element Analysis
CIVL 719	Elastic Stability of Structures
CIVL 720	Dynamic Analysis of Structures
CIVL 721	Earthquake Engineering for Structural Engineers

Course/ Certificate Availability: The courses/ certificates will be offered based on student preferences/ overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course/ certificate offerings will be based on minimum class size enrollment. The Civil and Environmental Engineering Department will continually monitor student interest to expedite completion of your program of study.

Graduate Certificate in Student Affairs

Zucker Family School of Education
843-953-5097
https://go.citadel.edu/counselor-education/graduate-programs/student-affairs-cert/

Dr. Tara Hornor, Program Coordinator
tara.hornor@citadel.edu
Dr. Guy Ilagan, gilagan@citadel.edu
Dr. Aaron Oberman, Division Coordinator
obermana1@citadel.edu
Dr. George T. Williams, williamsg@citadel.edu

The Citadel Graduate College (CGC) and the Division of Counselor Education within the Zucker Family School of Education (ZFSOE) is committed to principled educational leadership in higher education, making The Citadel the ideal place for offering a program that aims to prepare leaders in Student Affairs.

The Graduate Certificate in Student Affairs is designed to teach students aspiring to work (or currently working) in higher education how to:

- Use resources effectively to achieve institutional missions and goals;
- Establish high expectations for the learning process; and
- Equip individuals with the skills needed to engage students in active learning, while building supportive and inclusive communities within higher education institutions that help students develop coherent values and ethical standards.

Admission Requirements

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript reflecting the highest degree earned from an accredited college or university.

Once all admission requirements have been satisfied, review of the application will commence and the applicant will be notified of the admission decision. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

The Student Affairs certificate program consists of four, three credit-hour courses totaling 12 graduate credit hours. Students may choose to enroll in 15 credit hours when including a practicum.

EDUC-537 - Student Development Services in Higher Education
EDUC-538 - Theories of Student Development in Higher Education
EDUC-539 - Higher Education Administration
EDUC-613 - Foundations of American Higher Education
EDUC-634 - Practicum in Student Affairs and College Counseling (optional)

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Systems Engineering Management

School of Engineering
843-953-9811
www.citadel.edu/root/pmgt-admission

Dr. David Greenburg
dgreenbu@citadel.edu

The Graduate Certificate in Systems Engineering Management (SEM) program provides a multidisciplinary approach to the management and delivery of complex projects and programs. The SEM course of instruction presents systems engineering as a well-developed body of knowledge, methodologies and techniques from a management perspective with application to a wide range of industries.

Admission Requirements

Successful applicants must meet the following criteria for admission into the SEM graduate certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an accredited college or university.
3. Submission of resume detailing work experience, or permission of Department Head.
4. Submission of a one-page letter of intent (form available at www.citadel.edu/graduatecollege/forms) that provides concise, complete answers to the following questions:
   a. How has your experience prepared you for the SEM graduate courses?
   b. How will your knowledge, skills and attitudes contribute to the SEM program's learning community?
   c. What do you hope to gain from the SEM graduate certificate program?

All material must be received by the CGC office and evaluated by the Department of Engineering Leadership and Program Management (ELPM) to receive consideration for admission to the SEM graduate certificate program. An undergraduate engineering degree is not required. Coursework will not begin until admission has been granted into the program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

Students must complete three required courses and one of the elective courses identified below:

Required Courses:

- PMGT-680 Systems Engineering Management Fundamentals
- PMGT-681 Requirements Development and Management
- PMGT-682 System Verification and Validation

Elective Courses (Select one):

- PMGT-683 Systems Modeling and Integration
- PMGT-684 Human System Integration
- PMGT-685 Decision and Risk Analysis

Up to four courses in the SEM program may be used in completing the elective requirements for the Master of Science in Project Management. Please see your advisor for eligibility.

Students must complete their coursework with a grade point average (GPA) of 3.0 or better on hours earned in these four courses.

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Tactical Performance and Resiliency

Department of Health & Human Performance
www.citadel.edu/root/hhp-programs/graduate/master-of-science-health-exercise-sport-science

Dr. Chris Bellon, Program Director
843-953-1652, cbellon@citadel.edu

The Online Graduate Certificate in Tactical Performance and Resiliency develops practitioners prepared to assume a part-time or full-time assistant role as a tactical strength and condintioning coach within a military, paramiliatary, law enforcement, fire and rescue, or private-sector setting. Studying at your own pace through our online courses, you will expand your skills and knowledge well beyond that offered by professional certifications alone. You will graduate from this program effectively prepared to design and deliver effective tactical training programs for military service members, firefighters, law enforcement officers, and veterans on a one-on-one basis.

Admission Requirements

Requirements and application procedures for admission into the
Online Graduate Certificate:

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree from an accredited college and university and all transcripts from post-baccularеate work.
3. A one-page letter describing why you are interested in the Graduate Certificate in Tactical Performance and Resiliency.
4. Competency, demonstrated through coursework, approved work experience, or a program administered competency exam, in the areas of functional anatomy, exercise physiology, and general psychology.
5. Submission of a resume detailing previous education and work experiences.

All materials must be received by the CGC and evaluated by the department to receive consideration for the program. Coursework is not to begin until admission has been granted into the program.

GRADUATION REQUIREMENTS (non-credit bearing)

1. The Citadel Principled Leadership Seminar – LDRS 500
2. Students in this program must demonstrate having earned the credential of Certified Personal Trainer from either the National Strength and Conditioning Association or The American College of Sports Medicine
3. Proof of current Certification in First Aid and CPR
4. Proof of current Certification in Mental Health First Aid

Program Requirements

The Graduate Certificate in Tactical Performance and Resiliency will consist of fifteen (15) semester credit hours. Twelve (12) semester credit hours will consist of online coursework, while the remaining three (3) hours will be completed in the form of a 150-hour practicum. Candidates must pass a background check. Students are responsible for all associated fees for the background check which must include the submission of social security card copy and fingerprints prior to beginning the practicum.

Required Courses

PSYC 516	Psychological Resiliency for Tactical Athletes
TAPR 600	Strength & Conditioning I
TAPR 601	Introduction to Human Performance & Coaching
TAPR 640	Tactical Strength and Conditioning
TAPR 695	On-site practicum

Total Required Courses: 15 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Technical Program Management

School of Engineering
843-953-9811
www.citadel.edu/root/pmgt-admission

Dr. David Greenburg
dgreenbu@citadel.edu

Mission Statement

The mission of the Technical Program Management (TPgM) graduate certificate program is to educate and prepare technical professionals to serve as program and portfolio managers and leaders.

Admission Requirements

Successful applicants must meet the following criteria for admission into the TPgM graduate certificate program.

1. Completion of the online graduate application along with the application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.
3. Submission of resume detailing work experience.
4. Submission of a one-page letter of intent that provides concise, complete answers to the following questions:
   a. How has your experience prepared you for the TPgM graduate courses?
   b. How will your knowledge, skills and attitudes contribute to the TPgM program's learning community?
   c. What do you hope to gain from the TPgM graduate program?

All material must be received by the CGC office and evaluated by the Department of Engineering Leadership and Program Management (ELPM) to receive consideration for admission to the TPgM Graduate Certificate program. An undergraduate engineering degree is not required.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

Students are required to complete 12 hours of graduate study within a two-year period from the time of registration in their first TPgM graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Technical Program Management (TPgM).

The required four courses for the TPgM Graduate Certificate Program can be chosen from:
- PMGT-660: Overview of Technical Program Management
- PMGT-661: The Legal and Contractual Aspects of Program Management
- PMGT-662: Program Development Strategies and Processes
- PMGT-663: Fundamentals of Agile Project Management
- PMGT-685: Decision and Risk Analysis

Up to four courses in the TPgM Certificate program may be used in completing the elective requirements for the Master of Science in Project Management. Please see your advisor for eligibility.

Students must complete their coursework with a grade point average (GPA) of 3.0 or better on hours earned in these four courses.

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

Graduate Certificate in Technical Project Management

School of Engineering
843-953-9811
www.citadel.edu/root/pmgt-admission

Dr. David Greenburg
dgreenbu@citadel.edu

Mission Statement

The mission of the Technical Project Management (TPM) graduate certificate program is to educate and train the next generation of technical and professional project managers and leaders.

Admission Requirements

Successful applicants must meet the following criteria for admission into the TPM graduate certificate program.

1. Completion of the online graduate application along with the non-refundable application fee.
2. Submission of an official transcript of the baccalaureate degree directly from an accredited college or university.
3. Submission of resume detailing work experience.
4. Submission of a one-page letter of intent that provides concise, complete answers to the following questions:
   a. How has your experience prepared you for the TPM graduate courses?
   b. How will your knowledge, skills and attitudes contribute to the TPM program's learning community?
   c. What do you hope to gain from the TPM graduate program?

*Students who have been admitted to the MSPM are automatically enrolled in the TPM Graduate Certificate program.

All material must be received by the CGC office and evaluated by the Department of Engineering Leadership and Program Management (ELPM) to receive consideration for admission to the TPM Graduate Certificate program. An undergraduate engineering degree is not required. Applicants enrolled in the Master of Science in Project Management are automatically enrolled in this certificate program.

GRADUATION REQUIREMENT (non-credit bearing)

- The Citadel Principled Leadership Seminar – LDRS 500

Program Requirements

Students are required to complete 12 hours of graduate study within a two-year period from the time of registration in their first TPM graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Technical Project Management. The four courses in the TPM Certificate Program are required core courses for completing the requirements for the Master of Science in Project Management.

The required courses for the TPM Graduate Certificate Program are:

- PMGT-650: Overview of Technical Project Management
- PMGT-651: Technical Project Planning and Scheduling
- PMGT-652: Applications of Quality Management
- PMGT-653: Technical Project Support and Operations

Students must complete their coursework with a grade point average (GPA) of 3.0 or better on hours earned in these four courses.

Total Required Courses: 12 credit hours

Descriptions of courses are listed in the last section of this catalog.

All students are required to complete a capstone project that spans the four TPM courses.

A formal presentation of the completed capstone project will be made upon completion of PMGT 653 to faculty, students and industry professionals.

Graduate Certificate in Transportation Engineering

School of Engineering,
843-953-5083
www.citadel.edu/root/cee-graduate-programs/transportation-engineering

Dr. William J. Davis, P.E.
jeff.davis@citadel.edu

The Graduate Certificate in Transportation Engineering program focuses on applied advanced engineering skills needed by todays practicing transportation engineer. The courses are designed focused for immediate transference to design applications in the United States.

Admission Requirements

1. Successful applicants must meet the following criteria for admission into the Transportation Engineering Graduate Certificate program.
2. Completion of the online graduate application along with the non-refundable application fee.
3. Submission of an official transcript of the baccalaureate degree directly from an ABET accredited engineering program or approved alternative.

*Students who have been admitted to the MSCE with a transportation focus need to apply for Transportation Engineering Graduate Certificate program (application fee will not be required for those already admitted to the MSCE program).

All material must be received by the CGC office and evaluated by the department to receive consideration to the Transportation Engineering Graduate Certificate program. An undergraduate civil engineering degree from an ABET accredited engineering is required or approval degree from the department head.

Program Requirements

Students are required to complete 12 hours of graduate study within a three-year period from the time of registration in their first civil engineering graduate course at The Citadel. Students who fulfill the program requirements will earn a Graduate Certificate in Transportation Engineering.

GRADUATION REQUIREMENT (non-credit bearing)
- The Citadel Principled Leadership Seminar – LDRS 500

GRADUATION REQUIREMENTS (Course Requirements)
All degree candidates must:
1. File a plan of study outlining the intended areas of interest and listing the top four corresponding courses of interest
2. Complete four courses (12 hours) from the transportation engineering areas of study below.

Transportation Engineering

CIVL 506	Geographic Information Systems
CIVL 575	Traffic Engineering Operations
CIVL 576	Roadway Geometric Design
CIVL 612	Urban Transportation Planning
CIVL 640	Urban Mobility Infrastructure Policy and Planning
CIVL 642	Public Health, Physical Activity, and Design of the Built Environment
CIVL 740	Transportation Safety Engineering
CIVL 741	Travel Demand Forecasting

Course/ Certificate Availability: The courses/ certificates will be offered based on student preferences/ overall demand indicated in your plan of study to be submitted after acceptance. Students should be aware course/ certificate offerings will be based on minimum class size enrollment. The Civil and Environmental Engineering Department will continually monitor student interest to expedite completion of your program of study.

Graduate Course Descriptions

Course Descriptions

Descriptions of graduate courses are listed in this section. Consult the course schedules online to determine the course offerings in a particular term.

Anthropology (ANTH)

ANTH-501—Physical and Cultural Adaptations
Three Credit Hours
This course examines how humans have adapted to their unique environments through cultural alterations and physical changes to the body by looking at pre-1492 Native American peoples. The development of human cultures are examined beginning with the origins of the First Americans and tracing their migrations to the various environments of North, Central, and South America for a more in-depth look at the range of variability among living peoples. The growth and development of human cultures are examined from the movement of pre-1492 Native Americans as bands and progressing through tribes to more advanced urban societies.

ANTH-508—Special Topics in Anthropology
Selected topics that fit the needs of students as well as the specialized knowledge of the faculty. Topics could range from the main subfields of biological, cultural, or linguistic anthropology.

Biology (BIOL)

BIOL-502—Comparative Vertebrate Anatomy
Four Credit Hours
A study of the comparative anatomy of vertebrate animals. Emphasis will be placed on the evolution of organ systems in response to environmental pressures.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-505—Biometry
Three Credit Hours
This course will focus on methods and procedures for designing experiments, gathering, analyzing, and interpreting data. Topics to be included are descriptive statistics, estimation, measurements of confidence and reliability, tests of significance, measurements of relationship and correlation, and non-parametric analyses. In addition to lecture format, students will get hands-on experience in data gathering, analyses using computer statistical programs, statistical inference and decision making.

BIOL-506—Ecology
Four Credit Hours
An introduction to the study of biological interrelationships and the effects of the environment on the structure and function of animal and plant systems. Laboratory will emphasize methods and materials of ecological investigations.
Lecture: two hours a week; laboratory: four hours a week.

BIOL-508—Genetics
Four Credit Hours
A study of inheritance, including Mendelian genetics, molecular genetics, changes in chromosome structure and number, cytogenetics, and population genetics.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-509—Marine Biology
Four Credit Hours
Lectures cover major ecological factors and the fundamentals of oceanography. Laboratory work stresses familiarity with species, taxonomic methods, sampling procedures, experimental design, use of equipment, and data handling.
Lecture: two hours a week; laboratory: four hours a week.

BIOL-510—Vertebrate Natural History
Four Credit Hours
An introduction to the classification, ecology, evolution, and distribution of the vertebrates. Laboratory with emphasis on identification and field study techniques, especially with respect to the vertebrates of South Carolina.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-512—Descriptive Histology
Four Credit Hours
A detailed study of the chief types of animal tissues and a description of the histology of organs. Laboratory work includes microscopic study of cells, tissues, and organs of animals.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-514—The Vascular Flora of South Carolina
Four Credit Hours
An introductory study of the native vascular flora of South Carolina, emphasizing the identification and collection of native plants. The student will have practice in use of taxonomic keys and in preparation of specimens.
Lecture: two hours a week; laboratory: four hours a week.

BIOL-518—Ornithology
Four Credit Hours
A study of the structure, function, and ecology of birds. Field trips and bird specimens will give students a working knowledge of birds common to South Carolina.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-519—Economic Botany
Three Credit Hours
A course in economic botany devoted to the consideration of plants which are useful or harmful to humans, their origins and history, botanical relationships, chemical constituents that make them economically important, and their role in prehistoric and modern cultures and civilizations. Lecture: three hours a week.

BIOL-526—Freshwater Biology
Four Credit Hours
The study of freshwater organisms and their environment. Instruction will cover the biological diversity, ecological and physiological adaptation, and the physical setting of freshwater systems. Local systems of interest include large coastal rivers and lakes, upper portions of estuaries, and old rice fields.
Lecture: two hours a week; laboratory: four hours a week.

BIOL-532—Developmental Biology
Four Credit Hours

A study of animal embryology and its molecular control, including: processes of fertilization; the processes of cleavage, gastrulation, and neurulation; the formation of tissues and organs from the three primordial germ layers; the role of secondary induction and of hormones in development; the role of the environment in development; and some of the techniques of molecular biology that are used in the study of developmental processes. The laboratory will include use of model systems to investigate the principles discussed in lecture.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-540—Biotechnology for STEM Educators
Three Credit Hours
This course covers current techniques in biotechnology research and applications and highlights the interdisciplinary nature of the topic. Discussions cover techniques used in genomics, and proteomics and the applications of these techniques. Current techniques are explained and ethical considerations are discussed. Emerging technologies in this field and their applications are introduced.

BIOL-601—Evolution
Three Credit Hours
A review of evolutionary principles and general morphology of the animal kingdom.
Lecture: three hours a week.

BIOL-602—Morphological Survey of the Plant Kingdom
Three Credit Hours
An advanced course in comparative morphology, life history, and phylogeny of the vascular and nonvascular plants. The laboratory will include work on structural and developmental relationships as applied to morphological and anatomical interpretations of the vascular and nonvascular plants.
Lecture: two hours a week; laboratory: two hours a week.

BIOL-603—General Physiology
Three Credit Hours
A study of the general principles of animal physiology. Emphasis will be placed on cellular, tissue, and organ system function and how these are integrated to allow the organism to respond and succeed in its environment.
Lecture: three hours a week.

BIOL-604—Marine Invertebrates
Four Credit Hours
A study of marine invertebrates and their environment. Lecture: three hours a week; laboratory: three hours a week.

BIOL-605—Laboratory Methods in Biology
Four Credit Hours
An experience in laboratory preparation, participation, evaluation, and supply sources for a series of general biology laboratory exercises for the secondary or middle school level.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-606—Field Methods in Biology
Four Credit Hours
An examination of the methods used by field biologists emphasizing experimental design, sampling techniques, and data analysis. Classroom discussion will be supplemented by practical field experiences. Topics will include the measurement of primary productivity, estimation of animal population size, plant community composition and diversity, and the correlation of environmental factors with species distribution. An effort will be made to use procedures and field situations that are accessible to local teachers.
Lecture: three hours a week; laboratory: four hours a week.

BIOL-607—Microbiology
Four Credit Hours
An advanced study of the fundamental life processes of microorganisms and their importance to humans. The emphasis of the course will be on bacteriology. Includes a brief introduction to epidemiology and immunology.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-609—Seminar in Environmental Studies
Three Credit Hours
A series of field trips, lectures, and other experiences designed to develop an understanding of the environment as it affects human well-being now and in the future. This course is especially designed for teachers and counselors, grades K-12, in all disciplines. Classes will normally meet daily from 8:30 a.m. to 2:00 p.m. for a period of two weeks during a summer session. Outside fieldwork is required.

BIOL-610—Special Topics in Biology
Variable Credit Hours
This course is designed for the study of specialized topics in modern biology. The subject for each course will be announced. Lecture and laboratory hours per week dependent on topic.

BIOL-611—Graduate Research
Variable Credit Hours
Research problems in various areas of biology to introduce the student to the planning and execution of research experimentation, data analysis, and the presentation of research findings.
By arrangement; *prerequisite*: Permission of instructor.

BIOL-612—Cell and Molecular Biology
Three Credit Hours
An in-depth exploration of the cell surface, organelles, and metabolism of different cell types. This course integrates cell biology, molecular biology, and biochemistry.
Lecture: three hours a week.

BIOL-621—Aquatic Toxicology
Four Credit Hours
An introduction to assessing the effects of toxic substances on aquatic organisms and ecosystems. Topics include general principles of toxicology, fate and transport models, quantitative structure-activity relationships, single-species and community-level toxicity measures, regulatory issues, and career opportunities. Examples will be drawn from marine, freshwater, and brackish-water systems.
Lecture: three hours a week; laboratory: three hours a week.

BIOL-624—Molecular Genetics and Recombinant DNA: Theory, Practice and Issues
Three Credit Hours

The fundamental principles and applications of recombinant DNA technology will be discussed and demonstrated. Emphasis will be placed on sources and preparation of materials for classroom activities. Societal issues involving recombinant DNA technology will also be explored.
Lecture: two hours a week; laboratory: two hours a week.

BIOL-625—Tropical Rainforest and Reef Ecology
Four Credit Hours
The objectives of this experiential course are to survey biodiversity and provide understanding of ecological principles in tropical habitats through physical involvement with the environment. Two co-instructors will lead students on a 10-12 day excursion in forest and reef habitats of the Neotropics, providing natural history instruction and interpretation. Participants will have the opportunity to immerse themselves in the subject by walking forest paths, swimming forest streams, spelunking caves, paddling mangrove swamps, combing beaches, and snorkeling coral reefs. A species list of plants and animals will be assembled for each habitat and readings from the scientific literature, appropriate to the region, will be assigned for analysis and discussion.

BIOL-631—Environmental Physiology
Three Credit Hours
This course will study the effects of such parameters as salinity, oxygen, temperature and elevation or depth on animal physiology and the adaptations made by animals to these environments.
Lecture: two hours a week; laboratory: two hours a week.

Business Administration (BADM)

MBA Core Courses

ACCT-710—Accounting for Executives
Three Credit Hours
This course is designed to provide students with a knowledge of the basic tools and concepts used in managerial accounting and to provide an opportunity for students to employ their knowledge of financial and managerial accounting through projects. The course emphasizes identifying and interpreting relevant accounting information for decision-making by internal and external users. The focus is on the use of accounting information for decision-making, including behavioral and ethical aspects.
Prerequisite: MBA Essentials II (GBUS703)

ACCT-730—Financial Statement Analysis
Three Credit Hours
This course focuses on the use of financial statements to assess a company's financial health, its strengths, weaknesses, recent performance and future prospects. Emphasis is on the ties between a company's operating activities and its financial performance. In addition, the course also examines financial forecasting and planning with particular emphasis on managing growth and decline, including the financing of the company's operations.
Prerequisite: Accounting for Executives (ACCT710)

ENTR-710—Managing Innovation
Three Credit Hours
This course focuses on innovation's role in 21st Century organizations. It addresses the need for a systemic approach to building innovation capabilities and the challenges of integrating the many facets of innovation management. Leading innovators and building innovative organizations are covered from both a theoretical and applied approach. Topics addressed include fundamental theories of innovation, developing an innovation strategy, innovation as a business process, the role of the innovation context including leadership and organization, culture and values, people and skills, processes and tools, and assessing and improving innovation performance. Both classroom and alternative instructional methods will be used throughout the semester.
Prerequisite/Co-requisite: GBUS 702, GBUS 703.

FINC-710—Corporate Financial Management
Three Credit Hours
This course provides an overview of modern corporate financial methods with an emphasis on practitcal financial decisions that firms in the real world need to make on a regular basis. Conceptually the course can be divided into two parts: a) Investment decisions (how firms should spend money) and b) Financing Decisions (how firms should raise money). Topics include the cost of capital, capital structure, valuation, issuing securities, derivatives and risk management. This course takes the perspective of the corporate financial manager attempting to pursue strategies that increase shareholder wealth.
Prerequisite: MBA Essentials II (GBUS703)

GBUS-702—MBA Essentials I
Three Credit Hours
MBA Essentials I will cover baseline knowledge in the functional areas of business. This course will address communications, legal, leadership, and marketing. *Prerequisite*: None.

GBUS-703—MBA Essentials II
Three Credit Hours
MBA Essentials II will cover baseline knowledge in the functional areas of business. This course will lay a foundation in economics, accounting, finance, and operations that the other courses will build upon.
Prerequisite: None.

MGMT-710—Ethical Leadership and Organizational Behavior
Three Credit Hours
This course is a seminar that focuses on the understanding and application of organizational theory and leadership principles. In addition, the course will include components on developing individual leadership skills and different theories of organizations. The applications component of the course will include a variety of approaches such as cases, films, guest speakers, individual self-assessments, role play, team building exercises, and a leadership portfolio.
Prerequisite: MBA Essentials I (GBUS702).

MGMT-712—Information Technology Management
Three Credit Hours

This course introduces the student to the vocabulary of Management Information Systems (MIS) and explores how organizations are using information technology for a competitive advantage and redefining the way in which they interact with their stakeholders.
Prerequisite: MBA Essentials I (GBUS-702) and MBA Essentials II (GBUS-703).

MGMT-760—Global Business Strategy
Three Credit Hours
This comprehensive and integrative MBA capstone course pulls together the concepts, tools, and approaches taught in all the required courses. This course uses a combination of cases which place students in diverse managerial positions and a business simulation which requires the student to act as a senior executive responsible for the strategic decisions of an organization, the course emphasizes the application, execution, and resolution of multi-dimensional problems. The course emphasizes the strategic management of the business unit and the development of a paradigm for strategic analysis, as well as matching internal processes with the implementation of diverse objectives. The focus is on business-level strategy and the role of leadership in improving performance. *Prerequisites: ACCT 710, SCMT 710, FINC 710, MKTG 710*

MGMT-762—Strategic Consulting Experience
Three Credit Hours
This course provides opportunities for students to apply knowledge and skills acquired throughout their MBA coursework in a real-world business environment as project consultants. Consulting projects address issues of significance to client organizations, and project teams make recommendations to client management through oral presentations and written reports based on a thorough analysis of the client organization and environment. MBA Capstone course or elective. *Prerequisites: ACCT 710, SCMT 710, FINC 710, MKTG 710.*

MGMT-764—Business Plan
Three Credit Hours
This course is designed to focus on researching, developing, writing and presenting business plans with associated financials for a new product and/or service that is not available in the current market place. MBA Capstone course.
Prerequisites: ACCT 710, SCMT 710, FINC 710, MKTG 710.

MKTG-710—Strategic Marketing
Three Credit Hours
This course examines how organizations gain and maintain a competitive advantage in a dynamic environment. The course emphasizes the analysis of marketing decisions involving product, price, promotion, and distribution variables. Marketing decision-making is explored in both domestic and global settings.
Prerequisite: MBA Essentials I (GBUS702)

SCMT-710—Quantitative Methods for Operations Management
Three Credit Hours
Students explore the role of operations management in building the competitive strength of the firm and in pursuing the firm's goals of customer satisfaction, profit, service delivery, and quality and shareholder wealth. The course integrates classical and modern operations management methodologies with both hypothetical and real-world business cases. Students learn concepts and quantitative algorithms involved in designing and managing operations.
Prerequisite: MBA Essentials II (GBUS703)

MBA Elective Courses

ACCT-750—Lecture in Accounting
Three Credit Hours
This course may be elected by students to perform advanced study and/or research in a particular area. Special topics covered within the seminar, as well as required prerequisites
are at the discretion of the instructor.
Prerequisites: MBA Essentials II (GBUS703) and Accounting for Executives (ACCT 710).

ACCT-770—Advanced Topics in Accounting
Three Credit Hours
This course explores the current issues in the field of accounting. Particular issues covered in any given semester will be selected by the course professor and announced at the time of registration.
Prerequisite: Accounting for Executives (ACC).

ACCT/BANA/ECON/ENTR/FINC/MGMT/MKTG/ SCMT-795—Independent Study
Three Credit Hours
This is an advanced course that may be taken by graduate students desiring to engage in a research/scholarly project of mutual interest to the student and the faculty member who directs the study. The course is intended to be rigorous. The course structure, evaluation process, and expected outcomes should be clearly delineated by the instructor in advance.

BLAW-730—Legal and Ethical Environment for Decision Makers
Three Credit Hours
This course introduces the framework of law and ethics within which businesses operate and provides the student with a broad understanding of common law (contract, tort, and property) as well as a statutory, administrative, and Constitutional law.
Prerequisite: MBA Essentials I (GBUS702).

ECON-730—Business and Economic Forecasting
Three Credit Hours
This course addresses the important function of strategic planning. Planning requires accurate forecasts of future sales, capacity, market size, prices, and a myriad of other variables that determine the long-run profitability of the firm. This course will help the student understand and create forecasts for the firm, industry and the economy. Techniques include smoothing, time series analysis, and regression analysis.
Prerequisite Quantitative Methods for Operations Management (SCMT 710).

ECON-750—Lecture in Economics
Three Credit Hours
This course may be elected by students to perform advanced study and/or research in a particular area. Special topics covered within the seminar, as well as required prerequisites are at the discretion of the instructor.
Prerequisite: MBA Essentials II (GBUS703)

ENTR-730—Entrepreneurship
Three Credit Hours
This course is designed for students interested in creating a business venture, acquiring an existing business, working in industries that serve the entrepreneur, or who wish to become familiar with the concepts, issues, and techniques of new venture creation and entrepreneurship. Tools to be developed include recognition of a venture opportunity, acquisition of information on resources needed for venture creation and survival, development of competitive marketing strategies, and international opportunities.
Prerequisite: MBA Essentials I (GBUS702) and MBA Essentials II (GBUS703).

FINC-730—Personal Finance
Three Credit Hour
This course will focus on the application of basic financial tools and principles to the student's personal life including the financial planning process, liquidity management, debt management, asset management, and risk management. This course will also include retirement, education and estate planning.
Prerequisite: None.

FINC-735—Investments
Three Credit Hours
This course explores the practical aspects of investment analysis germane to evolution of market securities and derivative instruments evaluation, portfolio analysis and performance evaluation, sources of printed and Internet investment information, and the formulation of investment policies and strategies.
Prerequisite: MBA Essentials II (GBUS703)

FINC-740—Financial Markets and Institutions
Three Credit Hours
This course provides an introduction to the financial markets (entities that sell stocks, bonds and foreign currencies) and the key financial insititutions (banks, insurance companies, mutual funds, government entities etc.). Financial markets play a critical role in the efficient functioning of the market economy. The financial insititutions are the organizations that allow the financial markets to function properly. This course teaches the fundamental ideas that govern interaction of these markets and related insititutions.
Prerequisites: MBA Essentials (GBUS702 and GBUS703).

FINC-745—Financial Modeling
Three Credit Hours
This course is a hands-on course in spreadsheet and financial modeling, primarily using Microsoft Excel, and covers various topics in financial management and investments. The emphasis is on the practical application of financial theory. Students will develop skills in the quantitiative analysis of financial theory.
Prerequisite: MBA Essentials II (GBUS703)

FINC-750—Lecture in Finance
Three Credit Hours
This course may be elected by students to perform advanced study and/or research in a particular area. Special topics covered within the seminar, as well as required prerequisites are at the discretion of the instructor.
Prerequisites: MBA Essentials II (GBUS703)

MGMT-731—Human Resource Development
Three Credit Hours
This course examines Human Resource Development (HRD) as a field through the learning, development and behavior of humans in social systems. These systems include but are not limited to, workforce, education, and family. Research from Management Science, Education, Psychology, and Sociology strengthen HRD theory and practice. The purpose of this course is to explore the integration of the individual into work organizations by examining work issues in learning, training, leadership, and psychosocial development. A primary focus of this course is on applied performance management informed by human sciences research as a tool that can be applied to productivity.
Prerequisites: MBA Essentials I (GBUS702).

MGMT-732—Human Resource Management
Three Credit Hours
This course is designed to provide managers with an understanding of the processes of adding strategic human capital to the organization. The course examines the design of work, personnel recruitment and selection, employee compensation and benefits, employee relations and personnel policies, and labor issues. The course is applied management science designed for managers.
Prerequisite: MBA Essentials I (GBUS-702).

MGMT-742—International Business
Three Credit Hours
This course studies the trend toward internationalization, explores the terminology used in international business, and, via case studies and examples, demonstrates the problems and advantages of the internationalization process.
Prerequisite: MBA Essentials I (GBUS702)

MGMT-744—International Management
Three Credit Hours
This course is designed to provide students with an understanding of the issues facing international managers and the environment of the Global Market Place. Some of the challenges include: accommodating different currencies, dealing with a multiplicity of governments, operating effectively in diverse legal environments, being sensitive to and avoiding problems that may arise from cultural differences among people, and the formulation of effective strategies in the complex global environment.
Prerequisite: MBA Essentials I (GBUS702)

MGMT-750—Lecture in Business Administration
Three Credit Hours
This course may be elected by students to perform advanced study and/or research in a particular area. Special topics covered within the seminar, as well as required prerequisites, are at the discretion of the instructor.
Prerequisite: MBA Essentials I (GBUS702).

MGMT-762—Strategic Consulting Experience
Three Credit Hours
This course provides opportunities for students to apply knowledge and skills acquired throughout their MBA coursework in a real-world business environment as project consultants. Consulting projects address issues of significance to client organizations, and project teams make recommendations to client management

through oral presentations and written reports based on a thorough analysis of the client organization and environment. MBA Capstone course or elective. *Prerequisites: ACCT 710, SCMT 710, FINC 710, MKTG 710.*

MGMT-770—Advanced Topics in Information Technology
Three Credit Hours
This course may include expert systems, decision theory, decision support systems, artificial intelligence, telecommunications, and/or other contemporary issues in information technology.
Prerequisite: Information Technology Management (MGMT712).

MKTG-730—Communications for Leadership
Three Credit Hours
This course provides insight on the role of organizations as communication systems in which effective writing and speaking are crucial. Emphasis is on developing awareness of verbal and written styles, interpersonal skills, and creating a repertoire of writing and speaking strategies.
Prerequisite: None.

MKTG-731—Negotiation Strategies
Three Credit Hours
This course emphasizes negotiation, the art and science of creating agreements between two or more parties, and introduces students to the effective use of power, persuasion, influence, and control in modern organizations. In this course students first apply theories developed as guides to improving negotiating strategies (the science). Students will then develop and sharpen negotiating skills through realistic cases (the application) with an emphasis on preparation, bidding, distributive and integrative bargaining techniques.
Prerequisite: None.

MKTG-732—International Marketing
Three Credit Hours
This course examines detailed analysis of theories, issues, and decisions facing the global marketing manager. Emphasis is on small and large firms, innovative applications, workshops, and original research projects.
Prerequisite: MBA Essentials I (GBUS702).

MKTG-733—Consumer Behavior
Three Credit Hours
This course consists of the study of domestic and international models of consumer behavior, including key variables from the behavioral sciences. Course content includes research methodologies, case studies, applications to decision-making, and an original student research project.
Prerequisite: MBA Essentials I (GBUS702)

MKTG-750—Lecture in Marketing
Three Credit Hours
This course may be elected by students to perform advanced study and/or research in a particular area. Special topics covered within the seminar, as well as required prerequisites are at the discretion of the instructor.
Prerequisite: MBA Essentials I (GBUS702).

SCMT-731—Production/Operations Strategies for Manufacturing and Service Industries
Three Credit Hours
This course builds upon previous course work to provide a basis for development of a coherent operations strategy to support the firm's competitive strategy. Using case studies, course content is based upon the programs that have proven successful in global firms and covers process choice, product development, order coordination inside and outside the firm, and methodologies for developing technology and operations strategies.
Prerequisites: Accounting for Executives (ACCT 710), and Quantitative Methods for Operations Management (SCMT 710).

Chemistry (CHEM)

CHEM-520—The Chemistry of Art
Three Credit Hours
This course will address the chemistry involved in the preparation of artists' materials and artwork itself and the chemistry used in authenticating, restoring, and conserving art and artifacts.

CHEM-521—Forensic Science
Three Credit Hours
Forensic Science incorporates concepts of biology, chemistry and physics in learning about the science involved in crime investigations. Hands-on activities will be incorporated to illustrate the techniques. Topics to be covered include fingerprinting, blood typing, disputed documents, DNA analysis, drug and poison detection and identification, and fiber comparison. Actual cases will be studied.

CHEM-522—Nanotechnology for STEM Educators
Three Credit Hours
Nanotechnology is based on the science of designing materials from the atomic or molecular level. It has the potential to impact virtually every area of life, from medicine to ultra-strong materials to electronics to clothing. In this course students will learn about the foundational physics and chemistry behind nanoscience as well as nanotechnology applications.

Civil Engineering (CIVL)

CIVL-502—Sustainability
Three credit hours
This course provides an introduction to the broad topic of sustainability and its application to engineering. A foundation of study on the historical perspective of sustainability leads to a focus on sustainable development, sustainable design.
Prerequisites: BS degree in engineering or related field.

CIVL-504—Natural Hazards and Preservation of Historical Structures
Three credit hours
Engineering and science applications and socio-economic impacts of natural hazards on historic structures. Course provides thorough overview of design, rehabilitation, and other socio=economic decisions related to natural hazards and historical structures.
Prerequisites: BS degree in engineering or related field.

CIVL-506—Geographic Information Systems
Three credit hours
Instruction in Geographic Information Systems (GIS) focusing on data analysis and application methods for engineers, planners and related professions. Fundamental topics include spatial analysis, geostatistical analysis, 3-D modeling, and vector/raster modeling. The focus of the course is on gaining a fundamental understanding of spatial data structures in GIS, geo-spatial data acquisition, geoprocessing, geostatistical methods; visualization, exploration of spatial data; network analysis, terrain mapping, spatial analysis, and modeling. The course will include specific emphasis on urban land use evaluation methods, transportation analysis (dynamic segmentation and routing) and hydrologic modeling.
Prerequisites: BS in mathematics, science, or engineering, or permission from instructor. Familiarity with basic GIS concepts with and either ARC/INFO, ArcView, or ArcGIS highly recommended.

CIVL-508—Monitoring of Civil Engineering Infrastructure
Three credit hours
Design and analysis of instrumentation systems to monitoring of civil engineering infrastructure for the purpose of evaluating performance and/or design. Covered topics include principles of measurement, measurement errors and error analysis, instrumentation sensor types and calibration, data acquisition and signal conditioning, and data management.
Prerequisites: CIV-330 or equivalent or permission from instructor.

CIVL-575—Traffic Engineering Operations
Three Credit Hours
Basic characteristics of motor-vehicle traffic, highway capacity, applications of traffic control devices, traffic design of parking facilities, engineering studies, traffic safety, traffic laws and ordinances, basic statistical analysis, components of traffic systems, measurement of traffic data, characterizing traffic system performance, analysis of existing traffic facilities, and design of traffic facilities for achieving desired system performance.
Prerequisite: CIVL 305 or permission from Department Head

CIVL-576—Roadway Geometric Design
Three Credit Hours
Geometric design of roadways, at-grade intersections, and interchanges, using software programs, in accordance with conditions imposed by driver ability, vehicle performance, safety sustainability, and economic constraints.
Prerequisite: CIVL 302 or permission from Department Head

CIVL-602—Water Quality Modeling and Management
Three credit hours
Water quality analysis and simulation of physical, chemical, and biological processes affecting rivers, lakes, estuaries, and drinking water distribution systems. Included are best management practices based on application of water quality modeling techniques to environmental systems (rivers, lakes, distribution systems, etc.
Prerequisites: CIVL-312 or permission from instructor.

CIVL-604—Aquatic Chemistry
Three credit hours
Quantitative treatment of variables that govern the chemistry of aquatic systems such as lakes, oceans, rivers, estuaries, and groundwater. Emphasis on carbonate in open and closed systems, metal complexation and solubility, and oxidation-reduction reactions.
Prerequisites: CHEM-152/162 or permission from instructor.

CIVL-608—Structural Loads and Systems
Three Credit Hours
Structural engineering applications of analysis methodologies used to determine loads in accordance with ASCE 7. In-depth discussion of minimum design loads and load combinations. Includes overview of various steel and concrete systems. Discusses practical selection and design issues and design of proprietary building materials and components such as steel joists, diaphragms, engineered wood products, etc.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-610—Wood Design
Three Credit Hours
Design of wood framed structures in accordance with the NDS Specification. Course provides thorough overview of practical member and connection design and real world applications. Introduction to wood design and engineering; properties of wood and wood-based materials; design of beams, columns, walls, roofs, panel systems, and connections.
Prerequisite: CIVL 304 or permission from Department Head

CIVL-612—Urban Transportation Planning
Three Credit Hours
A systems approach to the transportation planning process focusing on policy issues and the decision making process. Topics include: 1.) Trip generation modeling –variables influencing trip generation, regression analysis and category analysis; 2.) Trip distribution – modeling factors governing trip distribution, growth-factor methods and gravity models, calibration of gravity models; 3.) Mode split modeling – factors influencing mode choice, discrete choice models; 4.) Route selection – traffic assignment; and 5.) Transportation surveys; transport related land use models, urban structure, urban goods transport. Use of popular transportation planning software will also be covered.
Prerequisite: CIVL 305 or permission from Department Head

CIVL-614—Ground Improvement
Three credit hours
This course provides a thorough overview of several design and construction methods for improving in-situ soil conditions. Covered topics include site exploration; evaluation of in-situ soil conditions via in-situ testing; soil liquefaction; soil shear strength and compressibility; soil nailing; foundation problems for highway embankments; soil grouting; dynamic compaction, vibro-compaction; and vibro-replacement.
Prerequisites: CIVL-410 or equivalent or permission from instructor.

CIVL-616—Deep Foundations
Three credit hours
Design, construction, and inspection of deep foundation systems. Covered topics include effects of deep foundation installations; static capacity and settlement analysis of single pile and pile groups under axial and lateral loads; drilled shaft design, construction, and inspection techniques; deep foundation load testing standards, interpretation, and simulation; non-destructive testing and subsequent analysis; cost analysis of deep foundations.
Prerequisites: CIVL-410 or equivalent or permission from instructor.

CIVL-640—Urban Mobility Infrastructure Policy and Planning
Three Credit Hours
Foundation for understanding transportation systems' relationship to cities and people and managing urban transportation systems, including: 1.) multi-faceted understanding of the historical, spatial, economic, social, and environmental factors affecting transportation issues, 2.) transportation and land use relationships, 3.) transportation as a tool of economic development and growth, 4.) transportation political influences and finance, and 5.) regional, state and federal governmental structure of committees, agencies and oversight.
Prerequisite: Admission to partner graduate degree programs; BS in math, science or engineering; or permission from Department Head

CIVL-642—Public Health, Physical Activity, and Design of the Built Environment
Three Credit Hours
Multidisciplinary evaluation of cities, suburban communities and neighborhoods to identify positive and adverse effects of the built environment on levels of physical activity and measures of public health, with an emphasis on adoption of approaches for improving desirable outcomes. The course focuses on establishing basis of need and potential benefits from implementation of optimal solutions to the challenging dilemma of built environment, urban mobility, transportation infrastructure networks, economics, sustainability, livability, and community wellness. Interconnections between the fields of public health, public policy and engineering design are identified. Students are equipped with proficiencies needed to create more healthy communities through an emphasis on physical activity.
Prerequisite: Admission to partner graduate degree programs; BS in math, science or engineering; or permission from Department Head

CIVL-650—Special Graduate Topics in Civil Engineering
Three Credit Hours
Selected graduate topics in civil engineering. The offering of this course will depend upon the interest of the students, the availability of an instructor, and the approval of the department head. Since the content of this course may change, a student may repeat the course for credit with the consent of the department head.
Prerequisites: Graduate status and permission from department head.

CIVL-655—Masonry Structural Design
Three Credit Hours
Introduction to design of structural elements for masonry buildings. Lintels, walls, shear walls, columns, pilasters, and retaining walls are included. Reinforced and unreinforced elements of concrete or clay masonry are designed by allowable stress and strength design methods. Introduction to construction techniques, materials, and terminology used in masonry.
Prerequisite: CIVL 304 or permission from Department Head

CIVL-657—Indeterminate and Matrix Structural Analysis
Three Credit Hours
Analysis of indeterminate structures using moment distribution, energy methods such as virtual work and Castigliano's Theorem. Matrix displacement method derived and simplified to a form suitable for structural engineering applications. Truss and frame applications with modifications for symmetry, internal releases, and support settlements. SAP2000 and other structural engineering software is used to compare with analytical solutions.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-711—Design of Masonry, Wood and Cold Formed steel Structures
Three Credit Hours
Design of masonry structures in accordance with ACI specifications, wood framed structures in accordance with NDS specifications, and Cold Formed Steel Structures in accordance with AISI specifications. Course provides thorough overview of practical member and connection design and real world applications.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-712—Design of Coastal Structures and Bridges
Three Credit Hours
AASHTO based design of bridge structures and foundation elements. Design of piers and seawalls for coastal applications.
Prerequisite: CIVL 404 and CIVL 406 or permission from Department Head

CIVL-713—Design of Civil Engineering Systems for Natural and Manmade Hazards
Three Credit Hours
Design of infrastructure for hurricanes, earthquakes, floods, tornadoes, and man-made or accidental explosions. Focus on design philosophy and practical examples. Structural design, site layout, and economics discussed in detail.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-714—Advanced Steel Design
Three Credit Hours
Advanced design of structural steel buildings emphasizing the relationship between design and response of the structural system; theoretical basis of building code provisions; limit state and plastic design; beam-columns; plate girders and composite sections and connections. All design provisions in accordance with AISC 360.
Prerequisite: CIVL 406 or permission from Department Head

CIVL-715—Advanced Reinforced Concrete Design
Three Credit Hours
Second course in design of reinforced concrete structures; advanced concepts in analysis and design of beams, columns, and slabs; introduction to prestressed concrete. All design provisions in accordance with ACI 318.
Prerequisite: CIVL 404 or permission from Department Head

CIVL-716—Prestressed Concrete
Three Credit Hours
Introduction to the analysis, behavior, and design of prestressed concrete members and structures. Allowable stress design and strength design of prestressed concrete members, shear design, loss of prestressed force, design of continuous structures.
Prerequisite: CIVL 404 or permission from Department Head

CIVL-718—Matrix and Finite Element Analysis
Three Credit Hours
Finite element method derived and simplified using matrix approach to truss, beam, plate, and shell structures. Solid elements also discussed. Mesh layout and refinement, convergence

characteristics, and solution accuracy proven. SAP2000 and other structural engineering software is used to compare to analytical solutions.
Prerequisite: CIVL 657 or permission from Department Head

CIVL-719—Elastic Stability of Structures
Three Credit Hours
Stability of elastic structural components under conservative loads. Precise definitions of stability; energy approaches; Rayleigh-Ritz and Galerkin methods utilized with primary applications to frame structures. SAP2000 and other structural engineering software is used to compare to analytical solutions.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-720—Dynamic Analysis of Structures
Three Credit Hours
Analysis and design of structures subjected to dynamic loading; response of lumped and distributed parameter systems of one or many degrees of freedom; approximate design methods; introduction to earthquake analysis and design.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-721—Earthquake Engineering for Structural Engineers
Three Credit Hours
Effects of earthquake-induced forces on buildings, bridges, and other structures; development of design codes and their application to the design of structures to resist seismic forces; fundamental structural dynamics and analysis techniques used to compute the response of structures or obtain design forces.
Prerequisite: CIVL 309 or permission from Department Head

CIVL-730—Geotechnical Earthquake Engineering
Three Credit Hours
Fundamentals of soil dynamics, plate tectonics and earthquakes; application of the concepts to seismic ground response, design ground motions, soil liquefaction, site response analysis, seismic slope stability, dynamic lateral earth pressure, and soil improvement.
Prerequisite: CIVL 409, 402 and 410 or permission from Department Head

CIVL-731—Geo-Environmental Engineering
Three Credit Hours
Geo-environmental engineering is a multi-disciplinary area of study that involves various aspects of geotechnical engineering, environmental engineering, hydraulics/hydrology, and groundwater engineering. The course focuses on the following two specific technical issues: (1) characterization and remediation of contaminated soil and groundwater; (2) design of waste containment barriers (e.g., liners, covers, vertical barriers) used for waste remediation.
Prerequisite: CIVL 409, 402, 322 and 408 or permission from Department Head

CIVL-732—Advanced Soil Mechanics
Three Credit Hours
Study of stresses in soils, stress-strain and shear strength properties of soil, plastic equilibrium of soil masses, failure conditions, earth pressures, with applications to geotechnical engineering design.
Prerequisite: CIVL 409 and 402 or permission from Department Head

CIVL-733—Advanced Foundation Design
Three Credit Hours
The engineering design process is demonstrated through use of practical problem-solving methods for public infrastructure and built environment projects. Analysis and design of deep foundations, earth slopes, retaining walls, sheet-pile walls, and braced excavations, anchored bulkheads, reinforced earth, and underpinning
Prerequisite: CIVL 409, 402 and 410 or permission from Department Head

CIVL-734—Soil Behavior
Three Credit Hours
Detailed study of physiochemical aspects of soil behavior, stabilization of soils, and engineering properties of soils.
Prerequisite: CIVL 409 and 402 or permission from Department Head

CIVL-740—Transportation Safety Engineering
Three Credit Hours
Methodology for conducting transportation accident studies, accident characteristics as related to operator, facility, and mode, statistical applications to accident data, current trends and problems in transportation safety.
Prerequisite: CIVL 305 or permission from Department Head

CIVL-741—Travel Demand Forecasting
Three Credit Hours
In-depth coverage of travel-demand forecasting theory and the four-step process, site traffic impact analysis, and disaggregate travel demand models. Theory and method of forecasting travelers' choices of route, mode, destination, departure time, trip frequency and origin location in congested transportation networks.
Prerequisite: CIVL 305 or permission from Department Head

Criminal Justice (CRMJ)

CRMJ-500/PSCI-500—Seminar in Social Science
Three Credit Hours
An interdisciplinary introduction to the social sciences with an emphasis on the perspectives and patterns of inquiry of several subfields. This course surveys the empirical and theoretical contributions of different social science disciplines in order to provide a fundamental understanding of the dynamics of individual and group behavior. Topics include ethics, social science methodology, and the key criticisms of these methods.

CRMJ-501/PSCI-501—Research Methods in Social Science
Three Credit Hours
An examination of methods in the scientific study of social phenomena with emphasis given to the systematic study of society and contemporary research problem in the social sciences, including research design, data collection, data analysis, and computer applications.

CRMJ-510—Topics in Criminal Justice
Three Credit Hours
Selected special topics or problems in the general area of criminal justice to fit the needs of students as well as the specialized knowledge of the faculty.

CRMJ-515/INTL-515/PSCI-515—Topics in Homeland Security
Three Credit Hours
Selected special topics or problems in the general areas of homeland security to fit the needs of students as well as the specialized knowledge of the faculty.

CRMJ-555—Leadership Application Course in Criminal Justice
Three Credit Hours
Selected special topics in leadership application within the field of criminal justice based on the specialized knowledge and research interests of the faculty. This course satisfies the "leadership application" requirement for students in the leadership graduate certificate program.

CRMJ-560—Homeland Security and Criminal Justice Administration
Three Credit Hours
Seminar on effective management principles and practices as they apply within homeland security organizations. Organizational and management theories are analyzed and applied to the contemporary structure of homeland security organizations with emphasis given **to a review of** the research related to the development of leadership skills for homeland security management.

CRMJ-561—Drugs and Crime
Three Credit Hours
This course of study explores and analyzes issues involving drugs and crime. Drug types, drug offenders, drug trafficking/global smuggling, money/laundering, law enforcement/interdiction, governmental response, domestic and international drug policy, drug-crime correlation, drug testing, and the drug relationship to other social problems are examined. Future trends and current dilemmas are investigated regarding the effectiveness of law enforcement, the "war on drugs," and drug usage.

CRMJ-562—Comparative Criminal Justice Systems
Three Credit Hours
An examination of the ideology, structure, and justice processes of various criminal justice systems in the United States, Europe, Asia, Africa, Middle East and Latin America This comparative study involves the analysis of diverse social control, legal, police, court, correction, and juvenile systems from representative justice approaches around the world. Variations among countries in crime and deviance phenomena, as well as, comparative normative values, practices, and ethics of justice system practitioners are explored. Contemporary dilemmas and issues involving crime and criminal justice practices among divergent justice schemes are discussed.

CRMJ-563—Criminal Evidence
Three Credit Hours
A graduate level discussion of types of evidence, collection of evidence, the chain of custody, and procedures relating to its introduction into judicial proceedings. Special attention is given to Fourth Amendment constitutional issues and the changing nature of the judicial order.

CRMJ-564—Juvenile Justice
Three Credit Hours
A study of juvenile delinquency and the operation of the American juvenile justice system. The course explores classical and contemporary theories of juvenile delinquency and status offending, as well as the effects of family, peers, school, gang affiliation, and drug usage on youthful offenders. In examining the juvenile justice system, the course investigates the historical development and individual operating components. (e.g., police, courts, and corrections) of the system. Consideration is given current and future issues involving youth and delinquency such as curfew, boot camp, youth violence, drug usage, and court waiver.

CRMJ-565—Corrections
Three Credit Hours
An overview of the American correctional system including prisons, jails, probation and parole. In addition to the historical development of punishment and corrections, the course explores issues involving the effectiveness of formal punishment, deterrence effects, punishment types, and the death penalty. Discussions also include prison inmate culture, prison gangs, prison life, inmate civil rights and litigation, problems and dilemmas of early release, probation, parole, and recidivism. Future trends and prospects for an increasing prison and parole population are discussed.

CRMJ-568/INTL-568/PSCI 568—International and Domestic Terrorism
Three Credit Hours
In-depth seminar on the nature of international, transnational, and domestic political violence, with some attention to the phenomenon of "state terrorism" (international repression) and its potential impact on the conduct of American foreign policy. The course also reviews and critiques current explanations for terrorist behavior. Issues addressed include conceptualizing and defining terrorism, the structure of violent politics, the lessons and patterns from the history of contemporary political violence, State support for terrorism, and counterterrorism as a public policy problem.

CRMJ-569/PSCI-569—National Security Policy
Three Credit Hours
Seminar which examines the components of United States security policy. Course discusses the roles and agencies involved in the development of national security policy. Consideration given to factors, both internal and external, affecting national security.

CRMJ-570—Homeland Security
Three Credit Hours
Seminar on homeland defense and security. The course takes an in-depth look at the agencies involved in homeland security and the interagency process which exist to integrate the services of federal agencies and state and local governments with armed forces and defense agencies.

CRMJ-572—Ethics and Integrity in Homeland Security
Three Credit Hours
A study of the role of justice, ethics, integrity, and ethical behavior in the homeland security. The course examines ethical issues regarding the application of law and challenges associated with the protection of American citizens against internal and external threats. Consideration is given to the function of ethical conduct in the rule of law, use of authority, and exercises of governmental power as part of U.S. government responses to threats to homeland security. The course includes a thorough review of issues related to the rules of engagement, the U.S. Patriot Act, Border Patrol and Security, the Transportation and Safety Administration (TSA) regulations, and the treatment of terrorists. Ethical dilemmas and practical applications are explored.

CRMJ-580—Introduction to Intelligence
Three Credit Hours
This course provides an introduction to the field of intelligence and national security. We will examine the history and development of United States intelligence community. Specific topics include the intelligence cycle, the relationship between intelligence professionals and policy makers, the restructuring of the U.S. intelligence community, oversight and accountability, and covert action as a policy option. The moral and ethical implications of intelligence practices will also be discussed.

CRMJ-581—Intelligence Research and Analysis
Three Credit Hours
This course seeks to develop in students the skills and abilities necessary for conducting basic intelligence analysis. A variety of exercises and practical applications are used to foster critical thinking skills, the planning and coordination of data collection from a variety of sources, and the use of analytic tools to establish connections between people, places, events and other entities. Students are exposed to computer software programs that visually depict complex relationships. Cross listed as INTL 581.

CRMJ-582—Intelligence Theory Application
Three Credit Hours
This course introduces the student to the discipline of intelligence and provides the student with an understanding of how intelligence systems function and how intelligence estimates and products are derived. By understanding the basic psychology of intelligence, organizational trends and cognitive cultural difference, the student will gain insight to how intelligence analysis actually transpires.

CRMJ-583—Transnational Organized Crime
Three Credit Hours
This course will examine the diverse dimensions of transnational crime. Students will examine and discuss historical and contemporary patterns, modus operandi, capabilities, and vulnerabilities of transnational criminals and organizations. Course content includes an introduction to transnational crime, a discussion of the "problem" of transnational crime, a review of illicit activities of transnational criminal organizations, an examination of the link between transnational crime and terrorism, a review of contemporary approaches to combating transnational crime, and area studies covering Europe, Russia, the Middle East, Asia, Africa and The Americas. Area studies will include a review of American, Italian, French, Mexican, Asian, Middle Eastern, & African criminal enterprises, traditional organized crime, outlaw motorcycle gangs, and other transnational criminal enterprises.

CRMJ-585—Topics in Intelligence
Three Credit Hours
Selected special topics or problems in the general area of intelligence to fit the needs of students as well as the specialized knowledge of the faculty – possible offering: Narco-terrorism, Weapons of Mass Destruction and Emerging Threats. Topics include the intelligence cycle, the relationship between intelligence professionals and policy makers, the restructuring of the U.S. intelligence community, oversight and accountability, and covert action as a policy option. The moral and ethical implications of intelligence practices will also be discussed.

CRMJ-600—Homeland Security Internship
Three Credit Hours
This course provides the student with an opportunity to explore career interests while applying knowledge and skills learned in the classroom to real-world problems encountered in Homeland Security agencies/ the Intelligence Community (IC). The experience also helps students gain a clearer sense of future learning needs and provides an opportunity to build professional networks.
Prerequisite: Consent of Department or Program Head

Computer Science (CSCI)

CSCI-555—STEM Education through Robotics
Three Credit Hours
Use the LEGO Mindstorms Robotics kit to build, test and program robots to accomplish various tasks. This exciting fusion of physics, mathematics, computer science and artistic expression can really draw students and teachers into active learning and experimentation. Hands-on experience will provide strategies and projects that teachers can use with middle and high school students; advanced options are available for those who want to go beyond the basics. Each assignment, project or test will have a due date that will be posted online. Access to a Mindstorms robotics kit with software is required for the course. Note: This course cannot be used for the Master of Science in Computer and Information Sciences.

CSCI-563—Programming for Teachers
Three Credit Hours
This course introduces computer programming and problem-solving using a modern programming language. Students will learn language syntax and basics of event-driven programming. Concepts and methods of object-oriented programming and design, creating applications using a development cycle approach, and disciplined coding style are included. In addition, students will also learn about

data organization and collection, database construction, and manipulating data within a database. Students will be required to complete tutorial exercises and projects that can be used with middle and high school students. Note: This course cannot be used for the Master of Science in Computer and Information Sciences. Note: May be substituted for MATH 663.

CSCI-601—Data Modeling and Database Design
Three Credit Hours
Topics include conceptual, logical, and physical data modeling, data analysis, relational database design and normalization, query languages, query processing, administration, and CASE tools. A database design project is part of the requirement and includes hands-on data modeling, design, development, and implementation.

CSCI-602—Foundations of Software Engineering
Three Credit Hours
A survey course in software engineering processes and methodologies. This course includes software life cycles, planning and managing projects, capturing and managing requirements, analysis and design, implementation, software testing and quality assurance, and risk analysis in software development. Emphasized are team-based development, quality standards, object-oriented design, and CASE (computer aided software engineering) tools.

CSCI-603—Object-Oriented Design Patterns
Three Credit Hours
A course in software design using design patterns as a tool for communicating software design solutions and as an aid in software refactoring. Creational, structural and behavioral patterns are emphasized. Also covered are finding and documenting software development patterns. The Unified Modeling Language is used as the design tool for software patterns and programming projects are in an object-oriented programming language.

CSCI 604—Distributed Computer Systems Architecture
Three Credit Hours
This course covers basic techniques for the design andconstruction of distributed systems. Its aim is to give the skills needed to build simple systems and to identify key issues for the analysis of distribution problems.

CSCI 605—Applied Algorithms
Three Credit Hours
A course that covers algorithms, focusing on foundations of algorithms, and applications to areas such as data science, cybersecurity, and software engineering. Course objective: To expose students to a variety of techniques for designing and applying algorithms for problems which have practical, pedagogical, and theoretical origins. Students are expected to engage with scholarly publications and professionally report on a project covering any of the applied topics.

CSCI-612—Advanced Computer Architecture
Three Credit Hours
This course covers various topics relevant to clustering including the following: interconnection networks, protocols, high performance I/O, load balancing, availability, programming models and environments, parallel algorithms, and applications. The course is lab intensive and includes the implementation of parallel algorithms on a parallel cluster.
Prerequisites: CSCI-604 or an undergraduate course in operating systems.

CSCI-614—Advanced Operating Systems
Three Credit Hours
This course covers a broad range of advanced operating systems concepts including protection, security, memory management, kernels, file systems, synchronization, naming, networks, and distributed systems as well as recent trends in operating systems design. Specific aspects of operating systems which support distributed computing will be emphasized.
Prerequisites: CSCI-604 or an undergraduate course in operating systems.

CSCI-616—Automata Theory
Three Credit Hours
The theory of finite state machines and regular expressions are applied to the design of switching circuits, components of compilers such as lexical analysis, pattern-matching, text-editors, unifications as needed in Prolog or for automated deduction, and almost any program which processes under commands. Undecidable problems and intractable problems are explored.

CSCI-618—Programming Languages
Three Credit Hours
The course surveys the principles of programming language design and the issues related to their implementation. Topics will include a comparison of the major programming paradigms: imperative, functional, logic, and object-oriented. Also covered are data types, methods of specifying the semantics of language constructs, and concurrency.

CSCI-631—Privacy and Security Issues
Three Credit Hours
A survey of the principles and practices related to computer security. The course concentrates on the problems of security associated with computer systems and emphasizes the application of cryptography to address those problems.

CSCI-632—Data Communications and Networking
Three Credit Hours
An introduction to data communications and computer networking. Topics include LAN topologies, transmission media, error detection, packet switching networks, internetworking of heterogeneous network technologies, Internet protocol suites (with emphasis on TCP/IP), the client/server paradigm, the BSD Socket interface, network security, and network applications.

CSCI-633—Semantic Web Principles and Practice
Three Credit Hours
This course covers the emerging technology supporting the Semantic Web with machine-processable content. Students will engineer and implement ontologies, associated metadata and logical inference systems. Covered are specialized languages such as Extensible Markup Language (XML), Resource Description Framework (RDF), and Ontology Web Language (OWL) and query associated query languages.

CSCI-634—Project Change and Management

Three Credit Hours
Managing projects within an organizational context, including the processes related to initiating, planning, executing, controlling, reporting, and closing a project form the major portion of this course. Project integration, scope, time, cost, quality control, risk management, and managing the changes in organization resulting from introducing or revising information systems are also included. Cross-listed with PMGT 650.

CSCI-635—Fundamentals of Agile Project Management
Three Credit Hours
This course explores agile-related practices, methodologies, and applications in development and operational project environments. Learning experiences and team projects focus on developing the knowledge, skills, abilities and attitudes considered essential in effectively managing teams in adaptive project environments. Topics of study include the development of an agile mindset, theoretical and practical applications of agile practices, the transition and integration of these practices with other project management methodologies, along with the stages of the agile development cycle. Students will apply tools and techniques in a learning environment that approximates adaptive project environments. In addition, case studies will include applicable individual and organizational experiences with implementing agile methodologies. Cross-listed with PMGT 663.

CSCI-636—Information Technology Policy, Strategy, and Governance
Three Credit Hours
This course will consider the development and implementation of policies and plans to achieve organizational goals, the defining of systems that support the operational, administrative and strategic needs of the organization, and the study of approaches to managing the information systems function in organizations.

CSCI-638— Implementation of Database Management Systems
Three Credit Hours
Topics include algorithms for query processing and optimization, physical database design, transaction processing, concurrency control, database backup and recovery techniques, distributed databases, multidimensional data, and recursive query processing, as an example, Datalog. Other topics may include multimedia databases, object and object relational databases, data warehousing, and data mining.
Prerequisite: CSCI-601.

CSCI-641—Advanced Cybersecurity
Three Credit Hours
This course will cover the techniques used to secure cybersystems. Topics covered will include security policies, computer security management and risk assessment, secured network protocols, software security issues, ethical and legal aspects of cybersecurity, and disaster recovery. Special emphasis will be given to designing, deploying, and managing complete secured cybersystems.
Prerequisite: CSCI- 631 and CSCI- 632.

CSCI-654—Software Requirements Analysis and Specification
Three Credit Hours
An introduction to the software requirements engineering process. Topics to include: feasibility studies, risk, requirements elicitation, modeling, analysis, specification, and validation.
Prerequisite: CSCI-602.

CSCI-656—Software Systems Design and Implementation
Three Credit Hours
An introduction to the issues, techniques, strategies, representations, and patterns used in designing and implementing software. Possible design topics include: specification of internal interfaces, architectural design, data design, user interface design, design tools and evaluation of design. Possible implementation topics include: language-oriented issues, construction technologies, tools and formal construction methods.
Prerequisites: CSCI-602.

CSCI-657—Embedded Systems Design
Three Credit Hours
This course is an introduction to specifying, designing, implementing and testing (real-time) embedded systems. Topics include the embedded system life cycle, choosing a processor, hardware/software partitioning, design techniques, cross-platform development, debugging, testing and integration. Implementation languages may include Java, C/C++ or assembly.
Prerequisites: CSCI-602 and CSCI-604.

CSCI-658—Software Testing and Maintenance
Three Credit Hours
An introduction to the concepts and methods associated with software testing and maintenance. Testing topics to include: testing as part of requirements engineering and software design, test plan writing, and static and dynamic testing. Maintenance topics to include: an overview of corrective, adaptive, perfective and preventive maintenance activities as well as organizational managerial issues.
Prerequisite: CSCI-602.

CSCI-659—Service-Oriented Computing
Three Credit Hours
Service-Oriented Computing is a term that describes software systems that combine Service-Oriented Architecture (SOA) and Business Process Management (BPM) layers. This course explores both SOA and BPM, demonstrating how business and IT concerns can be aligned. Students will gain experience with service-oriented development, process modeling and execution, and securing services.

CSCI-663—Programming for STEM Educators
Three Credit Hours
This course introduces programming and problem-solving using Visual Basic. Students will learn Visual Basic syntax, and basics of event-driven programming while working with variables, constants, data types, and expressions. Problem solving and decision-making are integrated as students also explore looping and multiple forms, using menus, common dialogs, procedures, functions and arrays, debugging, creating executable files, and distributing a Windows application. Concepts and methods of object-oriented programming and design, creating applications using a development cycle approach, and disciplined coding style are included. In addition, students will also learn about data organization and collection, file organization, sort and search techniques, database construction, and manipulating data created in Microsoft Access using Visual Basic.
Note: May be substituted for MATH 563.

CSCI-670—Developing Mobile Applications

Three Credit Hours
This hands-on, project-oriented course explores the principles and tools involved in the design and construction of applications for mobile devices. Topics include the platform application architecture, mobile application lifecycle, managing application resources, designing user interfaces, data storage options, integrating audio and video, location-based services, cross-platform development using a mobile device emulator, and porting applications to actual devices. Students will work individually or on small teams to design, develop, and deploy several mobile applications.

CSCI-672—Human-Computer Interaction
Three Credit Hours
Introduction to human computer interaction and user interface development. Topics include human factors of interactive software, interactive styles, design principles and considerations, development methods and tools, interface quality and evaluation methods. This course stresses the importance of good interfaces and the relationship of user interface design to human-computer interaction. It is intended for students whose future work may involve software development.

CSCI-674—Introduction to Computer Graphics
Three Credit Hours. An introduction to the fundamental principles of computer graphics. Using standard graphics libraries, students will learn these principles by writing a series of programming projects.

CSCI-690—Special Topics in Computing
Three Credit Hours
A course in the special study of an advanced or new topic in computer science, information science or software engineering. This course may be repeated for additional credit, as the topic change.
Prerequisite: Permission of the instructor.

CSCI-691—Independent Study
Three Credit Hours
This course consists of individual study of an agreed-upon topic under the direction of a faculty member and following a course of reading and other requirements proposed by the student and established by negotiation with the director. This course is intended to provide graduate students with an opportunity to study in an area of computer science, software engineering or information systems that is not generally offered. The course may be repeated once.

CSCI-698—Project Thesis
Three Credit Hours
Project thesis is a three-credit hour course for the completion of a formal master's project thesis under faculty direction. A project thesis is characterized by a research project that applies or extends course topics through systems development.
Prerequisites: Completion of the four core courses CSCI-601, CSCI-602, CSCI-604, and CSCI-605, and approval by the program director.

CSCI-699—Research Thesis
Three Credit Hours, repeatable for credit up to six hours
Research Thesis is a three-credit hour course for the completion of a formal master's research thesis under faculty direction. A research thesis is a traditional research project characterized by a comprehensive paper on a research topic.
Prerequisites: Completion of the four core courses CSCI-601, CSCI-602, CSCI-604, and CSCI-605, and approval by the program director.

Education (EDUC)

EDUC-500—Foundations of American Education
Three Credit Hours
This course provides an introduction to the historical, political, sociological, and philosophical foundations of education. Emphasis is on the complex relationship between society and school. Issues regarding race, class, gender, and culture within the educational system are addressed in the context of fostering educational opportunity and ameliorating inequalities. A historical context also is established which allows for critical examination of events, individuals, and ideas that have influenced the development of education in the United States. Through an integration of knowledge in the foundations of education, the course prepares reflective decision-makers who can critically examine various schools of philosophical thought and political issues related to education.

EDUC-501—Methods and Materials of Middle and High School Teaching
Three Credit Hours
Study of the aims, methods, and materials employed in middle & high schools; organization of subject matter; motivation and direction of learning; development of attitudes, appreciations, and ideas; classroom presentation of formal materials; conducting informal activities; provision for individual differences; measurement of educational outcomes; and enhancement of personal and professional growth. The focus of the course is the application of the learner-centered conceptual base in the process of teaching their discipline specialty. A. English; B. Biology; C. Social Studies; D. Mathematics.

EDUC-504—Teaching in the Middle School
Three Credit Hours
This course surveys the current practices in middle schools in terms of objectives, methods, and materials. The student is involved in practical application of these practices as they relate to the organization of subject matter, the motivation of pupils, the achievement of learning outcomes, and the evaluation of learning experiences.

EDUC-505—Individual Instruction
Three Credit Hours
Emphasis upon current approaches and strategies utilized in the individualized programs in the classrooms. Management systems essential to individualized instruction will be emphasized.

EDUC-508—Remedial Strategies in Reading and Language Arts
Three Credit Hours
A course for practicing educators which analyzes varying strategies for helping the problem learner primarily in the literacy areas of reading and the language arts. The course covers techniques at all grade levels and reviews the literature as to teaching effectiveness. Case studies are required.

EDUC-512—Data Collection and Analysis
Three Credit Hours
Coursework designed to introduce the graduate student to quantitative methods to include construction of assessment instruments, analysis, and interpretation of quantitative data. Students will be required to develop minimum competence in use of microcomputers for descriptive statistical analyses and word processing. Emphasis will be placed on the development of skills in critical analysis of literature relating to effective schools. This ability to analyze research data should result in improved by professional performance.

EDUC-514—The Exceptional Child in the School
Three Credit Hours
Coursework is designed as an introduction for students with little or no background or experience in special education and is appropriate for students from various fields as well as for those who anticipate further study and future careers in special education. An interdisciplinary approach is used in the study of learning and behavior characteristics of children and youth with exceptionalities. There is a focus on cause, identification, evidence-based practices, and educational and community programs for individuals with exceptionalities.

EDUC-515—Introduction to the Counseling Profession
Three Credit Hours
Overview and orientation to counseling profession including history, roles, functions, settings, specialties, organizations, credentialing, ethical, legal, and professional issues.

EDUC-516—Research Design
Three Credit Hours
Research Design is intended for those students who will be conducting and producing research studies. The course examines the various descriptive and experimental models for data analysis (in the behavioral sciences), with emphasis placed on the fundamentals of planning and inferential statistical techniques.
Prerequisite: EDUC-517 or equivalent.

EDUC-517—Statistics in Education and Psychology
Three Credit Hours
A course to provide skill in treatment of research data including descriptive and inferential statistics. Some experience with analysis of published statistical research in the fields of education and psychology will be provided.

EDUC-520—Professional Internship
Six Credit Hours
A supervised clinical teaching experience conducted in a public school. This is a full-time, entire semester internship. Each student also attends weekly evening seminars. This last course in the M.A.T. sequence requires an application to be filed two semesters prior to internship. Application forms are available on the School of Education website.
Prerequisite: all other program of studies requirements, including a minimum of 75 hours of field experiences in public schools. Passing scores on the PRAXIS II specialty area examinations are required before enrollment in this course. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-521—Program Planning, Management, and Evaluation in School Counseling
Three Credit Hours
The purpose of the course is to prepare school counselors to work within elementary and secondary school systems. A model for planning, developing, implementing, and evaluating a comprehensive guidance and counseling program with emphasis on student development and competencies will be presented. The school guidance counselor's role and function will be discussed as a balance of responsive services, systems support, individual planning, and guidance curriculum. Students will develop resources, classroom guidance curricula and group counseling materials that they can use in their fieldwork experiences and in the initial stages of their careers.
Prerequisite: EDUC-515

EDUC-522—Critical Educational Issues in a Multicultural Society
Three Credit Hours
Coursework includes a study of contemporary issues/trends, internal and external to elementary and secondary school systems which impacts on the learner. The course is designed to encourage students to examine issues/trends within the context of their present and future career interests.

EDUC-524—Techniques of School Supervision
Three Credit Hours
Coursework examines the criteria needed for effective school supervision at all levels. Administrative candidates explore the technical and interpersonal skills, functions and knowledge required to effectively evaluate faculty and staff.

EDUC-525—Transition to the Profession
Three Credit Hours
This course is for candidates seeking SC teacher certification. The purpose is to provide each candidate an opportunity to demonstrate his/her ability through successful completion of all ADEPT written materials, reflections and a professional portfolio. (Must be taken concurrently with Student Teaching Internship - EDUC 520).

EDUC-527—Finance and Business Management
Three Credit Hours
Coursework includes procedures and problems relating to financing public education, theory of taxation, types of taxes, practices of education finance, federal, state, and local support of education, budget procedures, financial accounting, purchasing, insurance, inventories, and school maintenance.

EDUC-528—School Administration
Three Credit Hours
Coursework is designed for school personnel preparing for administrative positions. The course involves a study of the basic concepts involved in planning, organizing, managing, and evaluating public schools.

EDUC-529—Emerging Technologies for School Administration
Three Credit Hours
This course is designed for practicing and prospective educational administrators. The course focuses on technology planning, leading with new technologies, professional development, infrastructure, systematic change, and legal and social issues related to technology. The course final project and

presentation is the development of strategic initiatives to enhance student achievement.

EDUC-530-Strategic Planning and Assessment in Higher Education
Three Credit Hours
An examination of the fundamentals of assessment of learning outcomes and institutional effectiveness. Assessment is presented as an instrument to inform strategic planning and decision making in higher education.

EDUC-531—Principles of Elementary Curriculum Development
Three Credit Hours
Coursework focuses on the study of underlying principles of curriculum development and organization including curriculum evaluations and current issues and trends in the subject fields. Attention is given to the learner-centered decisions teachers, administrators, and others educators must make about elementary curriculum.

EDUC-532—Principles of Middle or High Curriculum Development
Three Credit Hours
Coursework includes the study of underlying principles of curriculum development and organization including curriculum evaluations and current issues and trends in the subject areas. Attention is given to the learner-centered decisions teachers, administrators, and others educators must make about secondary curriculum.

EDUC-533-Higher Education Finance
Three Credit Hours
An analysis of private, state, federal, and other revenue sources in higher education. Students will engage in the application of strategic planning processes, budgeting systems, and financial processes.

EDUC-534-Advanced Leadership in Higher Education
Three Credit Hours
An overview of best practices in higher education leadership, including a survey of leadership models, application of leadership models in staff development, policy, and financial practices.

EDUC-535—Organizational Theory and Behavior
Three Credit Hours
Coursework includes a study of the school organization as a social system, supervision and curriculum, control, authority, change, planning strategies, and organizational dynamics.

EDUC-536—Educational Psychology
Three Credit Hours
This course provides an introduction to educational psychology and explores the process of learning throughout the life span. Emphasis is placed on the application of psychological concepts, theoretical principles, and research findings to the planning and implementation of effective instructional strategies in the classroom. Moreover, through this course graduate students who are preparing for employment in the field of education are acquainted with many facets of the teacher's role in the teaching/learning process. Class discussions, activities, and field experience focus on the connection between theory and practice and provide students with opportunities to apply psychological principles and solve practical problems for personal and professional growth.

EDUC-537—Student Development Services in Higher Education
Three Credit Hours
Overview of the historical development of the counseling and student affairs profession, as well as legal and ethical codes, and skills needed in the profession.

EDUC 538—Theories of Student Development in Higher Education
Three Credit Hours
This course provides an overview of theories of student development in higher education as it applies to the cognitive and psychosocial development of students and the influence of the college environment.

EDUC 539—Higher Education Administration
Three Credit Hours
This course provides an overview of the process of organizing the personnel and financial resources needed to effectively meet student development and institutional goals and objectives. This course will introduce students to basic human and fiscal management concepts and skills.

EDUC-540—Integrative Foundations and Teaching in American Education
Five Credit Hours
This first pre-professional block format course provides an introduction to the historical, political, sociological, and philosophical foundations of education as well as methods and materials of teaching middle & high school. The integrated approach includes learner similarities and differences, motivation and direction of learning, provision for individual differences, measurement of educational outcomes, organization of subject matter, legal issues, and enhancement of personal and professional growth. Learner-centered in nature, this course is intended to begin the process of developing professional educational leaders. 35 hours of field experience is required for this course. During the field experience, the teacher candidate will observe, assist and teach in a secondary school setting under the supervision of a classroom teacher who is certified in the candidate's chosen content area.

EDUC-541—Integrative Educational Psychology and Exceptional Child
Five Credit Hours
This second pre-professional block format course provides an introduction to educational psychology and exceptional children. In the course, teacher candidates will explore the process of learning throughout the life span with emphasis on both normal development and exceptionalities. Emphasis is placed on the application of psychological concepts, theoretical principles, and research findings to the planning and implementation of effective instructional strategies in the classroom so that all children can learn. Teacher candidates will also explore cause, identification, and educational and community programs for individuals with exceptionalities. 20 hours of field experience is required for this course. During field experiences for this course, the teacher candidate will have the opportunity to observe and work in a variety of settings with

students who have normal development and students who have exceptionalities.

EDUC-542—Teaching Reading and Writing in Middle and High School Content Areas Through Applied Research
Five Credit Hours
This third pre-professional block format course is designed for the middle school and high school teacher emphasizing pupil diagnosis of reading and writing skills followed by instructional decision making directed toward a balanced teaching approach. Quantitative and qualitative methods of research including construction of assessment instruments, analysis, and interpretation of data will be integrated into the course content. Students will be required to develop minimum competence in use of microcomputers for descriptive statistical analyses and word processing. Emphasis will be placed on the development of skills in critical analysis for instructional improvement. 20 hours of field experience is required for this course. During field experiences, teacher candidates will use a research approach to focus on assisting middle and/or high school student(s) improve their literacy skills in the teacher candidate's chosen content areas.

EDUC-543—Teaching, Learning and Assessing with Technology
Three Credit Hours
This course provides an overview of new and emerging technologies and how they are changing the way educators teach and students learn. These new advances enable students to engage in authentic learning by leveraging technology for problem solving, discovery and exploratory learning situated in a real-world context. In this course, educators will identify, explore and evaluated new and emerging technologies and their potential impact on instructional practices in integrated/interdisciplinary STEM education. Theories underlining these technological advancements and their implications for effective implementation are discussed.

EDUC-544—Project Based Learning and Interdisciplinary Teaching
Three Credit Hours
This course will enable students to learn how to use a Standards-Focused Project Based Learning (PBL) Model to develop specialized instructional curriculum to be implemented and integrated into an existing interdisciplinary educational system. Interactive and practical assignments are used to help teach the five major planning elements of PBL. Online discussions and interactive learning modules will be focused on the learning and application of PBL concepts. Furthermore, coursework is designed to help the student create a Project Based Learning curriculum for use in their teaching. For students enrolled in the STEM degree program, the curriculum developed in this class will be used as a component in their Capstone Project.

EDUC-545—Developing STEM Disciplinary Literacy Skills
Three Credit Hours
The purpose of this course is to enable those in the educational field to customize literacy practices to meet the unique demands of science, technology, engineering, and mathematics. Each content area demands specialized literacy skills. Therefore, in order to prepare students for literacy demands in careers and later in life, it is essential that literacy learning be embedded within the content knowledge. Educators will learn to assist K-12 students with the navigation of complex informational texts within STEM areas and be better prepared to help all students develop the necessary disciplinary literacy skills.

EDUC-546—Leadership and Critical Issues in STEM Education
Three Credit Hours
This course is designed to help candidates consider critical issues linked to successful leadership models in the integration of Science, Technology, Engineering and Mathematics (STEM) into educational endeavors. The on-line instructional approach for this course includes web-quest activities, asynchronous discussions, field experience interviews, and curriculum development activities as well as implementation reflective activities.

EDUC-547—Research and Statistics for STEM Applications
Three Credit Hours
This course is for teachers in STEM education with no previous background in statistics who will need statistics in their further studies and their work. The focus is on understanding the use of research and statistical methods in various areas of science and engineering. Topics to be covered include research methods, measures of central tendency and variability, correlation, statistical inference, and basic design of experiments with examples and applications in science and engineering. Teachers will become critical consumers of research products and learn the basic skills of planning, designing, and executing and reporting research as well as evaluating and applying published research findings. Emphasis will concentrate on planning, developing, and producing a quality STEM research e-portfolio.

EDUC-548—Multidisciplinary Experimental Design and Implementation-Special Topics
Three Credit Hours
In this course, students will learn methods of collaborative inter-disciplinary experimental design in the STEM fields. The course is designed to provide students with the experience, tools, and methods needed to improve experimental design processes and strategies for implementation in their classrooms. This course, using relevant STEM content, provides case studies in multidisciplinary experiments emphasizing problem solving and experimental design.

EDUC-549—Applied Measurement Techniques
Three Credit Hours
Students will examine and utilize tests and other evaluation techniques in counseling, in educational planning, in curriculum assessment, and in school-wide testing programs. Controversial issues in measurement will be appraised in the context of basic principles and actual use.

EDUC-550—Career Counseling and Development
Three Credit Hours
Students will learn foundational career development theories, the usefulness of career inventories, and the current trends in career counseling for adults and school-age children. In addition, students will practice and demonstrate competency in career counseling.
Prerequisite: EDUC-549 and EDUC-551

EDUC-551—Counseling Theories and Practice
Three Credit Hours

Overview of selected approaches to counseling theory and practice.
Prerequisite: EDUC-515

EDUC-552—Group Counseling
Three Credit Hours
Overview of selected approaches to group guidance and counseling theory and practice.
Prerequisite: EDUC-515 or EDUC-537 and EDUC-551

EDUC-561—Counseling Diverse Populations
Three Credit Hours
Designed to provide an overview of human behavior including diversity and cultural pluralism. Multicultural theories and models of counseling and consulting are presented and examined.

EDUC-562—Legal & Ethical Leadership Issues in Education
Three Credit Hours
This course examines goals and objectives of professional organizations, codes of ethics, legal considerations, standards of preparation, certification, licensing, role identity of counselors and other personnel services specialists, and fee structures, and the impact of fees on the counseling relationship.

EDUC-567—Assessment of Abnormal Behavior
Three Credit Hours
This course is a 3-hour, transcript course in abnormal behavior and psychopathology of children, adolescents, and adults. The course will focus on the etiology and morbidity of differing mental disorders. Students will be introduced to the science and art of clinical assessment as a foundation for the actual practice of assessment in school and community mental health settings. Students will receive practical training in the process of clinical assessment as associated with the specific disorders, which will be focused on the use of assessment techniques in a professionally and ethically responsible manner. The informal and formal diagnostics taught in the course will complement DSM-V-TR courses.

EDUC-568—DSM -V -TR
Three Credit Hours
The purpose of this course is to provide master's degree students with a basic introduction to the Diagnostic and Statistical Manual of Mental Disorders in relation to the psychology of deviant, or abnormal, behavior. This course will explore the subject on a number of different levels. Knowledge will be gained through: (a) an understanding of the history and theories in the field through lecture, readings, the internet, group discussions, and research; (b) an understanding of diagnoses in the DSM-IV-TR; and (c) the application of this knowledge through exercises, assignments, class participation, and videotaped role-plays.

EDUC-570— Teaching Reading and Writing with ELLs and Students from Historically Marginalized Communities
Three Credit Hours
This course will introduce students to historical relationships between language, literacy, culture, socioeconomic status, and power. Through that lens, students will learn about and enact culturally responsive and sustaining pedagogies in reading and writing, focusing on how to support students whose first language is not English, as well as speakers of a range of dialects.

EDUC-585—Independent Research
Three Credit Hours
A supervised research project in an area related to the student's major would be completed. A formal presentation to a panel of three faculties who evaluate the project will be required. With the approval of major advisor and graduate dean, this course may be repeated once for additional credit.
Prerequisite: Permission of the instructor and submission of a research prospectus.

EDUC-587—Special Topics
Three Credit Hours
This course is a study of a specific topic in the field of education at the graduate level.

EDUC-588—Foundations of Literacy
Three Credit Hours
A foundational course designed to focus on developing literacy skills. The developmental process of literacy growth, along with techniques for teaching phonemic awareness, word recognition, vocabulary, and comprehension skills will be explored.

EDUC-589—Methods and Materials for Developing Literacy Skills
Three Credit Hours
Specific methods of literacy instruction will be studied and demonstrated along with analysis and evaluation of a wide variety of materials used in literacy instruction.

EDUC-590—Literacy Assessment and Instruction
Three Credit Hours
A course examining and providing practice with formal and informal assessments used to target children's literacy strengths and identify areas needing improvement. Participants will assess one child and plan corrective instruction based on the assessment results.
Prerequisite: EDUC-588 or EDUC-592. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-591—Practicum in Literacy Education
Three Credit Hours
A course examining and providing practice with formal and informal assessments used to target children's literacy strengths and identify areas needing improvement. Participants will consider adaptations and modifications for a range of readers , including students whose first language is not English, as well as students who have been designated either as below grade level or as gifted and talented. Participants will then assess a small group of students to understand the student's strengths in literacy and areas of growth. Participants will undertake 15 hours of fieldwork in which they plan and enact instruction based on the assessment results. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-592— Teaching Language and Literacy across Content Areas
Three Credit Hour
This course will address major theories and instructional strategies related to supporting the development of academic language across content areas, focusing specifically on how teachers of all disciplinary backgrounds can support all students—including English Language Learners, students from historically marginalized

communities, and readers at a range of proficiency levels—to develop sophisticated forms of language use in particular content areas. Course topics include content-specific instructional strategies for supporting English Language Learners and students from marginalized communities to speak, read, write, listen, and think in ways consummate with the expectations of a discipline, and using inquiry, collaboration, composition, content-area reading strategies as supports for all students' learning across the content-areas.

EDUC-594—Internship in Literacy Education
Three Credit Hours
A field-based course in which each candidate engages in supervised action research. Candidates collect and analyze data and then disseminate findings to school-based audiences.
Prerequisites: EDUC 591 and a satisfactory score on Praxis II must be on file. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-597—Supervision of Student Teachers
Three Credit Hours
A course in supervision for master teachers, department heads, and college teachers with supervisory responsibilities in teacher education.

EDUC-598—Curriculum Project
Three Credit Hours
Coursework is designed as a capstone to the program in Curriculum and Instruction. The student will be required to develop a curriculum project ultimately to be implemented in the student's classroom or school. This written project will require a review of existing literature and a presentation of the results to peers and professor.
Prerequisite: EDUC 531 or EDUC 532

EDUC-600—Professional Negotiations
Three Credit Hours
Coursework emphasizes knowledge and improvement in the various education associations. The student will become acquainted with forces and trends influencing collective negotiations; principles, concepts, and theory relevant to negotiations; negotiation skills; and relevant literature and research.

EDUC-601—Principles of School Law
Three Credit Hours
Coursework includes constitutional, statutory, case, and common law bases of school administration and the study of legal provisions and principles relating to education with an emphasis on research and analysis.

EDUC-602—Staff Personnel Administration
Three Credit Hours
Coursework includes the study of personnel policies and practices as they relate to recruitment, selection, orientation, employment, promotion, evaluation, in-service development, dismissal, retirement, and teacher-administrator relationships.

EDUC-603—School Plant Seminar
Three Credit Hours
Coursework includes the study of problems and policies of the school plant, such as population studies, educational planning, school building standards, materials and uses, rating, and public relations. Discussion of innovative plans and construction as well as visits to new schools will be made.

EDUC-605—Independent Study
Three Credit Hours
This course will offer students an opportunity to acquire deeper knowledge of thought and practice in the major field of emphasis. Each student must develop a plan of independent study at the outset and file the completed study at the end of the semester
Prerequisite: Permission of instructor and Dean of School of Education.

EDUC-606—The Superintendency and School Organization
Three Credit Hours
Coursework emphasizes the principles of central school administration and the structural organization of public education and the responsibilities and authority of school boards, superintendents, and principals and the relationships between them.

EDUC-608—Teaching Reading and Writing in a Balanced Literacy Classroom
Three Credit Hours
This course will focus on supporting children to use multiple aspects of literacy, including reading, writing, speaking, and listening to improve their abilities to read and write. Students will learn how to select and use award-winning and multicultural literature, non-fiction, and multimodal texts for children and adolescents as supports for reading, and as mentor texts for learning to compose. Instructional practices for teaching fiction, non-fiction, and multimodal texts to students from a variety of cultural and linguistic backgrounds will be emphasized.

EDUC-610—Seminar on School Improvement
Three Credit Hours
Coursework includes the process of designing, implementing, and evaluating a school climate improvement program which includes mutual efforts by staff and students to formulate and attain school goals. Emphasis will be placed on effective school research.

EDUC-611—Staff Development and Evaluation
Three Credit Hours
This course focuses on designing staff development and evaluation systems to enhance effectiveness of school personnel.

EDUC-612—Seminar in School Law
Three Credit Hours
Coursework provides updates on legal issues and decisions related to teaching and the administration of public schools including current laws and regulations pertaining to public schools in South Carolina.
Prerequisite: EDUC-601

EDUC-613—Foundations of American Higher Education
Three Credit Hours
This course provides an introduction to the historical, political, sociological, and philosophical foundations of higher education. Emphasis is on the complex relationship between society and higher education. Issues regarding race, class, gender and culture within the educational system are addressed in the context of fostering educational opportunity and ameliorating inequalities. A historical context also is established which allows for critical examination of

events, individuals, and ideas that have influenced the development of higher education in the United States. Through an integration of knowledge in the foundations of education, the course prepares reflective decision makers who can critically examine various schools of philosophical thought and political issues related to higher education.

EDUC-614—Seminar in Educational Administration
Three Credit Hours
Coursework explores various theories and their impact on administration and the organization. Emphasis will be placed on behavioral science theories drawn from historical, philosophical, and sociological works applied to the administrative process.

EDUC-616—Political Process of Public Education
Three Credit Hours
Coursework includes the study of the process by which education public policy decisions are made, authority and responsibility, power and influence, public policy, methods of determining power structure, superintendency, and roles and tasks that includes attention to school community relations.

EDUC-619—Assessment of School Programs
Three Credit Hours
Coursework provides theoretical and applied analysis of the procedures and techniques involved in designing and implementing evaluation and assessment studies of total school programs. Attention will be given to accreditation procedures, minimum standards, legislative requirements, as well as the assessment of instructional outcomes

EDUC-620—Systems Planning and Management for Education
Three Credit Hours
This course is designed to apply systems theory to real educational situations. Setting and implementing goals and objectives, using various management techniques and tools, and then applying general management principles and practices constitute the instructional content.

EDUC-622—Critical Multicultural Issues in Higher Education
Three Credit Hours
A study of contemporary issues/trends internal and external to work within higher education system, focusing on the status, programming needs, and legal and ethical concerns of racial minorities, persons with disabilities, different lifestyle orientations, and adult learners on college/university campuses.

EDUC-623—Special Methods in Teaching: Social Studies
Three Credit Hours
This course is a study of the aims, methods, and materials employed in middle and high schools; organization of subject matter; motivation and direction of learning; development of attitudes, appreciations, and ideas; classroom presentation of formal materials; conducting informal activities; provision for individual difference; measurement of educational outcomes; and enhancement of personal and professional growth. The focus of the course is the application of the learner-centered conceptual base in the process of teaching their discipline specialty – the Social Studies.

EDUC-624—Basic Counseling Skills
Three Credit Hours
Systematic development of basic counseling skills essential to enter the counseling profession.
Prerequisite: EDUC-551 and/or faculty advisor approval.

EDUC-629—Practicum in School Counseling
Three Credit Hours
Supervised counseling experience in which student serves as counselor in school setting for a minimum of 100 clock hours.
Prerequisites: EDUC-624

EDUC-632, 633—Internship: School Superintendency
Three Credit Hours
Coursework provides supervised field studies and experiences in central office administration.
Prerequisite: Passing PRAXISII score results on file at The Citadel and permission of advisor.

EDUC-634—Practicum in Student Affairs and College Counseling
Three Credit Hours
Supervised counseling experience in which the student serves as a college counselor in a school setting for a minimum of 100 clock hours.
Prerequisite: EDUC-624

EDUC-635-Practicum in Higher Education Student Affairs
Three Credit Hours
Supervised field experienced in an approved student affairs setting for a minimum of 100 clock hours.

EDUC-642—Coaching in Literacy Education
Three Credit Hours
This course introduces students to the role of literacy coaching (K-12). Students learn to provide support for teachers and the school community as a whole. As part of this class, students will create a plan for supporting teachers' learning across a developmental trajectory and lead a teacher inquiry group on a topic related to literacy. This course will include topics related to modeling instruction, observing and providing feedback, and creating an improvement plan for literacy instruction in a classroom or school. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-643—Action Research in Literacy Coaching
Three Credit Hours
In this course, students learn to improve literacy coaching through action research. Participants identify an issue or problem related to literacy instruction, propose a research plan, collect and analyze data, and interpret and present the results in written and oral formats. Through their own teacher research, participants are able to influence classroom practice and improve the literacy instruction in schools.

EDUC-650—Elementary School Counseling Internship I
Three Credit Hours
Supervised field experience of 300 clock hours in which student serves as counselor in school setting.
Prerequisite: EDUC-629 & permission of Advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-651—Secondary Counseling Internship I
Three Credit Hours
Supervised field experience of 300 clock hours in which student serves as counselor in school setting.
Prerequisite: EDUC-629 & permission of Advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-652—Elementary School Counseling Internship II
Three Credit Hours
Prerequisite: EDUC-650 and permission from advisor. May be taken concurrently with EDUC-650. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-653—Secondary School Counseling Internship II
Three Credit Hours
Supervised field experience of 300 clock hours in which student serves as counselor in school setting.
Prerequisite: EDUC-651 and permission from advisor. May be taken concurrently with EDUC-651. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-655—Internship I in Student Affairs and College Counseling
Three Credit Hours
This supervised experience includes the student serving as a student affairs specialist in a higher education institutional setting for a minimum of 300 clock hours.
Prerequisite: Permission from a faculty advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-656—Internship II in Student Affairs and College Counseling
Three Credit Hours
This supervised experience includes the student serving as a student affairs specialist in a higher education institutional setting for a minimum of 300 clock hours.
Prerequisite: Permission from a faculty advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-658-Internship in Higher Education Student Affairs
Three Credit Hours
This supervised experience includes the student serving as a student affairs specialist in a higher education institutional setting for a minimum of 300 clock hours.
Prerequisite: Applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-661—Internship in Elementary Administration I
Three Credit Hours
Coursework includes supervised field studies and experiences in elementary school administration.
Prerequisites: Passing PRAXIS II score results on file at the Citadel Graduate College and permission of advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-662—Internship in Elementary Administration II
Three Credit Hours
Coursework includes supervised field studies and experiences in elementary administration.
Prerequisite: Successful completion of EDUC 661 and permission of advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-663—Internship Middle and High Administration I
Three Credit Hours
Coursework includes supervised field studies and experiences in secondary school administration.
Prerequisites: Passing PRAXIS II score results on file at the Citadel Graduate College and permission of advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-664—Internship in Middle and High Administration II
Three Credit Hours
Coursework includes supervised field studies and experiences in secondary school administration.
Prerequisites: Successful completion of EDUC-663 and permission of advisor. Also, applicants must have a cleared background check on file with the S.C. Department of Education.

EDUC-670—Foundations in STEM I
Two Credit Hours
The Foundations in STEM I course refreshes student knowledge in the STEM disciplines. Topics such as foundational concepts and applications of science, technology, engineering and math are explored. These courses will provide students with a solid background to enhance student confidence in STEM. Courses will utilize current events, case studies, and relevant readings to provide content knowledge and to highlight the interdisciplinary nature of the STEM disciplines.

EDUC-680—Foundations in STEM II
Two Credit Hours
The Foundations in STEM II course is a follow up to the first course and has students continue exploration of the foundational concepts and applications of science, technology, engineering and math.

Electrical Engineering (ELEC)

ELEC-605—Advanced Power Systems
Three credit hours
A review of AC systems, power flow and symmetrical faults will be given. Students will study symmetrical components, unsymmetrical faults, system protection, power system controls, and power line transients. Additional topics will include power flow computational methods, regulatory aspects of the North American power grid, and the use of computer tools for the design of transmission and distribution systems.
Prerequisites: Graduate status or permission from instructor, and an undergraduate course in power system analysis or equivalent.

ELEC-615—Spectral Analysis
Three credit hours
Spectral estimation and analysis plays a key role in a large variety of signal processing applications. Classical and modern spectral analysis techniques are developed and compared in terms of

performance and implementation. Topics covered include random-discrete signals, sample autocorrelations functions, the periodogram, and parametric spectral estimates.
Prerequisites: Graduate status or permission from instructor, and an undergraduate course(s) in continuous and discrete time signal analysis or equivalent.

ELEC-620—Electromagnetic Compatibility
Three credit hours
Electromagnetic compatibility, within electronic devices and between nearby electronic devices, is studied. The degree to which a device conforms to legal limits on conducted and radiated emission is predicted. Electromagnetic interference is observed and measured using radio-frequency laboratory instruments. The primary objective is to learn a variety of techniques for circuit design, selection, layout, and packaging, to be practiced throughout the development of an electronic device, which will ultimately minimize emissions from that device and minimize its susceptibility to interference from other electronic devices.
Prerequisites: Graduate status or permission from instructor, and undergraduate courses in linear systems and electromagnetic fields.

ELEC-625—RF Systems
Three credit hours
Analysis, design, and optimization of radio-frequency systems. The operation and characterization of RF components, fundamentals of noise and distortion, and system concepts including tools such as level charts and link budgets will be taught. Applications will include wireless communication systems and radar.
Prerequisites: Graduate status or permission from instructor, and undergraduate courses in linear systems and electromagnetic fields.

ELEC-635—Advanced Signal Processing
Three credit hours
An introduction to the analysis and design of adaptive systems with applications in the areas of communications, signal processing, and control. Topics include random signal models; theory of adaptation and performance measures; LMS and RLS algorithms; optimal filtering; adaptive equalization; interference cancellation; signal prediction; and system identification.
Prerequisites: Graduate status or permission from instructor, and undergraduate courses in signals and systems, and probability and statistics for engineers.

ELEC-645—Data Communication Networks
Three credit hours
Fundamentals of data communication networks. Emphasis on network algorithms and their performance. Topics include: layered network architecture, Link Layer protocols, high-speed packet switching, queueing theory, Local Area Networks, and Wide Area Networking issues, including routing and flow control.
Prerequisites: Graduate status or permission from instructor, and undergraduate courses in computer programming and probability and statistics for engineers.

ELEC-655—Digital Communications
Three credit hours
Introduction to modern digital communication systems. Emphasis on modulation and detection techniques and their performance in the presence of noise.
Prerequisites: Graduate status or permission from instructor, and undergraduate courses in linear systems and probability and statistics for engineers.

ELEC-650—Special Topics in Electrical Engineering
Three credit hours
Special topics in electrical engineering will be offered to graduate students occasionally when the interest of the students and the availability of an instructor dictate. The syllabus must be approved by the electrical engineering faculty. Since the content of the course may change, a student may repeat this course for credit with the permission of the department head.
Prerequisite: Graduate status and consent of instructor.

ELEC-665—Advanced Energy System Engineering
Three credit hours
This course covers fundamentals of thermodynamics, chemistry, flow and transport processes as applied to energy systems. Topics include analysis of energy conversion in thermomechanical, thermochemical, electrochemical, and photoelectric processes in existing and future power and transportation systems, with emphasis on efficiency, environmental impact and performance. Systems utilizing fossil fuels, hydrogen, nuclear and renewable resources, over a range of sizes and scales are discussed. Applications include fuel reforming, hydrogen and synthetic fuel production, fuel cells and batteries, combustion, hybrids, catalysis, supercritical and combined cycles, photovoltaics, etc. The course also deals with different forms of energy storage and transmission, and optimal source utilization and fuel-life cycle analysis.
Prerequisites: Graduate status or permission from instructor and undergraduate courses in university physics and engineering mathematics.

ELEC-675—Computer Architecture
Three credit hours
Organization and design of computer systems hardware. Provides the basic knowledge required for understanding and designing standard and advanced computer architectures. Topics include: instruction set architectures, ALU design and computer arithmetic, memory organization, cache and virtual memories, controller design, pipelining and parallelism.
Prerequisites: Graduate status or permission of the instructor, and undergraduate courses in digital logic design and assembly language programming.

ELEC-685—Digital Control Systems
Three credit hours
This course provides an introduction to the design of control systems in the digital domain. Key topics will include D/A and A/D conversion, the Z-transform, state variable techniques, stability, controllability, and observability. Modern controller design techniques including pole placement design by state feedback will be considered.
Prerequisites: Graduate status or permission of the instructor, and undergraduate course in feedback control systems.

English (ENGL)

ENGL-500—Old and Middle English Literature
Three Credit Hours

A study of *Beowulf*, other Old English poems, and Old English prose in translation; includes such Middle English works as *Sir Gawain and the Green Knight, Pearl, Piers Plowman,* the *Ancrene Riwle, The Owl and the Nightingale*, and other romances, lyrics, and drama. (Chaucer is excluded.)

ENGL-501—Chaucer
Three Credit Hours
A study of Chaucer's language, art, and cultural milieu through the reading of *Troilus and Criseyde,* the *Canterbury Tales*, and many of the shorter works.

ENGL-502—Shakespeare
Three Credit Hours
A comprehensive study of Shakespeare's art, including an intensive reading of several plays and appropriate attention to the primary critical approaches.

ENGL-504—Poetry and Prose of the English Renaissance
Three Credit Hours
Non-dramatic poetry and prose of the sixteenth and early seventeenth centuries.

ENGL-505—Milton
Three Credit Hours
A study of the major poetry, selected prose, and selected minor poems with emphasis on *Paradise Lost*.

ENGL-506—Restoration and Eighteenth Century Drama
Three Credit Hours
A study of important dramatists of the period as Otway, Etherege, Wycherley, Dryden, Congreve, Vanbrugh, Farquhar, Goldsmith, and Sheridan.

ENGL-507—Poetry and Prose of the Restoration and Eighteenth Century
Three Credit Hours
A study of Dryden, Swift, Pope, Johnson, Blake, and other important poets and prose writers of the period.

ENGL-509—Romantic Literature
Three Credit Hours
A study of the chief features of the Romantic writings of the early nineteenth century, with special emphasis on Wordsworth, Coleridge, Byron, Shelley, and Keats.

ENGL-510—Victorian Literature
Three Credit Hours
A study of English literature from 1832 to 1900 in major writers such as Tennyson, Browning, Arnold, Carlyle, Swinburne, and Rossetti.

ENGL-511—Introduction to English Graduate Studies
Three Credit Hours
A practical introduction to research and writing. The course will cover theoretical approaches to literary and cultural interpretation; the discovery, analysis, evaluation, and integration of primary and secondary resources; and strategies for generating and revising sophisticated arguments. It also seeks to broaden awareness of career paths and professional development opportunities.

ENGL-512—Southern Literature
Three Credit Hours
A study of the best literature written in the South from the time of William Byrd to the present. The focus will be on the "Southern Renaissance," with special attention given to the Fugitive Poets and William Faulkner.

ENGL-517, 518—Special Topics in Literature
Three Credit Hours
A study of a special author, period, topic, or problem in literature which is outside the routine offerings of the department. The subject for each course will be announced.

ENGL-520—A Survey of World Literature I
Three Credit Hours
Masterpieces of world literature in translation from the Vedic literature to Racine with special attention to the philosophical content and the development of literary forms.

ENGL-521—A Survey of World Literature II
Three Credit Hours
Masterpieces of world literature in translation from Voltaire to the present time with special attention to the philosophical content and the development of literary forms.

ENGL-522—Colonial and Revolutionary American Literature
Three Credit Hours
A detailed study of major American writers from the earliest settlers through the end of the 18th century.

ENGL-523—Nineteenth-Century American Literature I—Romanticism
Three Credit Hours
A study of major figures of the American Romantic period (approximately 1830-1860), including Emerson, Thoreau, Poe, Hawthorne, and Melville.

ENGL-524—Nineteenth-Century American Literature II—Realism
Three Credit Hours
A study of major figures of the American Realistic period (approximately 1860-1900), including Whitman, Dickinson, James, Twain, and Crane.

ENGL-525—Eighteenth Century British Novel
Three Credit Hours
A study of the origins of the British novel, including such figures as Fielding, Richardson, and Defoe.

ENGL-526—Victorian Novel
Three Credit Hours
A study of major British novelists of the late nineteenth century, including Dickens, Eliot, and Hardy.

ENGL-527—British Fiction: 1900 to 1945
Three Credit Hours

A study of the novels and short stories of major British writers from the first half of 20th- century, including such figures as Conrad, Lawrence, Forster, Woolf, and Joyce.

ENGL-528—American Fiction: 1900 to 1945
Three Credit Hours
A study of the novels and short stories of major American writers from the first half of the twentieth century, including such figures as Fitzgerald, Wolfe, Faulkner, and Hemingway.

ENGL-529—American Fiction: 1945 to the Present
Three Credit Hours
A study of the significant American novels and short fiction published since World War II.

ENGL-531—British Poetry: 1900 to Present
Three Credit Hours
A study of the poetry of major twentieth-century British authors such as Auden, Yeats, Thomas, and Hardy.

ENGL-532—American Poetry: 1900 to Present
Three Credit Hours
A study of the poetry of major 20th-century American authors such as Eliot, Pound, Stevens, Williams, and Frost.

ENGL-533—British Drama: 1900 to Present
Three Credit Hours
A study of the work of major 20th-century British dramatists such as Shaw, Pinter, Stoppard, and Beckett.

ENGL-534—American Drama: 1900 to Present
Three Credit Hours
A study of the work of major twentieth-century American dramatists such as O'Neill, Williams, Miller, and Albee.

ENGL-535—African American Literature
Three Credit Hours
A study of African American literature from the early days of slavery, to the struggle for emancipation, to the twentieth-century Harlem Renaissance and civil rights movement. Readings will cover poetry, fiction, and drama, as well as autobiographies and cultural commentaries.

ENGL-537— Contemporary British Fiction
Three Credit Hours
A study of the novels and short stories of major contemporary British writers.

ENGL-550, 551—Special Topics in Composition or Language
One to Three Credit Hours
A study of a special author, period, topic, or problem in composition or language which is outside the routine offerings of the department. The subject for each course will be announced.

ENGL-552—Adolescent Literature
Three Credit Hours
A study of literature for the adolescent, including methods of introducing the major literary genres to the secondary school student. *Note: For students in the M.A.T. in English program only.*

ENGL-553—Modern English Grammar
Three Credit Hours
An intensive study of the syntax of present day English. The course also includes a review of traditional grammar, focusing primarily on the parts of speech. Special attention is given to linguistic theory, particularly regarding the acquisition of language.

ENGL-554—History of the English Language
Three Credit Hours
A historical survey of the syntactic and phonological features of Old, Middle, Early Modern, and present day English.

ENGL-555—Literary Criticism
Three Credit Hours
A study of the major literary theories from ancient Greece to the present and practical application of the theories to particular works of literature. Special attention is given to semiotic theory as it relates to the influence of language and visual images on thinking, composing, and action.

ENGL-556—Theory and Practice of Teaching Composition
Three Credit Hours
A study of traditional and contemporary theories of the composition process and applications of those theories to teaching composition.

ENGL-558—Technical and Professional Writing
Three Credit Hours
Principles and practice of technical communication as applied to reports, technical papers, oral presentations, and business communications.

ENGL-559—History and Theory of Rhetoric
Three Credit Hours
A study of language as a means of winning the assent, sympathy, or cooperation of an audience. Includes contemporary rhetorical theory and its development from classical rhetoric.

ENGL-560—Film Studies
Three Credit Hours
This film course will expose students to films from a variety of nations and filmmakers that represent the chief cinematic movements of the twentieth century (Weimar Expressionism, French New Wave, American Noir, etc.), and it will instruct students in the terminology and techniques of filmmaking. The students will, by studying the relationship between the tools of filmmaking and the finished products, learn to "read" films as metaphors of reality.

ENGL-562—Workshop in Advanced Composition
Three Credit Hours
The study, discussion, and practice of advanced composition techniques; including the use of computer technology for print documents, audio-visual presentations, and web applications.

ENGL-564—Teaching with Technology
Three Credit Hours
Focuses on a wide range of web-based resources that future teachers can use to improve their students' writing, enrich their

understanding of literature, and get them excited about learning. This course provides interactive instruction designed to make work in and out of the classroom more meaningful for students. It also demonstrates how to incorporate applications that students use on a daily basis. Over the course of the semester, M.A.T. candidates will develop web-based projects that they can incorporate in their future courses.

ENGL-573—Special Topics in African American Literature
Three Credit Hours
A study of a specific topic in African American literature that is not a genre, period, or individual writer. Topics will vary according to instructor.

ENGL-574—Special topics in English Literature Before 1800
Three Credit Hours
A study of a specific topic in English Literature Before 1800. Topic will vary according to instructor. This course fulfills the period requirement for English Literature before 1800.

ENGL-575—Special topics in English Literature After 1800
Three Credit Hours
A study of a specific topic in English Literature After 1800. Topic will vary according to instructor. This course fulfills the period requirement for English Literature after 1800.

ENGL-576—Special topics in American Literature
Three Credit Hours
A study of a specific topic in American Literature. Topic will vary according to instructor. This course fulfills the period requirement for American Literature.

ENGL-595—Methods and Materials for English Language Arts
Three Credit Hours
This course exposes students to theories and practices of teaching English (to include reading, writing, speaking, listening, viewing and thinking) in grades 9-12, including preparation for reflective practice and classroom-based teacher research. In-class instruction is augmented by field experiences that expose students to the professionalism of practicing ELA teachers and the realities of working with a diverse population of students. This course is intended to prepare candidates for a teaching internship.
Prerequisites: EDUC-501 and EDUC-592.
Note: For students in the M.A.T. in English program only.

ENGL-698—Tutorial
Three Credit Hours
Individual study of a given topic following a syllabus of readings, papers, and other assignments prescribed by a faculty member serving as director.

ENGL-699—Independent Study
Three Credit Hours
Individual study of an agreed-upon topic under the direction of a faculty member but following a course of reading and other requirements proposed by the student and established by negotiation with the director.

ENGL-700—Seminar
Three Credit Hours
Individual research into a scholarly or critical problem in literature, composition, or language. Progress, methods, and results will be shared with the class by presentation and discussion will lead to the preparation of a single long paper.

ENGL-701—Thesis
Six Credit Hours
Completion of a formal master's thesis under faculty direction.

ENGL-703—Seminar in English Literature Before 1800
Three Credit Hours
Study of a scholarly or critical issue in literature, composition, or language. Typically, class presentations and seminar/discussion format are required with a single long paper as the culminating student project. This course fulfills the period requirement for English Literature before 1800 as well as the seminar requirement.

ENGL-704—Seminar in English Literature After 1800
Three Credit Hours
Study of a scholarly or critical issue in literature. Typically, class presentations and seminar/discussion format are required with a single long paper as the culminating student project. This course fulfills the period requirement for English Literature after 1800 as well as the seminar requirement.

ENGL-705—Seminar in American Literature
Three Credit Hours
Study of a scholarly or critical issue in literature, composition, or language. Typically, class presentations and seminar/discussion format are required with a single long paper as the culminating student project. This course fulfills the period requirement for American Literature as well as the seminar requirement.

Health & Human Performance (HESS)

HESS-501—Nutrition
Three Credit Hours
A study of primary nutrients essential to health with attention given to specific needs from infancy through adulthood. Current theories and practices related to physical and intellectual performance are also investigated. Contemporary topics are presented such as degenerative diseases, food-borne diseases, fad dieting, food additives, and sports nutrition.

HESS-502—Drug & Substance Abuse
Three Credit Hours
A study of characteristics of commonly abused chemicals and other substances and reasons for abuse. Attention will be given to methods of rehabilitation and prevention.

HESS-503—Human Sexuality
Three Credit Hours
A study of all facets of human sexuality.

HESS-504—Public Health
Three Credit Hours
A course designed to analyze public health trends, services, funding, and organization of local, state, and federal agencies.

HESS-505—Motor Development & Motor Learning
Three Credit Hours
Study of appropriate learning theories, hereditary and environmental factors influencing learning and performance of gross motor skills.

HESS-506—Applied Physiology of Exercise
Three Credit Hours
Study of effects of exercise upon various components of physical fitness. Analysis and interpretation of research in areas of cardiovascular-pulmonary adjustment, metabolic requirement, and heat regulation during exercise are emphasized.

HESS-507—Special Problems in Health Science, Exercise Science, & Sport Science
Three Credit Hours
An independent research study of a local problem or a specialized subject area not normally covered in existing
courses.
Prerequisite: HESS-540 Research Techniques & Methods of Analyzing Research in Health, Exercise, & Sport Science I.

HESS-508—Epidemiology
Three Credit Hours
An introduction to the science of epidemiology and techniques used in epidemiology.
Prerequisite: Tests & Measurements, Statistics, or equivalent.

HESS-509—Preventative & Rehabilitative Aspects of Physical Activity
Three Credit Hours
This course provides emphasis on roles of exercise and physical activity in prevention and rehabilitation of degenerative diseases.

HESS-510—Biomechanics of Sports Techniques
Three Credit Hours
Study and analysis of humans in motion, sport object motion, and forces acting upon animate and inanimate bodies. Basic cinematographic and non-cinematographic techniques are utilized in a variety of both general and specific sports skill applications.

HESS-511—Special Topics in Health, Exercise, & Sport Science (Exercise Science)
Three Credit Hours
Opportunities for graduate students to take special courses not generally offered within the department. Each course must be appropriate for one's program of studies, and permission of the Director of Graduate Studies in Health, Exercise, and Sport Science is required.
Prerequisite: Varies according to topic.

HESS-512—Special Topics in Health, Exercise, & Sport Science (Sports Management)
Three Credit Hours
Opportunities for graduate students to take special courses not generally offered within the department. Each course must be appropriate for one's program of studies, and permission of the Director of Graduate Studies in Health, Exercise, and Sport Science is required.
Prerequisite: Varies according to topic.

HESS-513—Sport Facility & Event Management
Three Credit Hours
This course will integrate various operational functions of sport facilities, including management principles, methodologies, and practices. In addition, effective management of sport and recreational events will be studied.

HESS-514—Principles & Practice of Sport Management
This course introduces the principles of sport management and discusses practical applications in the sport industry to graduate-level students Content related to sport management includes fundamental knowledge and skill-sets of the sport managers, as well as provides information on sport industry segments for potential job employment and career choices.

HESS-518—Sport Marketing
Three Credit Hours
This course will cover basic components of sport marketing: use of sports as a marketing tool for other products; marketing of sports products; and current considerations relevant for both marketing through and marketing of sports.

HESS-520—Special Topics in Sport Management
Three Credit Hours
Opportunity for graduate students to take special courses not generally offered within the department. Each course must be appropriate for one's program of studies, and permission of the Director of Graduate Studies in Health, Exercise, & Sport Science is required.

HESS-521—The Art of Selling in Sport
Three Credit Hours
A course concentrating on knowledge, skills and concepts related to the "art" of sales, an area valued considerably in the sport industry.

HESS-523—Administration & Leadership of Exercise and Sport Organizations
Three Credit Hours
This course examines organizational theory and behavior as well as leadership qualities related to exercise and sport organizations. Effectiveness, structure, and design of sport and exercise organizations will be addressed as well as cultures, leadership styles, conflicts, changes, and human resources involved in these entities.

HESS-525—Scientific Principles of Physical Education, Health, Exercise, & Sport Science
Three Credit Hours
This course introduces students to the study of effects of exercise, physical activity, and work on various physical fitness components, as well as analysis of the human body in motion, sports objects in motion, and forces acting upon animate and inanimate objects/bodies.
Prerequisite: A biology, chemistry, or physics course and two human anatomy and/or physiology courses.

HESS-527—Content & Methods of Teaching School Health Education & Health-Related Aspects of Physical Fitness
Three Credit Hours

This course updates content knowledge and prepares students in teaching styles, methodologies, and assessment techniques for health education curricula in K-12 schools.
Prerequisite: A health and wellness course or passing a departmental competency exam.

HESS-528—Content & Methods of Teaching Rhythmic Activities & Movement Education
Three Credit Hours
This course teaches content and prepares students in teaching methodologies for fundamental rhythmic activities and movement education in grades K-12, including basic locomotor skills, creative rhythmic activities, dances (traditional, folk, square, social, line), and aerobics. Additional emphasis is placed on candidate skill development in dance and basic gymnastics.
Prerequisite: HESS 550 or permission of the instructor.

HESS-529—Special Problems in Sport Management
Three Credit Hours
An independent research study of local, regional or national issue/subject of interest in Sport Management that is not normally covered in existing courses.

HESS-530—Practicum in Sport Management
Three Credit Hours
A supervised field experience of at least 125 hours in a sport industry setting. Students observe, shadow, and work in a setting that enhances and complements classroom learning, develops valuable skills, nurtures professional networking, and acts to advance one's future career goals. Prerequisites: Sport Marketing (HESS-518), Administration and Leadership of Exercise and Sport Organizations (HESS-523), or instructor approval.

HESS-533—Content & Methods of Teaching Elementary School Physical Education
Three Credit Hours
This course teaches content and theoretical and practical study of teaching progressively graded programs of activities for elementary school students, grades K-5.
Prerequisite: HESS 550 or permission of the instructor.

HESS-534—Accommodating Persons with Disabilities in Sport & Physical Activity
Three Credit Hours
Study of legal, ethical, and practical definitions of involving people with disabilities within physical activity, physical education, and sport settings.

HESS-535—History, Philosophy & Curriculum of Physical Education
Three Credit Hours
This course introduces students to the historical and philosophical roots of physical education and examines the degree to which these influence curricular models and decisions made by K-12 practitioners.

HESS-538—Internship in Sport Management
Six Credit Hours
Involvement in an external working experience with a host organization for a period of at least 500 hours. This internship will provide students with opportunities to receive practical experience in selected sport management settings.
Prerequisites: All required program courses or instructor approval.

HESS-539—Sport Public Relations &Promotions
Three Credit Hours
A course focusing on marketing and public relations principles and practices in the sport management industry.

HESS-540—Research Techniques & Methods of Analyzing Research in Health, Exercise, & Sport Science I
Three Credit Hours
A course designed to introduce procedures for conducting, evaluating, and applying research in health, exercise, and sport science including an understanding of fundamental research design, data collection, and data analysis.

HESS-541—Current & Future Trends in Health, Exercise, and Sport Science
Three Credit Hours
Investigation and exploration of current and future trends in health, exercise, and sport science through contemporary readings and seminar discussions.

HESS-542—Practicum in Health, Exercise, & Sport Science
Three Credit Hours
A supervised field experience of at least 125 hours in a health science, exercise science, or sport science setting. Students observe, shadow, and work in a setting (s) to enhance and complement classroom learning, develop valuable skills, nurture networking, and may advance one toward future career goals.

HESS-543—Consumer Health
Three Credit Hours
A course designed to produce smarter consumers in the health marketplace. Emphasis is on evaluation of health products and services.

HESS-544—Exercise Testing & Assessment
Three Credit Hours
A course designed to acquire knowledge and develop skills necessary for exercise testing, physical fitness assessment, and exercise prescriptions among a variety of populations. Topics to be addressed include exercise program goals and objectives, principles and methods of physical fitness screening, development and testing, evaluation of existing exercise programs, exercise prescriptions, and administration and programming considerations.

HESS-545—Nutrition for Exercise, Sport, & Physical Activity
Three Credit Hours
An examination of nutrition and physical activity interactions including exercise and sport. Topics include current research on nutrients and ergogenic aids, as well as dietary analysis and intervention with athletes.
Prerequisites: HESS 501

HESS-546—Environmental Physiology
Three Credit Hours
A course examining energetics of environmental stress on cardiovascular, respiratory, metabolic, and muscle physiology as pertain to physical performance.

Prerequisites: HESS 506

HESS-547—Techniques of Conditioning for Sport & Physical Fitness
Three Credit Hours
A study of fundamental concepts of human physiology and exercise physiology as apply to programs of physical conditioning, training, and physical fitness. Theories, current research, and laboratory techniques for assessing human physiological responses to exercise, physical training, health-related physical fitness, and sport performance will be studied.

HESS-548—Psychology of Sport & Motivation
Three Credit Hours
A course addressing the effects of participating in exercise and sport on psychological traits and states of participants and fans. Cognitive and neurobiological mechanisms and psychological limitations to athletic performance will be studied, as well as mental and psychological techniques and strategies to improve performance and achievement in sport and exercise.

HESS-549—Sociological and Cultural Aspects of Sport
Three Credit Hours
An examination of sport in America and its effects on society, including race, gender, adherence, values, and violence.

HESS-550—Instructional Aspects of Physical Education
Three Credit Hours
This course is designed to discuss theories of instruction in physical education settings including environmental arrangements, task presentation, content development, and feedback. Practical applications of these principles to small peer group settings using open and closed motor skills will be included.

HESS-551—Content & Methods of Teaching Secondary Physical Education
Three Credit Hours
This course is designed to develop both the pedagogical skills of teacher candidates as well as content knowledge in teaching team and individual/dual sports. Emphasis is placed on planning, teaching, and evaluating physical education lessons in secondary settings. Additional emphasis is placed on candidate skill development in team and individual/dual sports.
Prerequisite: HESS 550 or permission of the instructor.

HESS-552—Fundraising for Sport Organizations
Three Credit Hours
Traditional and innovative revenue acquisition methods for sport organizations will be examined. Fundamental concepts and theories of fundraising applicable to the sport industry will be studied.

HESS-553—Sport Communications
Three Credit Hours
Examination of the role of sport organizations as communications systems where effective written and oral interpersonal communication skills are imperative for success.

HESS-554—Analysis of Sports Skills & Techniques
Three Credit Hours
An application of data collection and data analysis tools including EMG, videography, and force transducers to kinesiological systems of the human body during movement and sport skills.

HESS-555—Legal Aspects of Sport
Three Credit Hours
This course reviews legal considerations, responsibilities, and liabilities of organizations and personnel related to sport and recreation. An examination of event management, personnel relations, and governmental regulations impacting sport and recreation as well as tort liability with special emphasis on effective management of risk, athletic eligibility, contracts, and Title IX.

HESS-556—Sport Finance
Three Credit Hours
This course addresses basic theory in finance and accounting as applied to managerial control of sport organizations. It examines forms of ownership, taxation, financial analysis, feasibility studies, and economic impact studies related to sport organizations.

HESS-557—Economics of Sport
Three Credit Hours
This course introduces students to fundamental economic concepts and analysis, especially those related to spectator sports, and youth sports, recreational sports, the sporting goods industry.

HESS-558—Advertising in Sport
Three Credit Hours
A course examining knowledge, skills and concepts required for successful advertising in the sport industry. Strategies and techniques of successful advertising will be studied.

HESS-559-Research in Sport Management
Three Credit Hours
A course designed to introduce procedures for conducting, evaluating, and applying research in the sport management domain, including an understanding of the utility of research, fundamental research design, data collection, and data analysis.

HESS-560—Research Techniques & Methods of Analyzing Research in Health, Exercise, & Sport Science II
Three Credit Hours
Advanced procedures for conducting, evaluating, and applying research in health, exercise, and sport science including an understanding of parametric and nonparametric instruments and methodologies used to measure and evaluate various parameters considered essential to research in health, exercise, and sport science.
Prerequisite: HESS-540 Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science I.

HESS-561—Advanced Measurement & Evaluation in Physical Education
Three Credit Hours
Analysis and interpretations of data associated with various cognitive, affective and psychomotor tests commonly used in physical education. Topics include test administration, test construction, performance-based assessments, rubrics, and physical fitness and skill testing.

HESS-598—Thesis I in Health Science, Exercise Science, & Sport Science
Three Credit Hours
Student will be directed to develop a research question or problem

statement, define terminology, identify limitations and delimitations, and formulate hypotheses and purpose statements. A literature review critiquing previous research on the topic and a description of methodology to be used to solve the problem will be included. Chapters 1, 2, and 3 of the thesis will be completed and presented to the thesis committee for approval.

HESS-599—Thesis II in Health Science, Exercise Science, & Sport Science
Three Credit Hours
Student will be directed to report results, discuss findings in relation to the introduction and previous literature, identify recommendations and conclusions, and include a bibliography. Chapters 4 and 5 of the thesis will be completed, and the entire thesis presented in an oral defense to the thesis committee for approval. The student will also be expected to submit the research for presentation at a state, regional, or national meeting or equivalent.

HESS-620—Professional Internship in Teaching
Six Credit Hours
A requirement for teacher certification, observation, and teaching in approved schools under supervision by a college professor. Two placements are required: one in an elementary school setting and one in a secondary school setting. A field experience component of a minimum of 60 days is required.
Prerequisites: Please refer to program requirements.

History (HIST)

HIST-502—Colonial America and the American Revolution to 1789
Three Credit Hours
The motives of colonization; the evolution of self-government; the extension of the frontier; economic, social, and religious life; imperial rivalries; the causes of the Revolution; the War for American Independence; problems of the Confederation; and the establishment of the Federal Union.

HIST-504—Civil War and Reconstruction
Three Credit Hours
The political, economic, diplomatic, and military history of the United States, 1850-1877, emphasizing the forces that tend to bind or disrupt the Union and including a detailed account of the war and its consequences.

HIST-506—The U.S. in the Twentieth Century
Three Credit Hours
A study of the efforts to fulfill the democratic vision in the era of wars and depressions, accelerating technological innovation, material progress, and cultural change.

HIST-521—The American South
Three Credit Hours
The political, social, and economic development of the South from the 1820s to the present with an emphasis on the region within the national context as one of both change and continuity.

HIST-522—South Carolina History
Three Credit Hours
A survey of the political, economic, social, and intellectual development of South Carolina from its discovery to the present, with emphasis on the relation of the state to the South and to the nation.

HIST-523—Afro-American History
Three Credit Hours
An introduction to the history of black Americans in the United States, with emphasis on the social forces underlying transition from West Africa to the New World, from slavery to freedom, and from rural to urban life. Topics to be discussed include the Atlantic slave trade, American slave societies, maroon communities, free blacks in the antebellum United States, Reconstruction and free labor, colonization, emigration, and urban migration.

HIST-525—Introduction to Public History
Three Credit Hours
This course is designed to explore the history, theory, and current issues of public history practice in the United States. Public history is about recognizing the public as history makers and "doing" history for a public audience. As such, public history can take numerous forms-including, but not limited to, oral history, folklore, museum curating, historical preservation, cultural conservation, and community activism. As an interdisciplinary field, public history incorporates methodologies from such disciplines as history, art history, architectural history, archeology, anthropology, folklore, and cultural geography. This course will therefore provide an introduction to different forms of public history, particularly by examining the theoretical underpinnings and methodologies that have shaped each one.

HIST-532—Ancient Greece
Three Credit Hours
Greek civilization from its beginning to Alexander the Great. Emphasis on political, economic, social, and intellectual movements.

HIST-533—Ancient Rome
Three Credit Hours
Roman history from its beginning until the Age of Constantine. Emphasis on political and social developments in the Republic and the early empire.

HIST-535—Medieval Europe
Three Credit Hours
European social, political, economic, and religious institutions and cultural and intellectual phenomena in the light of the changing historical environment from the end of the Ancient World to the Renaissance.

HIST-537—Renaissance and Reformation
Three Credit Hours
The Renaissance as a European-wide movement emanating from the Italian peninsula; the crisis of the church medieval and the rise of the Renaissance papacy; Humanism, with special emphasis on the great painters, architects, and sculptors such as Giotto, Brunelleschi, Donatello, Botticelli, da Vinci, Raphael, and Michelangelo; the Renaissance city-states, Machiavelli, and the Renaissance monarchies of France, England, Spain, and the Holy Roman Empire; the continuing crisis of the church medieval and the religious upheavals of Protestantism; the work of Luther, Calvin, Zwingli, and the Anabaptists; the Catholic Reformation.

HIST-541—Enlightenment and French Revolution

Three Credit Hours
The major social, political, and cultural changes in Europe from the death of Louis XIV to the fall of Napoleon. Topics include the intellectual history of the Enlightenment; the causes of the Revolution; the development of radical ideologies; social and political instability; the French impact on Europe; and the achievements of Napoleon as civil administrator, military strategist, and commander.

HIST-542—Nineteenth-Century Europe
Three Credit Hours
Europe from Waterloo to Sarajevo; political reaction and reform; the Industrial Revolution with its economic, social, and political effects; nationalism and the renewed interest in imperialism; other factors in international rivalries and the coming of World War I.

HIST-543—Twentieth-Century Europe
Three Credit Hours
An examination of the origins and consequences of two World Wars on the major European states; the political, social, and economic development of those states and their relative positions today.

HIST-545—History of Modern Russia
Three Credit Hours
History of the development of Tsarist absolutism under the Romanov dynasty and of the religious, social, and economic institutions of the Tsarist state. Intensive treatment of the 1917 Revolution; the rise and fall of the Soviet empire.

HIST-551—Women in the Western World
Three Credit Hours
An examination of the ideas, institutions, and events in Western Civilization which specifically affected women. Lectures and readings will be organized topically rather than geographically or chronologically. Areas to be examined include religion, education, sex and marriage, the family, work, feminist and suffragist movements.

HIST-560—History of the Non-Western World
Three Credit Hours
This course introduces the histories of East Asia, Meso-America, the Middle East, South Asia, and Sub-Sahara Africa. It examines the development of each area's political, social, and cultural traditions and institutions. Close attention is devoted to social values, religious beliefs, and cultural practices. Particular emphasis is given to how contact with the West irrevocably altered each region. (This course does not count towards the requirements for the MA in History.)

HIST-562—Colonial Latin America
Three Credit Hours
A survey of Spanish and Portuguese colonial America to 1825. Topics include native populations on the eve of conquest; exploration and conquest by Europeans; the development of multiracial societies; the colonial economies; the institutions of Ibero-American empires; the social, economic, and intellectual roots of revolution; independence movements.

HIST-563—Modern Latin America
Three Credit Hours
A survey of Spanish and Portuguese America since the wars for independence. Topics include the aftermath of the independence movements, incorporation into the international economy, changing social organization, race relations, the search for political stability, the role of the military, 20th century revolutionary movements, intellectual currents.

HIST-572—Precolonial Africa
Three Credit Hours
An introduction to the precolonial history of sub-Saharan Africa. Special attention will be focused on the growth of Islam in West Africa, the East African city-states and kingdoms, and the upheaval in nineteenth-century southern Africa. African slavery and the slave-trade will also be considered.

HIST-573—Modern Africa
Three Credit Hours
A history of the development of Africa during the modern period, including European penetration, the Colonial era, African resistance and independence, and contemporary issues.

HIST-577—Modern Middle East
Three Credit Hours
Tradition, modernization, and change in the contemporary Islamic World. The impact of nationalism, secularism, and westernization in the Middle East, from the disintegration of the Ottoman Empire and the emergence of successor states to the Arab-Israeli conflict, the oil crisis, and Great Power confrontation.

HIST-582—China to 1800
Three Credit Hours
A survey of traditional Chinese history from earliest times to 1800. Emphasis is placed upon intellectual development against the background of social, political, and economic transformations.

HIST-583—Modern China
Three Credit Hours
A study of Chinese history from 1800 to the present, emphasizing the transformation of the Confucian universal empire into a modern national state. The course will focus on the problems of imperialism, nationalism, revolution, the rise of communism, the proletarian Cultural Revolution, and the Four Modernizations in post-Mao China

HIST-586—Japan to 1800
Three Credit Hours
A survey of the political, economic, and cultural development of Japan from earliest times to 1800, with emphasis on the borrowing and adaptation of Chinese culture and the development of a unique Japanese civilization.

HIST-587—Modern Japan
Three Credit Hours
A study of modern Japanese history from 1800 to the present, with emphasis on the creation of the modern state, the impact of Western civilization on Japanese culture, Japan's experience with liberalism and militarism, with Japanese imperialism, and the postwar transformation.

***HIST-590—Special Topics in U.S. History**
Three Credit Hours
Examples include Turning Points in American History, the Progressive Era, the Social and Cultural Transformation of the 1920s, etc.

*Content in these courses must relate to public history and are subject to approval by the public history coordinator.

***HIST-591—Special Topics in European History**
Three Credit Hours
Examples include Georgian Britain, Edwardian Britain, the European Left and Labor, etc.

***HIST-592—Special Topics in Latin American Asian/African History**
Three Credit Hours
A course that concentrates upon an important historical period or topic within one of four principal regions: Latin America and the Caribbean, Asia, Africa, or the Middle East.

***HIST-593—Special Topics in Peace, War, and Diplomacy**
Three Credit Hours
Examples include World War I, the Vietnam War, Diplomacy of the American Civil War, etc.

HIST-594—Historiography for Social Studies Teachers
Three Credit Hours
Designed for social studies and history teachers in the secondary and middle schools, this course seeks to familiarize students with the history of historical writing and the tools of a practicing historian. The course will examine the various methods of gathering historical data and conceptualizing and interpreting historical information. A focus will be placed on how to write and how to teach writing a research paper. (This course does not count towards the requirements for the MA in History.)

HIST-610—Special Topics in U.S. History
Three Credit Hours
Examples include the Depression and New Deal; Business, Labor and Economic History; Social and Cultural History.

HIST-620—Special Topics in Lowcountry Studies
Three Credit Hours
An interdisciplinary course organized around a specific topic (e.g., Education, the Environment of the Lowcountry, Plantation Culture, Gullah, and the Caribbean Origins of the Lowcountry). This interdisciplinary course will allow a student to explore an area of specific interest.

HIST-630—Special Topics in Peace, War, and Diplomacy
Three Credit Hours
Examples include The Diplomacy of the American Revolution, Disarmament during the 1920s, etc. This course may be offered as HIST 660 (3) for topics in European history and as HIST 680 (3) for topics in Asian, African, or Latin American history.

HIST-640—Special Topics in European History
Three Credit Hours
Examples include Social and Cultural History, the Scientific Revolution, the Age of Louis XIV, etc.

HIST-650—Special Topics in British History
Three Credit Hours
Examples include The English Reformation, the English Civil War, the Victorian Age, etc.

HIST-670—Special Topics in Asian/African/ Latin American History
Three Credit Hours
A course that concentrates upon an important historical period or topic within one of four principal regions: Latin America and the Caribbean, Asia, Africa, or the Middle East.

HIST-691—Historiography
Three Credit Hours
The core course. Examines various methods of gathering historical data and issues of conceptualization and interpretation. The course thus seeks to develop in students critical awareness and expertise based on familiarity with a variety of historical techniques, methods, and concepts.

HIST-692—Teaching of History and Social Sciences
Three Credit Hours
Organization, methods, and procedures for teaching history and the social studies in the secondary and middle schools.

HIST-710—Research Seminar in U.S. History
Three Credit Hours
A topical seminar that focuses on a central historical problem with a major research paper required. Primary sources are utilized whenever possible.

HIST-720—Research Seminar in Lowcountry Studies
Three Credit Hours
An interdisciplinary seminar designed to acquaint students with the historical methods necessary to pursue successfully a research topic. This will entail an introduction to primary sources.

HIST-740—Research Seminar in European History
Three Credit Hours
A topical seminar focused upon a central historical problem with a major research paper required.

HIST-750—Internship Experience
Three Credit Hours
This course is designed to provide students with practical experience in a field of public history. We will meet monthly as a group to address any questions or concerns that may arise at each internship site. Overall, the expectations of the course are for each student to fulfill the requirements of their internship agreement; the final grade will be based on the weekly log, the final report, and the final assessment from the internship facilitator.
Prerequisite: It is strongly encouraged that students complete HIST-525 prior to enrolling in the Internship Experience.

HIST-760—Research Seminar in Asian/ African/Latin American History
Three Credit Hours
A topical seminar focused upon a central historical problem within one of four principal regions: Latin America and the Caribbean, Asia, Africa, or the Middle East. A major research paper will be required.

HIST-770—Independent Study in History
Three Credit Hours
Repeatable once.

HIST-801-802—Master's Thesis

Six Credit Hours
*These 500-level special topics courses are designed primarily for the brief summer terms each with an enrollment of up to twenty (20) students. Lectures are accompanied by some discussion of the readings, and usually a short paper of 10 to 15 pages is required. In contrast, the comparable 600-level special topics courses (i.e., HIST-610, 630, 640, and 670) are restricted to fifteen (15) MA students

HIST-803—Comprehensive Examination Preparation
Three Credit Hours
The purpose of this course is to provide students who will be taking the comprehensive examiniation with time to read through the two booklists that they will have compiled beforehand with their examiners. Students should be familiar with the argument and evidence of each book on the list.

History and Teaching Content (HITC)

HITC-560—History of the Non-Western World
Three Credit Hours
This course introduces the histories of East Asia, Meso-America, the Middle East, South Asia, and Sub-Saharan Africa. It examines the development of each area's political, social, and cultural traditions and institutions. Close attention is devoted to social values, religious beliefs, and cultural practices. Particular emphasis is given to how contact with the West irrevocably altered each region.

HITC-501—History of the United States to 1877
HITC-502—History of the United States from 1877
Three Credit Hours
An analysis of American history from the period of discovery to the present; a brief treatment of the colonial period, followed by a more detailed study such subjects as the causes of the Revolution, the framing of the Constitution, the development of political parties, the sectional conflict, economic progress and problems, and foreign relations; special emphasis place on understanding the nature of American democracy and the role of the United States in world affairs from 1789 to the present.

HITC-503—South Carolina History
Three Credit Hours
An analysis of the political, economic, social, and intellectual development of South Carolina from its discovery to the present, with emphasis on the relation of the state to the South and to the nation.

HITC-504—Europe and the World to 1500
HITC-505—Europe and the World from 1500
Three Credit Hours
An analysis of the development of European civilization from ancient times to the present. Among the major topics are Classical Greece, Republican Rome, Imperial Rome, the Protestant Reformation, the Age of European Exploration and Conquest, Absolutism, the Enlightenment, the French Revolution, the Industrial Revolution, Liberalism, Nationalism, Imperialism, Modernism, and Totalitarianism. Particular focus will be place on Europe's relationship with the wider world.

HITC-511—Special Topics in the History of the United States
Three Credit Hours
A course that concentrates on a specific historical period or topic in United States history. Examples may include the Depression and New Deal; Business, Labor and Economic History; Social and Cultural History.

HITC-512—Special Topics World History
Three Credit Hours
A course that concentrates upon an important historical period or topic within one of five principal regions: Europe, Latin America and the Caribbean, Asia, Africa, or the Middle East. Examples include Social and Cultural History, the History of China, the French Revolution, World War Two and the Holocaust, etc.

Historic Preservation (HSPV)

HSPV-807—American Architecture
Three Credit Hours
A survey of American buildings from the sixteenth century to the modern era with particular attention to the social, intellectual, technological, and economic forces that shaped America's cityscapes, small towns and countryside.
Prerequisite: Enrollment in MSHP/HSPV program.

HSPV-808—History and Theory of Historic Preservation
Three Credit Hours
Survey history of preservation that explores a variety of theoretical issues that impact the discipline. Provides a basis for critical evaluation of historic preservation. Discusses architectural and planning theories that drive preservation policy and application.
Prerequisite: Enrollment in MSHP/HSPV program.

HSPV-809—Historical Research Methods
Three Credit Hours
Advanced instruction in historical research methods in private archival manuscript sources and public records with application to recovering and writing the history of buildings and landscapes. Students acquire research, writing and presentations skills.
Prerequisite: Enrollment in MSHP/HSPV program.
HSPV-821— Historic Preservation and Public Memory
Three Credit Hours
A seminar that explores the creation of American public memory through commemorations, festivals, museum exhibits, historic sites, monuments, and other historic preservation activities.
Prerequisite: Enrollment in MSHP/HSPV program and HSPV 808/HP 8080.

HSPV-823— Historic American Interiors
Three Credit Hours
Survey of the American domestic interior from the seventeenth to the twentieth century with emphasis on the social, cultural, economic, and technological currents that influenced the furnishing of American dwelling places. In addition to investigating period forms and materials, it explores the interpretation of primary sources and historical finishes.
Prerequisite: Enrollment in MSHP/HSPV program and HSPV 808/HP 8080.

HSPV-833—Cultural and Historical Landscape Preservation
Three Credit Hours

Overview of cultural historic landscape preservation principles and practices. Includes inventory and analysis of historic resources from a cultural landscape perspective. Qualities of integrity are studied in correspondence to location, design, setting, materials, workmanship, and feeling and association.
Prerequisite: Enrollment in MSHP/HSPV program and HSPV 819/HP 8190.

Intelligence (INTL)

INTL-15/CRMJ-515/-PSCI-515—Topics in Homeland Security
Three Credit Hours
Selected special topics or problems in the general areas of homeland security to fit the needs of students as well as the specialized knowledge of the faculty.

INTL-560—Intelligence and Homeland Security Administration
Three Credit Hours
Seminar on effective management principles and practices as they apply within homeland security organizations. Organizational and management theories are analyzed and applied to the contemporary structure of homeland security organizations with emphasis given to a review of the research related to the development of leadership skills for homeland security management.

INTL-568/CRMJ-568/PSCI-568—International and Domestic Terrorism
Three Credit Hours
In-depth seminar on the nature of international, transnational, and domestic political violence, with some attention to the phenomenon of "state terrorism" (international repression) and its potential impact on the conduct of American foreign policy. The course also reviews and critiques current explanations for terrorist behavior. Issues addressed include conceptualizing and defining terrorism, the structure of violent politics, the lessons and patterns from the history of contemporary political violence, State support for terrorism, and counterterrorism as a public policy problem.

INTL-569/ PSCI-569—National Security Policy
Three Credit Hours
Seminar which examines the components of United States security policy. Course discusses the roles and agencies involved in the development of national security policy. Consideration given to factors, both internal and external, affecting national security.

INTL-570—Homeland Security
Three Credit Hours
Seminar on homeland defense and security. The course takes an in-depth look at the agencies involved in homeland security and the interagency processes which exist to integrate the services of federal agencies and state and local governments with armed forces and defense agencies.

INTL-572—Legal and Ethical Dimensions of Intelligence and Homeland Security
Three Credit Hours
A study of the role of justice, ethics, integrity, and ethical behavior in homeland security and the intelligence community. The course examines ethical issues regarding the application of law and challenges associated with the protection of American citizens against internal and external threats. Consideration is given to the function of ethical conduct in the rule of law, use of authority, and exercises of governmental power as part of U.S. government responses to threats to homeland security. The course includes a thorough review of issues related to the rules of engagement, the U.S. Patriot Act, Border Patrol, and Security, the Transportation and Safety Administration (TSA) regulations, and the treatment of terrorists. Ethical dilemmas and practical applications are explored.

INTL-580—Introduction to Intelligence
Three Credit Hours
This course provides an introduction to the field of intelligence and national security. We will examine the history and development of United States intelligence community. Specific topics include the intelligence cycle, the relationship between intelligence professionals and policy makers, the restructuring of the U.S. intelligence community, oversight and accountability, and covert action as a policy option. The moral and ethical implications of intelligence practices will also be discussed.

INTL-581—Intelligence Research and Analysis
Three Credit Hours
This course seeks to develop in students the skills and abilities necessary for conducting basic intelligence analysis. A variety of exercises and practical applications are used to foster critical thinking skills, the planning and coordination of data collection from a variety of sources, and the use of analytic tools to establish connections between people, places, events and other entities. Students are exposed to computer software programs that visually depict complex relationships. Cross listed as CRMJ 581.

INTL-582—Intelligence Theory Application
Three Credit Hours
This course introduces the student to the discipline of intelligence and provides the student with an understanding of how intelligence systems function and how intelligence estimates and products are derived. By understanding the basic psychology of intelligence, organizational trends and cognitive cultural differences, the student will gain insight to how intelligence analysis actually transpires.

INTL-585—Topics in Intelligence
Three Credit Hours
Selected special topics or problems in the general area of intelligence to fit the needs of students as well as the specialized knowledge of the faculty – possible offerings include: Narco-terrorism, Weapons of Mass Destruction and Emerging Threats. Topics include the intelligence cycle, the relationship between intelligence professionals and policy makers, the restructuring of the U.S. intelligence community, oversight and accountability, and cover action as a policy option. The moral and ethical implications of intelligence practices will also be discussed.
INTL-600- Intelligence Internship
Three Credit Hours
This course provides the student with an opportunity to explore career interests while applying knowledge and skills learned in the classroom to real-world problems encountered in Homeland Security agencies/ the Intelligence Community (IC). The experience also helps students gain a clearer sense of future learning needs and provides an opportunity to build professional networks.
Prerequisite: Consent of Department or Program Head

INTL-601—Homeland Security Internship
Three Credit Hours
This course provides the student with an opportunity to explore career interests while applying knowledge and skills learned in the classroom to real-world problems encountered in Homeland Security agencies/ the Intelligence Community (IC). The experience also helps students gain a clearer sense of future learning needs and provides an opportunity to build professional networks.
Prerequisite: Consent of Department or Program Head.

Instructional Systems Design and Performance Improvement (ISPI)

ISPI-500-Foundations and Principles of Instructional Systems Design and Performance Improvement
Three Credit Hours
Overview of the field of instructional systems and performance improvement with emphasis on the historical and philosophical roots of the discipline and the knowledge and skills underlying professional competence within the field.

ISPI-510-Learning and Cognition
Three Credit Hours
Examination of the various theoretical knowledge bases underpinning the science of learning, including psychological, behavioral, motivational, and neuroscience perspectives.

ISPI-520-Instructional Systems Design
Three Credit Hours
Exploration of effective processes for designing instruction and improving performance.

ISPI-535-Coding and Digital Applications
Three Credit Hours
Introduction to computational concepts and basic programming. Students will develop confidence in their ability to apply programming techniques to problems in a broad range of fields.

ISPI-540-Principles of Learning Architecture and Environments
Three Credit Hours
Introduction to innovative trends and practices in online learning and other e-learning environments. The course includes team-based activities focused on the design of e-learning tools and learning content management systems.

ISPI-545-User Experience and Design Thinking
Exploration of the theory and practice behind design thinking as applied to the evaluation of information interfaces from a user-centered design perspective including User Experience (UX) and User-Interface (UI).

ISPI-550-Leadership in Instructional Systems Design and Performance Improvement
Three Credit Hours
Overview of organizational and leadership theories commonly used in the field of instructional systems design and performance improvement. The course includes attention to organizational dynamics, leadership philosophies, and methods for assessing leadership styles.

ISPI-555-Training and Performance Improvement
Three Credit Hours
Exploration of systematic approaches to training and performance improvement. Attention is given to application of training, procedures, and methodologies that enhance learning and development.

ISPI-560-Performance Improvement, Systems Assessment, and Usability
Three Credit Hours
Application of principals of measurement, assessment, and evaluation in learning situations, including development and evaluation of assessment instruments, instructional decision-making, program evaluation, and exploration and application of basic concepts and methods of usability.

ISPI-565-Product Development and Performance Improvement
Three Credit Hours
End-to end product development as well as the systems approach critical to conceive, create, assess, and launch products and programs for performance improvement including usability testing. The Course involves processing, retrieving, and editing multimedia data and files (i.e., storyboarding, sound, music, graphics, images, video, and authoring tools) as part of constructing content for instruction.

ISPI-570-Capstone in Instructional Systems Design and Performance Improvement
Three Credit Hours
Development and implementation of a capstone project and portfolio showcasing the effective application of knowledge and skills in instructional systems design and performance improvement using appropriate processes, instructional materials, and technologies to improve learning and performance.

Leadership (LDRS)

LDRS-710—Ethics, Values, & Principled Leadership
Three Credit Hours
In this course students will study ethics, to include its philosophical foundations. Students will also learn and practice ethical decision making through dilemma resolution processes. Leadership virtues, values, and character will be emphasized as leadership essentials. Servant leadership, authentic leadership, and the role of individual spirituality will be explored. Principled leadership will be defined as the subscription to a particular set of positive values.

LDRS-711—Leading Change: Organization Development and Transformation
Three Credit Hours
In this course students examine the leadership processes associated with achieving effective change, including transformational leadership. Students will study the conscious and purposeful processes involved in developing an organization's capabilities targeted toward achieving its mission. Students will engage in organizational diagnoses and study leader intervention methods aimed at achieving organizational change with the goal of improvement toward mission accomplishment.
Prerequisite: LDRS 722 or LDRS 750

LDRS-712—Leading Teams: Coaching, Culture, Diversity, and Globalization
Three Credit Hours
This course focuses upon team development through leadership in an environment characterized by diversity. Students learn about effective team development strategies and the role that leaders play in coaching. Students also examine the role of culture in organizations as it impacts behavior, group effectiveness, and the capability of the organization to learn. Globalization and international cultures are also explored.

LDRS-714—Strategic Leadership, Vision, Mission and Contemporary Issues
Three Credit Hours
The critical importance of vision as purposeful direction is emphasized in this course. Strategic leadership is examined as the alignment of the organization with its environment in terms of mission orientation. Contemporary issues are derived from the examination of the current environment for
leadership and leaders.
Prerequisite: LDRS 722 or LDRS 750

LDRS-715—Leadership Capstone Project
Three Credit Hours
Students will conduct a formal research project under the guidance of a professor who serves as the project monitor. The project will focus upon leadership or a topic directly related to leadership.
Prerequisites: Research Methods course (PSCI 501 or EDUC 512), Communications course (BADM 713 *or* LDRS 723), LDRS 722 and all remaining required or elective LDRS courses. During a student's last term of degree completion, this course may be taken concurrently with an LDRS-prefix courses.

LDRS-716—Independent Study
Three Credit Hours
An in-depth study of a selected topic in leadership.
Prerequisite: Permission of the Department Head

LDRS-722/BADM-722—Leadership in Organizations: Principles and Practices
Three Credit Hours
This course is a seminar that focuses on the understanding and application of organizational theory and leadership principles. In addition, the course will include components on developing individual leadership skills and different theories of organizations. The applications component of the course will include a variety of approaches such as cases, films, guest speakers, individual self-assessments, role-play, team building exercises, and a leadership portfolio.

LDRS-723/BADM-713—Communications for Leadership
Three Credit Hours
This course provides insight on the role of organizations as communication systems in which effective writing and speaking are crucial. Emphasis is on developing awareness of verbal and written styles, interpersonal skills, and creating a repertoire of writing and speaking strategies.

LDRS-733-Special Topics in Leadership Studies
Three Credit Hours
Directed readings on a specific topic in leadership.

LDRS-750—Evolution of Military Leadership Thought
Three Credit Hours
This foundational course presents principles, theories, and empirical models of effective and ethical leadership. The subject of leadership will be examined primarily as a behavioral science and applied in the specific context of military teams, units, and organizations. Through a variety of approaches and methods, the course will analyze and evaluate literature, research, and actual case studies relating to military leadership.

LDRS-751—Survey of U.S. Military Leaders
Three Credit Hours
This course gives the student the opportunity to apply the leadership theories and models learned in LDRS 750 to examine U.S. military leaders. The course will focus on 13 selected U.S. military leaders. These leaders will be examined from their historical significance, their successes/failures, their styles, their backgrounds, how they developed as leaders, their leadership skills and effectiveness.
Prerequisite: LDRS 722 or LDRS 750

LDRS-752—Survey of World Military Leaders
Three Credit Hours
This course studies military leadership in world history. It seeks to identify the qualities and precepts of military leadership in different places and times, and to distill from them applicable principles and instructive examples for contemporary or future leaders. It examines military leadership at the strategic, operational, and tactical levels, and in the eras of antiquity, early modernity, and the 20th century. Its focus is upon non-American military leaders.
Prerequisite: LDRS 722 or LDRS 750

LDRS-753—Strategy & Contemporary Military Leadership Issues
Three Credit Hours
This course will focus on contemporary military leadership issues derived from the examination of the current environment for military leadership. In addition, the course will focus on the basics of strategy and will include a significant examination of U. S. military strategy.
Prerequisite: LDRS 722 or LDRS 750

LDRS-766/BADM-766—Human Resource Development
Three Credit Hours
This course examines Human Resource Development (HRD) as a field through the learning, development, and behavior of humans in social systems. These systems include but are not limited to, workforce, education, and family. Research from Management Science, Education, Psychology, and Sociology strengthen HRD theory and practice. The purpose of this course is to explore the integration of the individual into work organizations by examining work issues in learning, training, leadership, and psychosocial development. A primary focus of this course is on applied performance management informed by human sciences research as a tool that can be applied to productivity.
Note: This course relates to, but is distinct from, BADM 768 Human Resource Management.

Mathematics (MATH)

MATH-511—Number Theory
Three Credit Hours
The Euclidean algorithm; prime and composite integers, elementary Diophantine equations, Pythagorean triples, Euler's phi-function, congruences, Euler-Fermat theorems, exponents and primitive roots, quadratic residues.

MATH-512—History of Mathematics
Three Credit Hours
A survey of the development of mathematics from the time of the ancients to the present, analysis of causes for the retardation of the advancement of mathematics in different centuries, contributions by underrepresented cultures and selected reading to show the contributions of mathematics to the development of science.

MATH-514—Methods for Middle/Secondary Mathematics
Three Credit Hours
Various methodologies for teaching middle and secondary mathematics will be introduced and used in the course. The emphasis will be on using techniques and ideas suggested in the NCTM standards and South Carolina Frameworks. Ideas on how to supplement textbook material and how to motivate students will be presented. Students in the course will have the opportunity to practice the techniques presented. Note: All undergraduate mathematics prerequisites must be completed before taking this course.

MATH-518—Technology in Mathematics Classrooms
Three Credit Hours
This course will introduce new technological developments and explore ways to use calculators, computers, etc. in the teaching of mathematics.
Note: May be substituted for MATH 618.

MATH-521—Modern Geometry
Three Credit Hours
A reexamination of elementary geometry from an advanced standpoint. Metric and synthetic approaches to plane and solid geometry, topics in non-Euclidean geometry.

MATH-530—Linear Algebra
Three Credit Hours
A linear algebra course which emphasizes the geometry of vectors in two-and three dimensions. Topics include linear transformations, bases, orthogonality, matrix algebra, and applications in the real world as well as applications in mathematics.

MATH-532—Modern Algebra
Three Credit Hours
An introduction to the terminology, concepts, and methods of modern Abstract Algebra. Topics discussed include groups, rings, integral domains, fields, and isomorphism. Examples drawn from familiar number systems are used to illustrate elementary properties of the systems discussed.

MATH 542—Probability and Statistics
Three Credit Hours
Topics will include probability, random variables, important probability distributions, sampling distributions, point and interval estimation, hypothesis testing, regression, correlation, and analysis of variance. Emphasis will be given to applications in the fields of biology, business, agriculture, political science, and education.

MATH-545—Applications of Discrete Mathematics
Three Credit Hours
Discrete mathematical topics are introduced and used in various applications. Included are counting techniques, combinatorics, graphs, theory, and recurrence relations.

MATH-550—Mathematical Modeling
Three Credit Hours
The course is designed to strengthen the content knowledge needed to use mathematical modeling as an effective tool in problem solving. Topics include models which require use of some or all of the following: difference equations, curve fitting, graphing, spreadsheets, geometry, matrices, calculus, maximization and minimization, and simulation using random numbers.

MATH-553—Calculus from an Advanced Standpoint
Three Credit Hours
This course is designed to prepare teachers who may teach the Advanced Placement course in calculus. Emphasis will be on understanding background and concepts involved in the development of calculus. The use of graphing calculators and other technology will be demonstrated and practiced.

MATH-570—Selected Topics
Three Credit Hours
Special topics in mathematics which are not covered in other courses. This course may be repeated for additional credit, as the topic change.

MATH-618—Mathematical Technology Resources for STEM Education
Three Credit Hours
This course is applicable to multiple middle and high school academic disciplines: mathematics, science, technology, and middle/high school engineering such as Project Lead the Way. This course is 100% online in an asynchronous format; modules may be completed anytime within the week assigned. The course content will introduce students to open-source (free) mathematical software packages and tools. Middle and high school teachers will learn how to use these mathematical software packages and tools for mathematical modeling, classroom presentation and demonstration, illustration and exploration of mathematical concepts, and hands-on projects for teaching mathematics. The class will collaborate on a wiki. The prerequisite for this course will be successful completion of undergraduate class in College Algebra and Trigonometry.
Note: May be substituted for MATH 518.

Mechanical Engineering (MECH)

MECH-604—Advanced Mechanics of Materials
Three Credit Hours
Advanced topics in mechanics of materials, including three-dimensional stress and strain transformations, torsion of non-

circular prismatic bars, shear center, unsymmetrical bending, curved beams, flat plates, elastic strain energy, and theories of failure and application to machine and structural design.
Prerequisites: CIVL 304 or consent of program director.

MECH-605—Materials and Process Selection
Three Credit Hours
Engineering application of materials. Material, shape, and process selection for mechanical designs based on function, constraints, objectives, and free variables. Materials and the environment.
Prerequisites: MECH 304 Engineering Materials or consent of program director.

MECH-606—Fatigue and Fracture
Three Credit Hours
Stationary crack under static loading, energy balance, crack initiation and growth, dynamic crack growth, and fatigue of metals, ceramics, polymers, and composites.
Prerequisite: MECH 304 Engineering Materials or equivalent.

MECH-611—Advanced Fluid Mechanics
Three Credit Hours
Advanced Fluid Mechanics is a continuation of concepts presented in a typical undergraduate course in fluid mechanics. The course introduces vector, tensor, and indicial notation. Topics in incompressible fluid dynamics are explored at depth including viscous flows, the Navier-Stokes equations, and boundary layer theory. Basic concepts in turbulent flow are also covered.
Prerequisites: MATH 231 and MECH 311 or consent of program director.

MECH-615—Applied Heat Transfer
Three Credit Hours
Fundamentals of conduction, convective heat transfer, diffusive and convective mass transfer, heat-exchanger design; tradeoff associated with heat transfer systems, workable and optimal system.
Prerequisites: MECH 415 or consent of program director.

MECH-617—Advanced Topics in Renewable Energy Systems
Three Credit Hours
Advanced topics in renewable energy sources to include solar heating and cooling, wind resource characteristics and assessments; wind turbine technologies (fixed and variable-speed turbines); wind power transmission; integration and interconnection issues; and photovoltaic energy. Surveys the life cycle cost and present value to evaluate systems. Same as MECH 417 but includes graduate student project / report.
Prerequisites: MECH 415or consent of program director.

MECH-618—Energy Sources, Technology, and Policy
Three Credit Hours
Multidisciplinary overview of energy technologies, fuels, environmental impacts, and public policies. Quantitative engineering analysis in energy, including the differences among fuels and energy technologies, the electricity sector, liquid fuels, conventional fuels, renewable fuels, impacts on the environment, basics of atmospheric chemistry, and water use for power plant cooling. Energy policy and the societal aspects of energy, such as culture, economics, war, and international affairs, are covered.
Prerequisites: MECH 415 or consent of program director.

MECH-619—Power Systems Engineering
Three Credit Hours
Physical features, operational characteristics, and analytical models for major electric power systems and components; advanced techniques for solving large power networks; load flow, symmetrical components, short circuit analysis.
Prerequisites: MECH 415 or consent of program director.

MECH-625—Computer-Aided Design and Analysis
Three Credit Hours
Geometric and solid modeling, finite element analysis, optimization, rapid prototyping. Emphasizes practical utilization of computer-based design tools.
Prerequisites: MECH102 and MECH 225 or consent of program director.
Co-requisite: MECH 635.

MECH-631—Advanced Engineering Mathematics
Three Credit Hours
Classification and solution of partial differential equations; includes linear superposition, separation of variables, Fourier and Laplace transform methods, Green's functions, similarity solution, and spectral methods; introduction to solution of nonlinear partial differential equations, including both exact and approximate techniques, with a strong emphasis on physical systems.
Prerequisite: MATH 335 (or equivalent undergraduate Applied Mathematics II course) or consent of program director.

MECH-635—Computer-Aided Design and Analysis Laboratory
0 Credit Hours
Non-credit laboratory to accompany MECH 625.
*Co-requ*isite: MECH 625

MECH-640—Manufacturing Process and Design
Three Credit Hours
Selection and analysis of manufacturing processes. Product and process design for automated manufacturing. Economic analysis of manufacturing. Automated manufacturing, knowledge-based systems, and flexible product manufacture.
Prerequisites: MECH 340 or consent of program director.

MECH-645—Machine Design
Three Credit Hours
Selection, design, assembly, and analysis of common machine elements including springs, shafts, gears, clutches, brakes, and bearings. Computer-based methods of optimization employed when appropriate.
Prerequisites: MECH 345 or consent of program director.

MECH-650—Modeling, Analysis, and Control Systems
Three Credit Hours
Methods for analytical modeling, analysis, prediction, and control of linear, stationary time series of multidisciplinary dynamic systems, including mechanical, electrical, electro-mechanical, hydraulic and pneumatic systems; includes examples of advanced research in nonstationary time-series modeling and applications in manufacturing and other areas. Students complete a project on a topic of their choice.
Prerequisite: MECH 350 and MECH 450 or consent of program director.

MECH-655—Advanced Mechatronics
Three Credit Hours
Integrated use of mechanical, electrical, and computer systems for information processing and control of machines and devices. System modeling, electro- mechanics, sensors and actuators, basic electronics design, signal processing and conditioning, noise and its abatement, grounding and shielding, filters, and system interfacing techniques.
Prerequisite: MECH 350 and MECH 450 or consent of program director.

MECH-660—Advanced Design
Three Credit Hours
Creative decision-making processes for design. In-depth study of design in mechanical engineering. Quality functions, robust design, axiomatic design, and design for assembly.

MECH-670—Applied Aerodynamics
Three Credit Hours
Applied Aerodynamics introduces the basic theories for analyzing the aerodynamic forces on a vehicle in flight. Topics include incompressible flow over airfoils and finite wings, laminar and turbulent boundary layers in airfoil analysis, and boundary layer transition.
Prerequisites: MATH 231 and MECH 311 or consent of program director.

MECH-697—Special Topics in Mechanical Engineering
Three Credit Hours
Special topics in mechanical engineering will be offered to graduate students occasionally when the interest of the students and the availability of an instructor dictate. The syllabus must be approved by the mechanical engineering faculty. Since the content of the course may change, a student may repeat this course for credit with the permission of the department head.
Prerequisites: Consent of program director.

ENGR-698—Engineering Internship
Zero to Six Credit Hours
This course gives engineering students real-world, practical application and experience to complement the classroom education they have already received. The student will pursue advanced knowledge and understanding by working for a company completing engineering requirements. The scope of activities is tailored to the educational focus of the student in consultation with the faculty advisor and company supervisor.
Prerequisite: Department Head approval

MECH-702—Theory of Elasticity
Three Credit Hours
Plane stress and plane strain; two-dimensional problems in rectangular and polar coordinates; strain energy methods; complex variables in two-dimensional problems; the general equations of three-dimensional elasticity.
Prerequisites: MECH 604 (Advanced Mechanics of Materials) or consent of program director.

MECH-703—Theory of Plasticity
Three Credit Hours
Stress and strain tensors; elastic stress-strain relations, criteria of yielding; plastic stress-strain relations; elastoplastic problems of spheres and cylinders; the plane elastoplastic problem; the slip-line field.
Prerequisites: MECH 604 (Advanced Mechanics of Materials) or consent of program director.

MECH-708—Mechanics of Composite Materials
Three Credit Hours
Analysis of stress, strain, and strength of fiber reinforced composite laminates and structures. Topics include laminated plate theory, stress analysis of orthotropic plates, damage mechanisms, fatigue, impact, thermal and environmental effects.
Prerequisite: MECH 604 (Advanced Mechanics of Materials) or consent of program director.

MECH-750—Introduction to Modern Control Engineering
Three Credit Hours
State variable methods, eigenvalues, and response modes; controllability, observability, and stability; calculus of variations; optimal control; control of regulator and tracking servomechanisms; Hamilton-Jacobi, dynamic programming; deterministic observers, Kalman filter; discrete and continuous time.
Prerequisite: MECH 350 and MECH 450 or consent of program director.

MECH-755—Nonlinear Control Engineering
Three Credit Hours
Characteristics of nonlinear systems; State space formulation; stability criteria; Liapunov functions; describing functions; signal stabilization; Popov and circle criteria for design; adaptive control-systems.
Prerequisite: MECH 350 and MECH 650 or consent of program director.

MECH-771—Compressible Flow
Three Credit Hours
Compressible Flow combines aspects of classical thermodynamics and equilibrium mixtures with compressible fluid flow. Chemical thermodynamics and real gases are explored. One-dimensional flows through nozzles and diffusers are analyzed. Normal and oblique shock relations, Prandtl-Meyer flow, and method of characteristics are also introduced.
Prerequisites: MATH 231 and MECH 611 or consent of program director.

MECH-772—Computational Methods in Thermal Sciences
Three Credit Hours
Computational Methods in Thermal Sciences is an introduction to the field of Computational Fluid Dynamics (CFD). Finite difference methods for the solution of fluid dynamics and heat transfer problems are utilized. Students will gain a general understanding of numerical methods, computer programming, and fluid dynamics and heat transfer through project-based assignments. Finite volume methods are also introduced.
Prerequisites: MATH 231, MECH 611, MATLAB experience or consent of program director.

MILITARY HISTORY (MLTH)

MLTH-500~Methods and the Historiography of Military History
Three Credit Hours
An introduction to the methodologies of military history and the nature of historical sources pertaining to warfare (e.g., archaeological, geophysical, archival, and technological). It also introduces students to the broader questions, historiographical debates, and epistemological questions regarding the study of war and militaries as institutions.

MLTH-501~Strategic Thinkers and Military Intellectuals
Three Credit Hours
An examination of the masters of the military art and key military strategists and intellectuals throughout history, including Thucydides, Sun Tzu, Machiavelli, Jomini, Clausewitz, Mahan, Douhet, Eisenhower, and Mao Zedong. It introduces students to the theories and practices of war; the interrelationships among politics, strategy, technology, and society; and current thought on the future of war.

MLTH-502~Leadership in the Crucible of War
Three Credit Hours
An examination of the long history of military leadership in world history. It will examine leadership across time and the different ranks, while also placing leadership within societal contexts. This course considers models and exemplars of military leadership at the tactical, operational, and strategic levels across select epochs in history, from warrior-kings and four-stars to centurions and lieutenants.

MLTH-503~U.S. Military History
Three Credit Hours
This course examines patterns in U.S. military history from the colonial era to the present day. Significant attention is placed on operational military history and the larger strategic, political, social, and cultural conditions that have shaped American military history. The course also highlights how and why Americans have waged war; the common soldier's experience, uniforms, and weaponry in different conflicts; civil-military considerations; and the dynamic ways that technology has affected warfare.

MLTH-504~Non-Western Military History
Three Credit Hours
This course examines patterns in military history in the non-western world in Africa, the Americas, the Middle East, and Asia. While significant attention will be devoted to operational history and larger issues of strategy, the course will examine how and why these societies waged war. It will also explore the experience of warfare throughout the non-western world as it affected native peoples, common soldiers, governments, and military institutions.

MLTH-505~Irregular Warfare
Three Credit Hours
This course examines the history of irregular, or guerrilla, warfare from the ancient world to the present day. Attention will be devoted not only to the tactical experience of guerrilla war, but also to the social, economic, and political contexts that have fostered these wars. No less important, the course will examine counter insurgent operations and the strategic and grand strategic considerations that have guided them.

MLTH-506~Naval and Amphibious Warfare
Three Credit Hours
A history of warfare at sea from ancient times to the present with emphasis on the historical development of naval architecture, technology and organization; the evolution of naval tactics and strategy, and the influence of seapower upon world affairs. The origins and development of the U.S. Navy and Marine Corps, and upon the role of joint operations and amphibious warfare, are also examined.

MLTH-507~The History of Airpower
Three Credit Hours
An examination of the development of manned flight and the emergence of air power in military history in the 20th century to the present. Air power theorists and practitioners such as Douhet, Mitchell, Trenchard, de Seversky, Harris, LeMay, and Warden are examined, as well as technological developments in aeronautical engineering and its effects on both the doctrine and application of air power. The course also examines the possibilities and limits of air power and its offensive, defensive, and deterrent capabilities in national strategy.

MLTH-511~Greco-Roman Warfare
Three Credit Hours
A survey of warfare in the ancient Mediterranean, particularly among the Greeks and Romans, from the era of the Trojan War to the height of the Roman Empire. It addresses cultural attitudes toward war, military service, and violence, the institutions that supported the waging of war and raising of armies, the actual progress of campaigns and battles, the impact of plunder and war losses on ancient societies, and the role of technological and tactical innovations in the changing practice of war. It also considers in what ways or to what extent the warfare of the Greeks and Romans represents the heritage of modern war.

MLTH-512~Hundred Years' War
Three Credit Hours
This course examines the nature, significance, and consequences of the Hundred Years' War (ca 1337 to 1453) between England and France. It examines the strategies, organization, weaponry, and leadership of the English and French armies during military operations, as well as the interplay of tactics and topography at the decisive battles of Crécy, Poitiers, and Agincourt.

MLTH-513~French and Indian War (Global Seven Years' War)
Three Credit Hours
A study of one of the most significant wars in American and world history: the French and Indian War in North America, or the Seven Years' War (1756-1763) as it was known in a global setting. The war pitted Britain, Prussia, and the Thirteen Colonies against France, Austria, Russia, and Spain in a global contest for imperial domination stretching from America to the

Caribbean, Europe, the Mediterranean, Africa, India, and the Philippines. In America, Indian nations defined much of the character of the war and profoundly influenced the war's origins, military character, and outcomes.

MLTH-514~American Revolution
Three Credit Hours
An examination of the origins and consequences of the American Revolution, paying particular attention to the War for American Independence (1775-1783); comparative leadership of American and British forces; the salient role of George Washington and his definition of the Continental Army; the principal campaigns and battles of the war; the naval and international diplomatic aspects of the war; irregular warfare involving rebels, loyalists, and Indians; and the relationships between the Revolution and broader patterns of civil-military relations.

MLTH-515~Napoleonic Wars
Three Credit Hours
A survey of the Napoleonic Wars, including those of the French Revolution, from a distinctly military perspective. Although the causes, ideologies, and mentalities of the revolutionary era will be explored, the class will emphasize the study of the conduct of war from the strategic, operational, and tactical perspectives with the goal of understanding how these wars, and Napoleon himself, shaped the future conduct of warfare. Attention will also be devoted to logistics and the experience of war among the soldiery of the period.

MLTH-516~American Civil War
Three Credit Hours
A study of the military history of the Civil War. In so doing the course will discuss those factors and people that influenced and shaped the conduct of war in the middle of the nineteenth century. Although there will be an emphasis upon strategic, operational, and tactical military history, the course will also explore the experience of combat, logistics, technological innovation, POWs, and the importance of naval operations upon the outcome of the war.

MLTH-517~American Indian Wars
Three Credit Hours
A study of the patterns of Native American warfare from the advent of European colonization in the 1500s to the end of organized Indian military resistance in the United States in the 1890s. It particularly examines the specific wars that Native nations waged against European colonizers as well as American settlement expansion. It also emphasizes comparative history, examining global patterns of warfare involving western or colonial powers and non-western indigenous peoples.

MLTH-518~World War I
Three Credit Hours
This course studies the history of World War I from its causation to the consequences of the Armistice in 1918. It will focus on all military aspects of the war from the strategic to tactical. It will examine the impact of nationalism and the rise of modern total war. The experience of warfare as well as the profound technological innovations of the conflict will also receive significant attention.

MLTH-519~World War II in Europe and Africa
Three Credit Hours
A study of the European and African theaters of World War II from the 1930s to 1945. The class will examine the causes of the conflict and the course of its military campaigns. The course will devote attention to air, land, and naval combat. The class will ultimately place the events and consequences of the war in the context of the military, diplomatic, and political history of the twentieth century.

MLTH-520~World War II in the Pacific
Three Credit Hours
A study of the Pacific theater of World War II from the 1930s to 1945. The class will examine the causes of the conflict and the course of its military campaigns. The course will devote attention to air, land, and naval combat. The class will ultimately place the events and consequences of the war in the context of the military, diplomatic, and political history of the twentieth century.

MLTH-521~The Resistance in World War II
Three Credit Hours
An examination of resistance movements and their significance to Allied victory in World War II. In Europe and Asia, political and religious groups waged a war of resistance as partisans or guerillas against Nazi or Japanese military forces. Their patterns of resistance included irregular warfare, espionage, media, and sabotage.

MLTH-522~The Red Army
Three Credit Hours
A study of the Soviet Red Army, from its revolutionary origins to its development as the mighty engine that destroyed the Nazi Wehrmacht on the Eastern Front. It will trace its post-World War II evolution in the Cold War, its operations ranging from eastern Europe to Afghanistan, and its evolution as the Russian Army of the present.

MLTH-523~The Vietnam War
Three Credit Hours
An examination of the history of the American war in Vietnam, beginning with the foundations of French imperialism in Indochina, the Japanese occupation during World War II, and the Vietnamese resistance during the First Indochina War. It will chart the contours of American policy toward Indochina and the escalation of military responses under presidents Kennedy and Johnson. Significant attention will be placed upon military operations from 1965 to 1972, the war's impact on American society; and the North Vietnamese conquest of South Vietnam in 1975.

MLTH-524~The Global Cold War
Three Credit Hours
The Cold War was arguably the twentieth century's most significant long-term conflict. This course takes an international perspective on its varied causes and consequences in Europe,

the Americas, Asia, and the Middle East. Major topics will include U.S.-Soviet relations and nuclear diplomacy; wars in Korea, Vietnam, and Latin America; crises in Berlin, Budapest, Prague, and Cuba; decolonization and the rise of the "Third World"; "the containment doctrine"; espionage and McCarthyism; and the (surprising) end of the Cold War.

MLTH-525~Global War on Terrorism
Three Credit Hours
This course examines the US and international military campaigns against global terrorism in the aftermath of the 9/11 attacks. Attention is given to the historical origins of Islamic terrorism, and the rise of al-Qaeda, ISIS, and other terrorist organizations, their ideologies, and their methods. The military campaigns in Afghanistan (Operation Enduring Freedom); Iraq (Operation Iraqi Freedom), and the Levant (Operation Inherent Resolve) will be examined, in a broader political-military context of state-building, counterinsurgency strategies, and counterterrorism efforts.

MLTH-526~Arab-Israeli Conflict
Three Credit Hours
A study of the turbulent history between the Arab countries of the Middle East and the state of Israel from 1900 to the present. The course will cover the rise of the World Zionist Organization, the impact of WWI and WWII diplomacy on the topic, the creation of the state of Israel, the impact of the state of Israel on the Palestinian people, the various wars and conflicts that have emerged between the Arab states and Israel, as well as the first and second Intifada in the occupied territories, the U.S. role in the conflict, and the impact of the Arab-Israeli conflict on terrorism.

MLTH-530~Special Topic: Conflict Studies
Three Credit Hours
Examples include the Fall of Rome, the Thirty Years' War, Korean War, or other interdisciplinary courses on conflicts.

MLTH-550~History of War and Society in China
Three Credit Hours
This course charts war and violence in China from the Bronze to the Nuclear Age. It would include topics such as chariot warfare, the emergence of infantry armies and the crossbow, professional generals and their manuals on military strategies and tactics, warfare against the nomads, farmer-soldiers and agricultural garrisons, knight-errantry and revenge killings, banditry, piracy, the development of firearms, peasant rebellions and secret societies, martial arts, the Boxer Rebellion, Warlordism, the Red Army and the Jiangxi Soviet, the War of Resistance against the Japanese, Chinese intervention in the Korean War, the military suppression of the Tian'anmen protests, and the modernization of the People's Liberation Army.

MLTH-551~The Samurai and the Japanese Military Tradition
Three Credit Hours
A study of the rise of the Samurai warrior tradition during the Heian period, the emergence and endurance of military government in Japan, the Japanese defeat of the Mongols, the feudal Warring States period, Hidoyoshi's invasion of Korea and the start of the First East Asian war, the de-militarization of the Samurai during the Tokugawa period, the infusion of Samurai values during the modernizing Meiji period, the Samurai ethic and the Japanese soldier in the Sino-Japanese War and the Russo-Japanese War, the militarization of the pre-war Japanese government and the invasion of Manchuria, and the Samurai legacy connection with atrocities and Kamikaze during WWII.

MLTH-552~The Viking Military Tradition
Three Credit Hours
The image of the fierce Vikings, spreading fear and dread across Europe, has been transmitted into the popular culture of today through literature, music and movies. This course will use both primary texts and material culture to consider what gave the Vikings their military prowess, as well as the cultural impact they made in their original homelands, and across Europe, Russia, and Byzantium.

MLTH-553~King Alfred's Wars
Three Credit Hours
A study of the social, economic and cultural strategies the Anglo-Saxon king used to counter Viking aggression in England in the 9th Century. It would also look at the major battles fought between the Vikings and Anglo-Saxons while connecting the strategic plans of Alfred's wars to his larger cultural agenda.

MLTH-554~War and Society in Early Modern Europe, 1350-1650
Three Credit Hours
Examines war as a chronic condition, big business, way of life, and determinant of statecraft in the three centuries following the Black Death. It gives special attention to the logistical, engineering, and financial challenges posed by the advent of firearms and other technical innovations after the 1490s.

MLTH-555~The Dutch Revolt
Three Credit Hours
Explores the complicated nexus of religious, dynastic, economic, and social developments that produced the Dutch Revolt of 1568-1648. It also considers how eight decades of chronic warfare altered the landscape and shaped the culture of the Low Countries.

MLTH-556~War and Society in the Age of Total War
Three Credit Hours
Examines the social, economic, cultural, and political dynamics of the home fronts in Europe during World War I and World War II.

MLTH-557~The Double-V Campaign: African-Americans in World War II
Three Credit Hours
This course examines the Double-V Campaign that was waged by African-Americans during World War II—victory abroad and

at home~and how African-Americans mobilized an enduring social movement.

MLTH-558~Social Movements in the Vietnam Era
Three Credit Hours
A survey of the political, social, and cultural movements of the 1960s—particularly the Civil Rights Movement, the anti-war movement, and the counterculture—and how they affected world opinion as well as the conduct of US policymaking and warfare in the 1960s and 1970s.

MLTH-559~The Modern Middle East
Three Credit Hours
A survey of Middle East history with an emphasis upon those events that provide historical background and context for current affairs in the region. It covers from around 1800 to the present, with an emphasis on the twentieth- and twenty-first centuries, beginning with the decline of the Ottoman Empire, and on to the impact of WWI and WWII, Zionism, the rise of modern Middle East states, the Israeli-Palestinian conflict, Arab nationalism, the rise of political Islam and Islamic fundamentalism.

MLTH-560~Military Coups and Dictators in Latin America
Three Credit Hours
This course examines the cycle of military coups and dictatorships that has shaped Latin America since 1810. Students will be asked to consider the following themes throughout the semester: 1) caudillismo, 2) left-wing/right-wing political ideologies, 3) popular reactions/resistance to authoritarianism, 4) U.S./Latin American relations.

MLTH-561~History of the U.S./ Mexico Borderland
Three Credit Hours
A survey of the history of the U.S./Mexico border region, from the Pre-Columbian period to the present day. Students will be asked to consider the following themes throughout the semester: 1) the significance of the Spanish colonial heritage, 2) the treatment of marginalized groups (indigenous peoples, women, peasants, etc.), 3) Manifest Destiny, 4) immigration and globalization.

MLTH-565~Special Topics in War and Society
Three Credit Hours
Examples include studies of war and memory, the U.S. Home Front in World War II, war and society in Ireland, the history of American veterans, or other interdisciplinary courses on war and society.

MLTH-600~Capstone Seminar
Three Credit Hours
The Capstone Seminar creates a cumulative program experience designed to synthesize student knowledge and apply it towards a major research endeavor in a chosen field of study. Students are expected to demonstrate analytical, research, and writing skills as they produce an essay of significant length.

MLTH-601-602~Master's Thesis
Six Credit Hours
These courses enable students to produce a deeply researched and publication-ready work of historical scholarship on a chosen topic of interest.

Physics (PHYS)

PHYS-510—Engineering Applications in STEM
Three Credit Hours
The flight of heavier than air vehicles is a wonder and a marvelous application of the principles of physics. Turning these principles into technology which is safe and effective requires knowledge and understanding of these principles of physics which makes flight possible and a command of structured engineering design which makes useful applications possible. This course provides both an understanding of the physical principles of flight and an introduction to the engineering design process. Teachers involved in the STEM disciplines will find the design projects addressed in this course directly applicable as student design projects in their classes. Through these case studies your students can not only learn that the underlying physics in not that difficult but can also have fun implementing what they learn in the design projects.

Political Science (PSCI)

PSCI-500/CRMJ-500—Seminar in Social Science
Three Credit Hours
An interdisciplinary introduction to the social sciences with an emphasis on the perspectives and patterns of inquiry of several subfields. This course surveys the empirical and theoretical contributions of different social science disciplines in order to provide a fundamental understanding of the dynamics of individual and group behavior. Topics include ethics, social science methodology, and the key criticisms of these methods.

PSCI-501/CRMJ-501—Research Methods in Social Science
Three Credit Hours
An examination of methods in the scientific study of social phenomena with emphasis given to the systematic study of society and contemporary research problem in the social sciences, including research design, data collection, data analysis, and computer applications.

PSCI-502—The American Federal System
Three Credit Hours
This course will examine the origins of and the relationships between the national government and the state and local governments. Topics covered will include the nature of the federal system and overviews of the functions and powers of the national and state and local governments. Particular attention will be given to an evaluation of the policy-making process through a study of one or more policy areas such as urban policy, welfare policy, and environmental policy.

PSCI-503—The Politics of American Democracy: Political Behavior, Interest Groups, and Political Parties
Three Credit Hours
This course will examine the political process in the United States, including an analysis of public opinion, the mass media, political parties, interest groups, voting behavior, and elections. It will incorporate an introduction to the basic methods of data analysis

in order to allow students to read and understand social science literature.

PSCI-506—Legislative Process
Three Credit Hours
A study of the organizations and procedures of a legislative body with attention on its role in policy formation and its relationships with other parts of a political and governmental system.

PSCI-507—American Presidency
Three Credit Hours
A study of the modern presidency with attention to its origin and its historical and constitutional development. Emphasis is placed on the examination of the various roles and functions of the President and on an analysis of presidents in action.

PSCI-509—Urban Politics
Three Credit Hours
A survey of urban areas and their development with emphasis on the politics of U.S. urban and suburban areas. Topics explored through lectures, seminars and student-led discussions of the professional literature include types of urban governance; urban demographics; suburbanization and gentrification; "urban sprawl"; the development of professionalized city planning; public administration and finance; pluralist competition in city regimes; race and politics; economic development; issues of federalism; and city-county consolidation and state-city relations.

PSCI-510—Topics in Political Science
Three Credit Hours
Selected topics that fit the needs of students as well as the specialized knowledge of the faculty. Topics could range from stability and change in the American political system to the best way to attain security in a nuclear-armed world.

PSCI-521—Advanced Placement: American Government
Three Credit Hours
This course reviews and examines the materials, methods, and approaches utilized in organizing and teaching the high school advanced placement course on American Government. Successful completion of the course satisfies the state requirement for certification to teach the advanced placement American Government Course.

PSCI-555—Topics in Political Science Leadership Application
Variable One - Three Credit Hours
Selected topics in political leadership application. Topics could range from leadership studies of the American presidency; U.S. foreign policy decision makers; or global leaders. This course satisfies the "leadership application" requirement for students in the leadership graduate certificate program.

PSCI-561—Law and Legal Process
Three Credit Hours
A general survey of the American legal process (except for the criminal justice process) with emphasis on the nature and function of law, the organization of legal institutions (primarily the state and federal judiciaries), an introduction to civil law and the civil justice process, the roles of judges and lawyers, the judicial decision-making process, and the impact of court decisions.

PSCI-562—East Asian Affairs
Three Credit Hours
A survey of contemporary political and economic issues within China, Japan, Taiwan, and the Koreas. This course examines the governmental and economic institutions within each country with emphasis on intra-regional relations; bilateral relations between the individual countries and with other states including the United States; and regional issues that impact Asia, the Pacific, and the globe.

PSCI-563—South Asian Affairs
Three Credit Hours
A study of key countries in the region including India, Pakistan, Nepal, Afghanistan, and Sri Lanka, with an emphasis on issues of development and security concerns such as nuclear weapons development, territorial disputes, communal conflicts, and other forms of political violence. Attention is also paid to the great power aspirations of India and Pakistan and their relations with the United States.

PSCI-564—US Foreign Policy
Three Credit Hours
This course will address two major topics: (1) the constitutional and structural foundations of the American foreign policymaking process, through a consideration of the presidency, executive institutions (the state department, department of defense, the intelligence community, and Congress, as well as the ongoing dynamic relations among these actors. The role and impact of other relevant actors in the foreign policy formation process (i.e., the media, interest groups, as well as that of public opinion will also be addressed. (2) The second no less important issue we will address is that of globalization on the choices and freedom of action the United States had enjoyed since the end of WW II. The emergence of a transformed geopolitical environment as well will be reviewed.

Students will be guided in analyzing the new context of American foreign policy as follows: (a) engaging in individual and small group analysis and presentation on individual foreign policy cases, to wit., researching how impact of American foreign policy is interpreted by leaders and publics in selected countries; (b) looking at survey research to understand the shaping and role of American public opinion on the foreign policy process; and (3) cross-comparison of the views of various activist elite foreign policy influencers, and the manner in which these views enter the formal foreign policymaking process (for example, the cycling of key policymakers from government to think tanks, the media, and academic institutions.

Students will be expected to complete a comprehensive final exam as well as submit a research paper on a topic derived from the course content. Students with relevant experiences (such as military or government service, may with the instructors permission utilize such documentable experience in their research paper.

PSCI-565—International Politics
Three Credit Hours
By interlinking the study of international politics, global affairs, and geopolitics, this course aims to provide graduate students with a solid foundation for further study and work in the field. It applies the major theories, concepts, and debates in international politics to "real-world" events and issues to help students fully grasp the

nature and relevance of this field of study. It intertwines readings and discussion with students' own thinking to encourage critical thinking, analysis, research, and communication skills.

PSCI-566—International Political Economy
Three Credit Hours
This course examines the relationship between economic and political behavior and the various ways in which domestic and international "agents" use political processes, institutions, and regimes to influence state policies and the international environment. In doing so, it analyses why and how politics and economics interact to shape the way we live. The course contains three parts. The first focuses on the major theoretical perspectives on political economy, including mercantilism, liberalism, and Marxism. The second examines some of the major components of the modern world economy: multilateral trade, domestic trade policy, international finance, and monetary policy and exchange rates. Finally, the course investigates current issues in international political economy, such as the North-South gap, the role of multinational corporations, and the effects of globalization.

PSCI-567—Global Democracy
Three Credit Hours
This course looks at the question of democratic governance across the globe. It presents an understanding by the concept of democracy both theoretically and practically; a discussion of efforts to measure democracy in order to help differentiate between democracies and non-democracies; an exploration of the reasons behind the historical spread of democracy; and an investigation of the numerous challenges and obstacles to the spread and consolidation of democracy. Both domestic and international factors are important not only in promoting democracy but also in inhibiting its adoption. Finally, the course concludes with an overview of a number of regional and country-specific experiences/case studies related to the democratization process.

PSCI-569/INTL-569— National Security Policy
Three Credit Hours
Seminar which examines the components of United States security policy. Course discusses the roles and agencies involved in the development of national security policy. Consideration given factors, both internal and external, affecting national security.

PSCI-571—Comparative Politics
Three Credit Hours
This course introduces students to the core themes, ideological debates, and methodological approaches used in the field of comparative politics. In doing so, it encourages students to examine some of the questions of enduring interest to political scientists, including the origins and influence of the state, the causes and consequences of authoritarian and democratic forms of government. It also looks at variations within regime types and how they may affect the function of key political institutions and overall governance. As students engage with these questions, they will explore the interaction between economic, social, historical, and institutional factors in explaining political developments. Critical thinking and the ability to articulate clearly the strengths and weaknesses of different approaches are stressed throughout the course.

PSCI-572—International Organization
Three Credit Hours
This course examines the development and growth of international organizations and their relationship between each other as well as their member states. It focuses on the internal dynamics of the organizations as well as their external manifestations in sub-regional, regional, and global policies and programs. The organizations covered in the course are the United Nations, the North Atlantic Treaty Organization, the African Union, and the Arab League. The emphasis behind each organization is its origins, growth, and change. The course reviews the establishment of the United Nations and the original attempts by member states to correct the failures of the League of Nations before following the political and economic development of the organization. The North Atlantic Treaty Organization is examined in terms of its origins and how the organization continued to modify its purpose and mission as international dynamics altered around it. This will be compared to the defunct South East Asian Treaty Organization with the purpose of understanding why the former succeeded and the later failed. The course covers how and why the African Union was conceived from the Organization of African Unity and the development and progression of its policies to form a continental customs union and common market through the work of regional economic commissions. The Arab League is examined in terms of its original purpose, how and why the organization decreased in effectiveness, the growth of sub- regional organizations to carry out its original purpose, and its recent resurgence as a single voice for its members.

PSCI-573—Politics of Economic Development (Service Learning)
Three Credit Hours
By combining academic work with hands-on experience as a volunteer, this course provides students an in-depth understanding of the economic development process. The course begins by examining the concept of development and the forces that influence economic development and growth in developing countries. With a focus on the relationships between the market, state, and civil society, it covers the various components of development that economists typically study, including economic growth, income inequality, poverty, population, urbanization, migration, education, health and nutrition, and the environment. Throughout the course, individual readings and assignments are selected with a view to students' volunteer placements so they can apply the concepts covered in their on-the-ground work and share their experiences with others.

PSCI-574—Global Issues
Three Credit Hours
The course will review the new context for state interaction and global order. The most significant question is whether the international community can weather the storm of new challenges and threats without a central gatekeeper, such as the United States. Globalization has also given other states (established and newly emerging powers) opportunities to exploit the inability of the United States to foment a new architecture of stability and order. Follower states have found opportunities (many derived from the expanding and deepening global trading system) to undermine American dominance. Also, some states have moved to establish regional political and security alliances that not only speak to their needs (counter-terrorism, immigration, and natural resource exploitation, for example) but also dilute the "traditional" influence of the United States in these matters. At the same time, there has been a proliferation of "non-state actors" who are able to capitalize

on the measurable weakening of national authority and the hesitancy of nation-states to coherently identify, define, and deal with the new challenges.

Students will review the impact of global issues from two perspectives: (1) challenges and (2) opportunities within the framework that the traditional role of states as "gatekeepers," buffering and processing challenges to stability and order has been gradually been transformed. Throughout the course, student groups will take up several issues and proceed to analyze whether international institutions such as the United Nations, and regional and functional non-governmental organizations (NGOs) are in fact dysfunctional when confronted with the challenges of globalization. Student groups will also address the question of whether the Cold War origins and patterning of these NGOs are obstacles to the development of flexible and creative strategies. Finally, although it might be fairly argued that the traditionally conceived state's influence and role has been diminished, it can also be proposed that the state system will not wither away quietly, and that states will engage in behavior necessary to protect and grow their influence—newly emerging states may resist the influence of older states, but the former seeks similar symbols of power and behave in ways to enhance their own economic and political power on the world stage.

Students will be required to complete a comprehensive final exam and to submit a research paper that may be derived from one or more of the paradoxes and contradictions described above. Students with relevant experiences in the private sector, government, military, or non-governmental organizations may, with the permission of the instructor use such experiences to shape their research paradigms.

PSCI-575—US Foreign Policy Leadership
Three Credit Hours
This course examines the various principles and models of leadership and applies them to US Foreign Policy decision making with an emphasis on the leadership styles exhibited by different US presidents, secretaries of state, and national security advisers. The course covers leadership and decision making from the individual and group level perspectives and includes factors related to personal psychology, group dynamics, models of bureaucracy, evaluation of inputs, and interpretation/misinterpretation of information. The course applies these factors to a series of major US foreign policy decisions covering topics that include deploying the military, political negotiations, and economic bargaining. The case studies also range from those where a leadership decision must be made within hours or days to those where the decision required a year or more for formulation. In each case study, the leadership styles of the US president, secretary of state, and national security adviser (and in some cases the secretary of defense) are analyzed in terms of the principles and models of leadership and decision making.

PSCI-576—International Law
Three Credit Hours
This course is an introduction to public international law for students of international relations. The primary purpose of this course is to enhance students' understanding of the ways in which international law orders international politics. Why do sovereign states voluntarily forfeit maximum independence and agree to constrain their behavior in the international system? How and to what extent has international law been used in resolving conflicts between nations? How and to what extent has it facilitated the achievement of common goals? What is the relationship between international law and states' foreign policies? Emphasis throughout the course is on the substantive rules of the law, the relationship between law and politics, and on the historical episodes that illustrate the issues.

PSCI-577—Conflict Studies
Three Credit Hours
What causes war? What causes intergroup conflict short of war? Why do groups of people systematically kill other groups of people? What do we need to know to prevent conflict/war if possible, and prepare for it when necessary? Is it possible to prevent conflict/war (or prepare for it) if it is often caused by accidents, miscalculation, and misperception? With these questions in mind, this course will develop your ability to analyze the causes, conduct, and consequences of intergroup conflict and war. We will begin by exploring the consequences of war for personal, national, international, and global security. We will then examine theories about the causes of war and apply them to understand the occurrence of World War I, World War II, and the Cold War. Next, we will explore the conduct and consequences of these wars at the doctrinal, strategic, operational, and tactical levels. Finally, we will discuss contemporary issues in war, peace, and security, including the causes, conduct, and consequences of the war on terror and the war in Iraq, weapons proliferation, the future of military technology, the rise of new great powers, humanitarian intervention, and alternatives to war. During the course, you will develop critical reading skills by evaluating other scholars' theories, arguments, and evidence. As will become apparent, there are numerous theories that attempt to explain what causes war and/or peace. You are encouraged to challenge these theories and arguments.

PSCI-592—International Political Theory
Three Credit Hours
Major theoretical writing from the ancient Greeks to the present day with emphasis on a comparison of ideas and on the relationships between theories and contemporary problems.

PSCI-662—Constitutional Law: Civil Rights and Liberties
Three Credit Hours
A study of the underlying and basic principles of the Constitution as reflected in the leading decisions of the United States Supreme Court with special attention directed to the Bill of Rights and the Thirteenth, Fourteenth, and Fifteenth Amendments.

Project Management (PMGT)

PMGT-633—Fundamentals of Agile Project Management
Three Credit Hours
This course explores agile-related practices, methodologies, and applications in development and operational project environments. Learning experiences and team projects focus on developing the knowledge, skills, abilities and attitudes considered essential in effectively managing teams in adaptive project environments. Topics of study include the development of an agile mindset, theoretical and practical applications of agile practices, the transition and integration of these practices with other project management methodologies, along with the stages of the agile

development cycle. Students will apply tools and techniques in a learning environment that approximates adaptive project environments. ln addition, case studies will include applicable individual and organizational experiences with implementing agile methodologies.
Prerequisite: None. Work experience is recommended.

PMGT-650—Overview of Technical Project Management
Three Credit Hours
This course applies a systems engineering approach to project management and introduces the student to the entire lifecycle of technical projects as offered by Project Management Institute's A Guide to the Project Management Body of Knowledge (PMBOK® Guide) and other resources. Practical assignments are combined with industry-accepted standards for the purpose of developing a logical framework for managing and leading technical projects. The five major process groups of Initiation, Planning, Executing, Monitoring and Controlling, and Closing are investigated in relationship with the ten knowledge areas of Integration, Scope, Time, Cost, Quality, Human Resources, Communication, Risk, Procurement and Stakeholder Management. Professional responsibility and ethics will receive particular emphasis. A Capstone Project requirement is a major component of this course and integrated into the other Technical Project Management (TPM) courses, PMGT 651, PMGT 652, and PMGT 653. A formal presentation of the completed TPM Capstone Project to industry, academic and public professionals will be required at the successful completion of the fourth TPM course.
Prerequisite: None

PMGT-651—Technical Project Planning and Scheduling
Three Credit Hours
This course explores the principles and applications of work breakdown structures (WBS); the Critical Path Method (CPM) and Program Evaluation and Review Technique (PERT); earned value management, critical chain scheduling and buffer management; definition and allocation of resources; resource leveling; and schedule compression. Course content includes realistic projects, case studies, MS Project computer applications, along with web-based management and technology tools. Each student will continue working on their Capstone Project started in PMGT-650.
Prerequisite: PMGT-650; or instructor permission.

PMGT-652—Applications of Quality Management
Three Credit Hours
This course investigates risk planning and the principles of quality management and their application in the technical project environment. The standards, tools, techniques and deliverables as related to the development and implementation of a comprehensive quality system will be explored. Topics related to ISO 9000, lean six sigma methodology, business process improvement, and risk planning and mitigation will be addressed. Each student will continue working on their Capstone Project started in PMGT-650.
Prerequisite: PMGT-650 & PMGT-651 or instructor permission.

PMGT-653—Technical Project Support and Operations
Three Credit Hours
This course is designed to provide students with knowledge and understanding of the activities necessary for the completion of a project, but not normally recognized as project activities. These activities include project plan development, human resources, communication, procurement, project closing, and stakeholder management. Each student will continue working on their Capstone Project started in PMGT-650, and if PMGT-651 and PMGT-652 have been successfully completed, will formally present the completed project as part of this course.
Prerequisite: PMGT-650, PMGT-651 and PMGT-652.

PMGT-660—Overview of Technical Program Management
Three Credit hours
This course introduces the student to the complexities of technical program management, as offered by Project Management Institute's (PMI) The Standard For Program Management, and other sources. The course provides an overview of the technical expertise, leadership and management skills, and cultural factors that generate success in management of today's complex technical programs. An overview of the social, economic, political, media, and regulatory issues faced by program managers will be explored to enable an understanding of the complex issues that must be managed. The primary intent of this course is to expose students to the many challenging issues being faced internally and externally so that successful processes can be developed and pitfalls avoided. Key topics covered will include the need for effective processes and management agility, establishing a culture of communication, superior stakeholder engagement, and active executive support in program governance.
Prerequisite: PMGT-650; or instructor permission.

PMGT-661—The Legal and Contractual Aspects of Program Management
Three Credit hours
This course provides an overview of legal and contractual issues that influence and impact technical program and project management decisions. An overview of the legal system and regulatory framework will be developed to facilitate an understanding of potential legal issues. Primary focus is placed upon understanding and avoiding pitfalls associated with the contracting process as it pertains to Engineering and Construction programs and large Government/Private Programs. Other topics include legal relationships between the Client, Prime Contractor and Design Professional; negligence and the Design Professional; Design Professional licensing and liability; the role of insurance and bonds in program management; personnel and labor issues; intellectual property; environmental liability in public and private construction; claims, arbitration, and dispute resolution options; and the ethical implications of decisions.
Prerequisite: PMGT-650

PMGT-662—Program Development Strategies and Processes
Three credit hours
This course provides a detailed exposure to Technical Program Development; understanding of market needs, a sound business model, a well-defined financial strategy, and well-thought-out strategic goals. The course is designed to help the professional engineer, technical program manager, and all others who must come together as a working team, to better understand their respective roles and responsibilities in that process. Through case examples, analysis, and project planning tools, this course looks at the longer organizational view of program development. It will present proven ways to improve program development cycle times and to take advantage of new market opportunities. Students will learn how to develop and analyze Technical Requests for Proposal

(RFPs) that are essential in today's global economy. Key topics include program development, analysis tools, preparation/evaluation of RFPs, building on existing product lines, and product platform management.
Prerequisite: PMGT 653 and PMGT 660; or instructor permission

PMGT-671—Project Manager Leadership Development
Three Credit Hours
This course is designed to provide project management students with knowledge and understanding of proven concepts for the development of leadership skill essential to lead and manage technical project teams. It is intended for students who want to improve their knowledge in the area of technical project leadership and management responsibilities. Students will be exposed to the issues related to understanding the difference between leadership and management, the leadership behaviors unique to the best performing project managers, the casual influences that impact leadership development, and the importance of coaching, mentoring, and corporate culture. Course content will include the study of proven research results, case studies, guest speakers, individual study, and executive interviews.
Prerequisite: PMGT-650 or instructor permission.

PMGT-672—Applied Leadership Concepts
Three credit hours
This course is designed to provide project/program management professionals with advanced leadership skills. Areas covered in the course will include leadership challenges unique to leading without formal authority, virtual project teams, executive leadership issues, conflict resolution, negotiations, and secession planning. Course content will include case studies, guest speakers, executive interviews, and team case studies.
Prerequisites: PMGT-650 and PMGT-671

PMGT-680—System Engineering Management Fundamentals
Three credit hours
This course is an overview of system engineering practices and principles, with an emphasis on system life cycle processes and activities. Content is based on the International Council on Systems Engineering (INCOSE) System Engineering Handbook as well as other related texts and applicable industry standards. Students will participate in individual and team projects. Topics of study include System Engineering Concepts, the System of Systems (SOS), System Definition and Development, System Design Requirements, integration strategies, System Modeling, Project Planning, System Engineering Processes, leadership, and organizing to manage processes associated with complex technical systems.
Prerequisites: None.

PMGT-681—Requirements Development and Management
Three credit hours
This course is designed to build the knowledge and skills necessary to manage the translation of needs and priorities into a system of requirements and to develop derived requirements. These together form the basis of the engineering of complex technical and multidiscipline projects. Course topics will focus on managing the processes associated with the development of system requirements. The course will introduce concepts associated with the translation of user needs and priorities into basic functions and quantifiable performance requirements, along with how to analyze and improve upon the requirements in areas such as correctness, completeness, consistency, measurability and testability.
Prerequisite: PMGT-680 or instructor permission.

PMGT-682—System Verification and Validation
Three credit hours
This course is designed to build knowledge and performance competencies related to the verification and validation processes associated with ensuring the integrity of an evolving design solution. A comprehensive exploration of system verification and validation practices will be performed to provide a basis for applying technical modeling and simulation techniques and lifecycle phases. Course topics will include an examination of applicable industry standards and provide a broad understanding associated with relevant process areas.
Prerequisite: PMGT-680 and PMGT-681 or instructor permission.

PMGT-683—Systems Modeling and Integration
Three credit hours
This course provides an overview of how systems engineers employ models and simulations to implement the systems engineering process model. Conceptual understanding and practical skills in the application and integration of systems modeling and simulation will be addressed, in addition to model and simulation development and application to facilitate decision making. Principles and theoretical frameworks will be explored to provide the practical knowledge and skills associated with the application and integration of systems modeling and simulation within complex systems or technical organizations. Topics of study include process improvement, lean enterprise concepts, requirements allocation, and system optimization.
Prerequisite: None.

PMGT-684—Human System Integration
Three credit hours
This course examines the application of human system integration (HSI) theories and principles to understand human factors, safety engineering, and the limitations of the human. Emphasis will be placed on reducing life cycle costs and optimizing system performance through an understanding of the relationships between humans and technology in complex systems. Topics will focus on the design of interactive products to support the way people communicate and interact, including human factors, safety, rapid prototyping, mock-ups, habitability, survivability and team behavior.
Prerequisites: None.

PMGT-685—Decision and Risk Analysis
Three credit hours
This course makes a broad study of decision analysis tools and techniques used in technical and management decision making within a risk management context. Integration of sustainability with decision and risk analysis will be emphasized. Students will develop an industry standard Risk Management Strategy and a Decision Management Strategy. Topics of study include decision and alternative definition, analytical decision support, probability theory and statistics, decision framing, cognitive bias, risk planning and identification, risk analysis, risk breakdown structures, sensitivity and multi-attribute utility analysis and decision implementation.
Prerequisites: None.

PMGT-690—Independent Study

Three credit hours
This course is designed to complement classroom instruction by allowing for work on an advanced academic project under the direction of one or more of the faculty of the School of Engineering. Students will have the opportunity to relate their classroom experience to an investigation of advanced topics. Applicable efforts, activities, and topics will be approved through the Department of Engineering Leadership and Program Management.
Prerequisites: PMGT-650 and instructor permission.

Psychology (PSYC)

PSYC-500—Human Growth and Development
Three Credit Hours
An analysis of the principles of human development with emphasis on the contributions of biological, social, psychological, and multicultural influences as applied to an understanding of cognitive, emotional, social, and physical development across the life-span. Particular emphasis will be given to the psychobiological nature and social context of development as well as cultural and ethnic variations impacting on developmental processes.

PSYC-501—Principles of Behavior and Cognitive Change
Three Credit Hours
This course will provide a systematic review of key concepts and principles of contemporary behavior and social learning theory. This material serves as a backdrop for an examination of a functional analytic approach to behavioral assessment and cognitive-behavioral therapeutic interventions. The theoretical rationale and empirical basis of traditional and more recently developed cognitive-behavioral interventions will be reviewed. Examples of these interventions include exposure techniques, contingency management, child-parent training, social skills training, cognitive therapy interventions, motivational interviewing, acceptance and commitment therapy, mindfulness, and dialectical behavioral therapy.
Prerequisites: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-502—Psychological and Educational Exceptionalities: Children and Adolescents
Three Credit Hours
This course is an overview of child and adolescent educational and behavioral disorders. The course will focus on definition, etiology, epidemiology, diagnosis, and treatment/intervention. Overlap and distinguishing characteristics of educationally and psychiatrically defined disorders (e.g., DSM-V) will be emphasized.
Prerequisites: Officially admitted into School Psychology Program.

PSYC-503—Objective Assessment
Three Credit Hours
This course is critical to data collection in the School Psychology program's data-based problem-solving model. It is an introduction to the administration, scoring, and interpretation of measures of intelligence and visual-motor abilities. The student will have practical experiences in the use of appropriate instruments. Each student must demonstrate proficiency with intervention planning within the problem-solving model.
Prerequisite: Officially admitted into School Psychology Program.

PSYC-504—Special Techniques in Assessment
Three Credit Hours
This course is critical to data collection in the School Psychology program's data-based problem-solving model. It is an advanced assessment course building on skills learned in PSYC 503, where students gain practical experience with measures of cognitive functioning, academic achievement, adaptive behavior, and preschool assessment. Emphasis is on integrating information from all sources (i.e., problem analysis) into information utilized in intervention planning within the problem-solving model.
Prerequisite: Objective Assessment (PSYC-503)

PSYC-505—Personality, Social, and Emotional Assessment
Three Credit Hours
Students will have direct experiences in assessment and evaluation with a specific focus on multiple diagnostic (e.g., DSM-5) and classification (e.g., IDEA) systems. Emphasis will be on collecting and interpreting data/information on behavior tendencies and styles with special attention to school age children and youth. Students will gain practical experience in the use and interpretation of objective measures (e.g., rating scales), direct observation, and other data collection techniques to facilitate accurate classification/diagnosis. Practical experiences will be integrated with analysis of the extant literature relating to legal/ethical issues, validity of data, and empirical findings. Focus will be on utilization of such information in a model that emphasizes data-based problem solving, planning and intervention at multiple levels across systems.
Prerequisites: Objective Assessment (PSYC-503) and Special Techniques in Assessment (PSYC-504).

PSYC-507—General Psychopathology Assessment and Differential Diagnosis
Three Credit Hours
A study of the major mental illnesses delineated in major diagnostic classification systems (e.g., DSM-5). The course will have a particular focus on differential and overlapping symptomatology within and across major classes of disorders. Models of assessment will be matched with specific symptom patterns. Continuity and overlap of normal and deviant behavior will be recognized. Additionally, students will examine the etiological and epidemiological factors in psychopathology.
Prerequisites: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-508—Counseling and Personalities Theories
Three Credit Hours
This course is designed to provide a balanced and systematic study of the major counseling and personality theories. The course will integrate personality theory and normal and abnormal personality with a particular emphasis on therapeutic application of the major theories of counseling intervention.
Prerequisite: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-512—Ethics, Roles, and Law
Three Credit Hours
This course will provide a survey of the field of school psychology. The role and function of the school psychologist, legal, ethical and professional issues in school psychology will be topics covered in this course. Field experiences, research methods and contemporary

trends in school psychology will also be addressed. Students will be oriented to a data-based problem-solving model of school psychology that is empirically driven and intervention focused within an ecological framework. An important outcome for this course is to foster participant's dispositions towards appreciating the diverse opportunities for school psychologists to positively impact communities, and to value implementing best practices as a school psychologist.
Prerequisite: Officially admitted into School Psychology Program.

PSYC-514—Ethics and Professional Issues in Counseling
Three Credit Hours
This course is designed to provide the Clinical Counseling student with a broad overview of professional issues related to counseling, including reference to current and historical role issues, licensure and professional development, and emphasis on matters of ethics and mental health law related to the counseling profession. Particular attention will be given to the examination of ethical principles and mental health law relevant to the potential conflicts/dilemmas arising in the course of counseling practice (e.g., suicide, homicide, role conflict, multiple relationships, etc.). Issues specific to service delivery to minorities and special populations will be addressed, as will possible ethical conflicts arising within particular counseling modalities (e.g., marital and family counseling, group counseling).
Prerequisite: Officially admitted into Clinical Counseling Program.

PSYC-516—Psychological Resiliency for Tactical Athletes
Three Credit Hours
This course will provide students with foundational knowledge of psychology in the military and theoretical information on the interaction between physical and mental health as they relate to readiness and resiliency of military service members, veterans, law enforcement officers, firefighters, and other tactical personnel. This course will explore the meaning of readiness and resiliency, including the interconnectedness of mind, body, interpersonal, and spiritual fitness.

PSYC-523—Statistics and Research Design
Three Credit Hours
Course will focus on descriptive and inferential statistics as tools for exploration of quantitative research methods. Students will develop competence in generating basic research designs to answer questions in schools, agencies, and practice.

PSYC-525—Basic Counseling Techniques
Three Credit Hours
Course focuses on fundamental skills of interviewing, assessment, case conceptualization, and intervention. These preparatory skills are taught through role-play and other practical approaches. The course is practice-oriented and designed to assist the student in developing professional skills. The student will be involved in analyzing his or her own counseling style and performance.
Prerequisites: Officially admitted into School Psychology Program and completion of all or concurrent registration in: Human Growth and Development (PSYC-500), Principles of Cognitive and Behavioral Change (PSYC-501), General Psychopathology (PSYC-507), and Counseling and Personality Theories (PSYC-508).

PSYC-526—Clinical Counseling: Basic
Three Credit Hours
Course focuses on fundamental skills of interviewing, assessment, case conceptualization, and intervention. These preparatory skills are taught through role-play and other practical approaches. The course is practice-oriented and designed to assist the student in developing professional skills. The student will be involved in analyzing his or her own counseling style and performance.
Prerequisites: Officially admitted into Clinical Counseling Program and completion of all or concurrent registration in: Human Growth and Development (PSYC-500), Principles of Cognitive and Behavioral Change (PSYC-501), General Psychopathology (PSYC-507), and Counseling and Personality Theories (PSYC-508).

PSYC-527- Child Psychopathology & Treatment
Three Credit Hours
This course will focus on child and adolescent psychopathology and its treatment. We will take a developmental approach in examining the presentation and etiology of a broad range of disorders commonly encountered in practice with children and adolescents. The course will begin with an overview of relevant frameworks for studying child psychopathology and cross-cutting issues in the field before moving into discussion of specific disorders and their treatment. Discussions of disorders will typically focus on symptom presentation, diagnostic considerations, major theories of etiology, developmental considerations, comorbidity, evidence-based treatment strategies, and cultural considerations.
Prerequisites: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-528- Evidence Based Practice, Case Conceptualization & Treatment Planning
Three Credit Hours
The aim of this course is to provide familiarity with and basic skills for adopting an evidence-based approach to clinical practice. Students will understand how to critically review field practice guidelines and how to make intentional and informed decisions when developing conceptualizations and treatment plans. Students will practice developing individualized case conceptualizations, which will be used as a guide for creating a treatment plan and obtaining the client's consent to the treatment. Finally, students will be exposed to the empirically supported treatment literature and its strengths and weaknesses. *Prerequisites: Completion of or concurrent enrollment in Principles of Cognitive and Behavioral Change (PSYC-501), General Psychopathology (PSYC-507), and Counseling and Personality Theories (PSYC-508), and Clinical Counseling: Basic (PSYC-526.*

PSYC-540— Theories & Biology of Addiction
Three Credit Hours
The purpose of this course is to provide students with 1) a rich foundation of theories of addiction (such as the disease model), 2) a basic understanding of the biological bases of addiction, including brain functioning associated with specific substances, and 3) basic assessment skills. These will be used to help develop case conceptualization skills. *Prerequisites*: Human Growth and Development (PSYC-500), Principles of Cognitive and Behavioral Change (PSYC-501), and General Psychopathology (PSYC-507).

PSYC-549—Foundations of Psychometrics
Three Credit Hours

This course is designed to prepare students to become intelligent users of assessment information within the clinical decision-making process. The primary focus is on understanding the philosophical and statistical properties of measurement instruments, developing an understanding of the advantages and limitations of assessment approaches, enhancing sensitivity to social and ethical issues in assessment, and using an integrative approach for applying the results of assessment to diagnosis and the clinical decision-making process. Students will also learn program evaluation models and quality improvement mechanism for school and mental health programs.
Prerequisite: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-553—Introduction to Family Dynamics
Three Credit Hours
This course is designed to serve as an introduction to the various schools of family therapy. Students will study the historical context and underlying pragmatic assumptions inherent in the diverse schools. Students will survey the major contributors to each theoretical perspective and examine techniques unique to each perspective.
Prerequisite: Completion of or concurrent enrollment in Human Growth and Development (PSYC-500).

PSYC-555—Special Topics in Psychology
One to Three Variable Credit Hours
This course is designed to provide service providers and students with information and knowledge regarding contemporary psychological and social problems. Various topics will be offered as the need arises. This course varies across semesters. Students must obtain approval from their advisor to include this course as an elective.

PSYC-557—Counseling and Psychotherapy for Couples
Three Credit Hours
This course is designed to provide an overview of the major theories of relationship psychotherapy and technical interventions utilized within the major approaches to couples counseling. The development aspects of family and couples counseling will be reviewed and special course topics will include spouse abuse, divorce mediation and adjustment, and ethical considerations. The training activities provided in this course will include diagnosis of family problems, assessment techniques, case presentations, enactments, and other experimental work. Video use and analysis are significant parts of the course.
Prerequisite: Officially admitted into Clinical Counseling Program and Family Dynamics (PSYC-553).

PSYC-561—Cultural Issues in Psychological Practice
Three Credit Hours
This course examines the influences of cultural, ethnic, minority, gender, socioeconomic, and other important group factors on psychological, educational and social development. Focus is on the development of aspects of multicultural competence. Students will learn about a variety of identity groups and engage in experiences that offer opportunities to shift focus from their own perspectives to that of people from different backgrounds. The course emphasizes ways that variations in experiences and perceptions of diverse individuals relate to psychological assessment and treatment.
Prerequisite: Officially admitted into Clinical Counseling Program or School Psychology Program.

PSYC-570—Social and Cognitive Foundations of Interpersonal Behavior
Three Credit Hours
This course presents a survey of the scientific study of social influence, emphasizing that a fundamental understanding of the basic forces affecting how individuals think and behave in social settings serves as a cornerstone of effective interpersonal behavior and sound leadership.

PSYC-599—Thesis
Three Credit Hours
This course entails the completion of an applied research project. Toward this end, students will select one of three designated options and, in conjunction with a supervising departmental faculty member, formulate and address an original research question. The student's research project will culminate in a presentation at a local, regional, or national psychology association meeting (or equivalent), or publication. This course will focus on data collection procedures, statistical analysis of data, methods of conducting program evaluation, and empirically-based decision making.
Prerequisite: Officially admitted into Clinical Counseling Program or School Psychology Program and Completion of Statistics and Research Design (PSYC-523).

PSYC-602—Social and Biological Basis of Child and Adolescent Behavior
Three Credit Hours
This course is an advanced course with a contemporary focus on the child and adolescent with particular attention to biological and social forces that shape development. Developmental processes will be examined through a review of current research. Part of the course will focus on cultural/technological forces (e.g., computers, television, video games) which are particularly important to today's youth and which are important forces impacting on development.
Prerequisite: Officially admitted into Clinical Counseling Program or School Psychology Program and Human Growth and Development (PSYC-500).

PSYC-605—System Theory and Consultation: Prevention and Intervention
Three Credit Hours
This course is critical to the intervention stage of the School Psychology program's data-based problem-solver model. School psychology students will develop skills in systems theory and intervention, consultation, and alternative delivery services to schools. Traditional test-and-place perceptions will be replaced with perceptions based on the principles of prevention, consultation, alternative intervention methods, and intervention progress monitoring. The course will cover systems theories and models of consultation to include instructional consultation, mental health consultation, and behavioral consultation. Interventions that promote positive school cultures will be examined across classroom, school, family, and community systems.
Prerequisite: Officially admitted into School Psychology Program and Ethics, Roles and Law (PSYC-512).
Co-requisites: Practicum in School Psychology I (PSYC-615) and Practicum in Consultation and Intervention I (PSYC-617).

PSYC-606—Academic Interventions

Three Credit Hours
This course is critical to the School Psychology program's data-based problem-solving model and emphasizes a multi-tiered model including primary, secondary, and tertiary prevention (e.g., Response to Intervention; RTI). It is an applied course for school psychologists-in-training designed to develop skills in designing, implementing, and evaluating evidence-based interventions that improve the academic achievement of primary and secondary school students. The course will cover curriculum-based assessment (CBA) and measurement (CBM), collaborative problem-solving, and analysis of students' academic strengths and needs. Emphasis will be placed on linking assessment data to development of appropriate interventions designed to address specific needs in reading, writing, and mathematics.
Co-requisites: Practicum in School Psychology I (PSYC-615) and Practicum in Consultation and Intervention I (PSYC-617).
*This course addresses competencies that meet the requirements for Read to Succeed.

PSYC-607—Behavioral and Emotional Interventions
Three Credit Hours
This course is critical to the School Psychology program's data-based problem-solving model. It is an applied course for school psychology students designed to develop skills in designing, implementing, and evaluating evidence-based interventions that improve the behavior and emotional well-being of primary and secondary school students. The course will cover behavioral principles and appropriate assessment techniques, including systematic observation of behavioral and functional behavioral assessment. Emphasis will be placed on linking assessment data to development of appropriate interventions designed to target specific needs related to internalizing and externalizing behaviors.
Co-requisites: Practicum in School Psychology II (PSYC-616) and Practicum in Consultation and Intervention II (PSYC-618).

PSYC-608—Advanced Counseling Techniques for School Psychologists
Three Credit Hours
An applied course designed for school psychology students to further develop and cultivate their counseling skills, with particular emphasis on practices useful within school settings. Through didactic as well as experiential methods, the course builds off of content and skills learned in PSYC-525. Students will apply previously learned content, theories, and modalities to counseling practices that are useful for promoting mental health and psychological wellness among children and youth. Under the supervision of the course instructor as well as certified/licensed school psychologists, students will gain practical experiences in delivering counseling Techniques.
Prerequisite: PSYC-525

PSYC-609-Evidence Based Treatment of Addictions
Three Credit Hours
This is intended to be an advanced course to provide students with a foundation in the understanding of the case conceptualization and treatment of addictions. The purpose of this course is to provide students with 1) knowledge and ability to develop a case conceptualization for a client with addictions, and 2) skills to implement effective interventions in the treatment of addiction. In keeping with this overall course purpose, students will be expected to think critically to summarize and apply knowledge learned in the course. Critical thinking is defined as reflective thinking involved in the evaluation of evidence relevant to a claim so that a sound or good conclusion can be drawn from the evidence. *Prerequisite*: Theories and Biology of Addictions (PSYC-540)

PSYC-611—Clinical and Professional Issues in Counseling
One Credit Hour
This course examines current issues in professional psychology with an emphasis on preparing students for field placements, licensure and clinical practice. Course topics include licensure and credentialing, clinician self-care, and professional development.
Prerequisite: Students must have completed all core courses and passed comprehensive examination.

PSYC-612—Reading Assessment and Intervention: A Neuropsychological Perspective
Three Credit Hours
Students will learn to evaluate the reading ability of children and youth using both qualitative and quantitative assessment techniques. This course will emphasize diagnosis leading to scientifically validated instructional interventions. Reading problems will be couched in a neuropsychological framework and will be consistent with the DSM and IDEA. Students will learn how to incorporate assessment data with existing psychological data on the person served to generate a more complete psychological profile. Students will also learn how to incorporate assessment data within a response to intervention framework to develop evidence-based reading interventions. Reading programs and methods of instruction used to prevent reading problems before they occur will also be reviewed.
Co-requisites: Practicum in Consultation and Intervention: I and II (PSYC-616/618).
*This course addresses competencies that meet the requirements for Read to Succeed.

PSYC-615/616 —Practicum in School Psychology: I and II
Two Credit Hours each
These practical courses are part of the final "capping off" of students before they begin professional school psychology internships. Applying the data-based problem-solving model, students will engage in the administration and scoring of traditional and alternative measures of intelligence, achievement, adaptive behavior, visual-perceptual, and socio-emotional functioning that are commonly used by school psychologists. Students will apply data to problem analysis and recommend or implement appropriate interventions, monitor the effectiveness of the interventions, and adhere to standards of best practice in school psychology. Students will experience various roles frequently expected of school psychologists in public schools or affiliated agencies with supervision provided by practicing certified/licensed psychologists.
Co-requisites: Practicum in Consultation and Intervention: I and II Course (PSYC-617/618)
Prerequisites: Objective Assessment (PSYC-503), Special Techniques in Assessment (PSYC-504), and Personality, Social, and Emotional Assessment (PSYC-505).

PSYC-617/618—Practicum in Consultation and Intervention: I and II
One Credit Hour Each
These practical courses involve the application of principles and theories of consultation and intervention through field-based experiences. Students will learn to employ empirically-based treatments and to evaluate innovative treatment programs applied

to a variety of children and conditions. Intervention and prevention programs will target multiple levels within the placement site, including the individual student, classroom, school, and/or system. Demonstration of learning and skill will be exhibited in the development of case studies involving children experiencing academic and/or emotional difficulties. Through these case studies, students will combine the scientist-practitioner model with a data-based problem solving approach to intervene with children in need of school psychology intervention.
Co-requisites: Practicum in School Psychology: I and II (PSYC-615/616).
Prerequisites: Objective Assessment (PSYC-503), Special Techniques in Assessment (PSYC-504), and Personality, Social, and Emotional Assessment (PSYC-505).

PSYC-620—Contemporary Issues in School Psychology
Three Credit Hours
This course provides an in-depth study of current issues and research in school psychology. Course content will cover contemporary issues in the field that impact the school psychologist's ability to competently and effectively deliver services across multiple levels within the school system. In addition to other topics related to professional practice, the course will focus on school crisis prevention and response skills.
Prerequisite: Officially admitted into School Psychology Program.

PSYC-621/622—Internship in School Psychology: I and II
Three Credit Hours Each
A field placement in school psychology utilizing either a clinic setting (for no more than half the internship) and/or a public school setting in which the student works under the direct supervision of a certified school psychologist in conjunction with The Citadel Coordinator of School Psychology Practicum and Internships. Internship training represents the cumulative experience and the synthesis of all course work and practice. The goal is to prepare the intern for independent function as a school psychologist, i.e., data-based problem-solver, capable of providing a full range of services with a multi-culturally diverse client population. Students are required to complete 1200 clock hours (PSYC-621 and 622) of supervised internship experience.
Prerequisite: Completion of all other course work for the Ed.S. degree (including thesis).

PSYC-629—Practicum: Clinical Counseling
Three Credit Hours
This course is a supervised field experience for clinical counseling students who are at the end of their program. The practicum consists of 100 hours of work within a community agency. In addition to working with clients in the community, students experience individual and group supervision that emphasizes case conceptualization and the use of intervention strategies. The practicum course integrates previous course experiences with counseling skills. The student will complete a comprehensive case study integrating theory, research, and practical issues in the treatment of a client seen during the practicum experience.
Prerequisites: Completion of all Clinical Counseling course work (may take electives with Practicum).

PSYC-643— Advanced Clinical Counseling: Assessment
Three Credit Hours
This course integrates clinical assessment, case conceptualization, and treatment planning and evaluation. The emphasis on assessment highlights specific, focused procedures for common clinical problems. Interview methods, self-report instruments, and self-monitoring among others will be considered for their psychometric characteristics, clinical utility, and practicality. Case conceptualization will integrate the results of the assessment process with current conceptual and empirical literature on etiology and treatment. The course includes practical exercises in the assessment and conceptualization for the most common clinical problems.
Prerequisite: Students must have completed all core courses and passed comprehensive examination.

PSYC-644—Advanced Clinical Counseling: Intervention
Three Credit Hours
This course is designed to prepare clinical counseling students for the practicum experience. The student will implement and apply previous learning of theory, techniques, and understanding of the therapeutic process through experiential and didactic methods. The student will develop increased knowledge of the counseling process, including assessment, case conceptualization, diagnostics, and intervention strategies. The student will complete a comprehensive case study integrating theory, research, and practical issues in the "treatment" of a simulated client.
Prerequisite: Students must have completed all core courses and passed comprehensive examination.

PSYC-645—Advanced Clinical Counseling: Group
Three Credit Hours
This course provides students with an understanding of the role of the group counseling/psychotherapy modality in therapeutic settings. Focus is on the major components of group counseling/psychotherapy, including: client selection and preparation for group; attributes and behaviors of effective group counselors; group dynamics and group processes; stages of group development; therapeutic factors associated with groups; and methods/procedures used in group counseling/psychotherapy.
Prerequisite: The student must have completed all core courses and passed comprehensive examination.

PSYC-651/652—Internship: Clinical Counseling
Three Credit Hours Each
The internship is a supervised field experience consisting of 600 hours of work in a community agency. It involves continued refinement of counseling skills developed over the course of the student's program. The student will complete and present a comprehensive case study integrating theory, research, and practical issues in the treatment of a client seen during the internship experience.
Prerequisites: Completion of all prior course work (may take elective with Practicum). Note that permission of advisor is required during the semester prior to enrollment in the course. Registration is contingent upon advisor approval based upon successful completion of coursework and demonstration of ability to function in a professional role in the community.
Prerequisite: Completion of all Clinical Counseling course work, including Practicum (may take elective with Internship).

Sociology (SOCI)

SOCI-501—Social Determinants of Modern Life
Three Credit Hours

This course explores some of the major determinants of group life such as social structure, socialization, stratification, the major social institutions, and social change. In addition, attention will center upon population dynamics and migration and the effects which they exert upon community life.

Spanish (SPAN)

SPAN-520—Mexico
Three Credit Hours
This is a panoramic course dedicated to an understanding of Mexico beginning with the Aztec and Mayan civilizations from before and after the conquest. The class will then focus on the colonial period, Mexican Independence (1810-1821), the nineteenth century, the Reforma, French occupation, the Porfiriato, Mexican Revolution, the Caudillismo, modern Mexico, Tlatelolco, twentieth and twenty first centuries, bilateral relations between the United States and Mexico and emigration to the United States. Some of the topics covered in the course will include, but are not limited to: Culture, politics, economics, literature, art, theater, cinema, religion, and gastronomy.

SPAN-521—The Hispanic Presence in the United States
Three Credit Hours
This panoramic course contributes to an understanding of the cultural, political, social and economic condition of the Mexican Americans, Cuban Americans and Puerto Ricans. The course trajectory will begin with a study of the Southwestern United States covering the war with Mexico and the subsequent annexation of the Mexican territory. A close look at the linguistic and ethno-racial consciousness and how it pertains to the emerging Chicano literature will be discussed. Puerto Rico: An in-depth look at the Commonwealth status of Puerto Rico, independence versus statehood, the economic crisis from the sugar trade and emigration to the United States. The course will consider the notion of Newrican and the issues of identity throughout literature including Black Poetry. Cuba: The focus begins with the Cuban Revolution and the subsequent anti-Castro culture that dominates both Cuba and the Cuban community in Miami. The course will also discuss the social, political, economic and cultural impact of the Cuban emigration to Miami and in the wake of this movement we will discuss exile literature and the phenomenon of transculturation.

SPAN-522—Culture and Literature of Spain
Three Credit Hours
A panoramic course covering the literature and culture from the Celtiberians to the Romans and from the Visigoths to the present day. Topics that will be discussed include the Islamic invasion of 711, the Reconquista, the Catholic Kings and the unification of Spain. The Golden Age of Spain from the perspective of hegemony and crisis. The course will also explore the culture and literature from the seventeenth to the nineteenth centuries, the Crisis of 98, the Spanish Civil War, the dictatorship of Francisco Franco (1939-1975) and democratic Spain (1982-2009). The course will examine Spain's cultural and intellectual life from 1900-2000: The Generation of 1898 and 1927, culture under the rule of Franco, progressives and the resurgence of the liberal tradition. Cultural life during the period of transition to democracy will also be discussed and will include the Constitution of 1978 as well as the formation of Spain's autonomous communities. Other areas of focus will be Spain and the European community, nationalism as it relates to the Basque Country, Galicia and Cataluña. The course will also explore the challenges of the family unit, women and childhood and conclude with a detailed look at Spain's gypsies, new immigrants, pastimes and popular culture (tapas, celebrations, bullfights, sports, tertulias and mass media).

SPAN-523—Advanced and Contrastive Grammar
Three Credit Hours
A Comparison of grammatical structures of Spanish and English, which define the linguistic perspective specific to Spanish and with special reference to practical application in spoken and written communication and in various socio-cultural contexts.

SPAN-524—Recent Trends in Teaching Spanish as a Second Language
Three Credit Hours
This course offers teaching strategies and learning practices for effectively delivering content and material in an engaging manner. It also covers the latest educational and language acquisition theories, in addition to the cultural aspects of teaching a new culture.

SPAN-525—Spanish for the Professional
Three Credit Hours
Includes the study of health, legal vocabulary, business concepts, geographic context, and cultural context. Depends on the trend taught each semester (Business Spanish, Medical Spanish, Spanish for Legal Spanish, etc.).

SPAN-550—Special Topics: Culture and Literature of South America
Three Credit Hours
Given the vastness of South America, the course is separated into three topics and will be taught in rotation each time the course is offered. (The course is repeatable and thus may be taken three times.) This will not cause duplication on transcripts as the title of each of the topics will be listed (e.g., Spanish 550 Special Topics: The Andean Countries). Listed below are the three topics:
A. Colombia and Venezuela
B. The Andean Countries (Ecuador, Peru and Bolivia)
C. The Southern Cone (Argentina, Chile, Paraguay and Uruguay)

Special Topic: Colombia and Venezuela: This is a panoramic course beginning with the conquest and independence of both Colombia and Venezuela and will continue through the formation as a republic until the present day. The topics will include the first civilizations, the conquest, the War of Independence, Simon Bolivar and the ideal of unification. The course will continue with the political, social and economic condition between the nineteenth and twenty-first centuries. In dealing with modern Colombia, we will dedicate specific attention to an exploration of violence, warfare, and the narco trade's impact on national life as well as its influence on the international community. In Venezuela, special attention will be given to discuss the Caudillismo and the Llanero, the petroleum industry and the transformation of national life. The course will also discuss the positivist project of Guzmán

Blanco, the dictatorial period, the Christian Democratic Project, militarism and Chavism as a unique phenomenon in Latin America. The previously mentioned topics will be also studied through the lens of literature, particularly in the evolution of the novel from the two country's celebrated novelists: Rómulo Gallegos, José Eustacio Rivera and Gabriel García Méarquez among others.

Special Topic: The Andean Countries (Ecuador, Peru and Bolivia): This is a panoramic course beginning with Peru by exploring the conquest, independence and gestation into the present-day republic. The primary focus will be the cultural legacy of the Incan Empire, the War of the Pacific, Haya de la Torre, and the ARPA and conclude with contemporary political currents. Bolivia will be the next region of discussion and will focus primarily on the political, cultural and economic history of the country. Specifically, the Chaco War, and the Revolutionary Nationalist Movement of 1952. We will discuss the current political trends with Alan García (Peru), Evo Morales (Bolivia) and Rafael Correa (Ecuador) as well as the production of literature from the Andean region. The course will survey authors from Ollantay to Inca Garcilaso and essayists from the nineteenth and twentieth centuries. We will examine the indigenous novel from Peru and Ecuador and the works of Mario Vargas Llosa, César Vallejo and other prominent Andean authors.

Special Topic: The Southern Cone: Argentina, Chile, Uruguay and Paraguay. This is a panoramic course that explores the conquest, independence and gestation into the present-day republics of the countries in the southern cone of South America. The course will emphasize the military dictatorships and the transition to the current neoliberal economies. The literature of Argentina will center on Romanticism with Esteban Echeverría, Domingo Faustino Sarmiento and José Hernandez. The study of Argentine literature will also include the Modernista Poetry of Alfonsina Storni and the new narrative with Jorge Luís Borges and Julio Cortázar. The literature of Chile will see epic poetry with Alonso de Ercilla as well as the Modernista and Vanguard poetry of Gabriel Mistral, Vicente Huidobro and Pablo Neruda. Attention will also be given to the novel of the Boom and Post Boom era with authors such as José Donoso and Isabel Allende. The literature of Uruguay and Paraguay will concentrate on the short stories of Horacio Quiroga, the Modernista poetry of Delmira Agustini and the novel with Augusto Roa Bastos.

SPAN-560—Hispanic Service Learning/Internship
Three Credit Hours
Course emphasizes increasing fluency in comprehension, speaking, reading, and writing skills as well as understanding of cultural issues while performing service in a Spanish-speaking atmosphere. Students are required to spend several hours providing service for a community partner to improve their language skills and appreciation for the Latino community. Taught every semester such as José Donoso and Isabel Allende. The literature of Uruguay and Paraguay will concentrate on the short stories of Horacio Quiroga, the Modernista poetry of Delmira Agustini and the novel with Augusto Roa Bastos.

SPAN-560–Hispanic Service Learning/Internship
Three Credit Hours
Course emphasizes increasing fluency in comprehension, speaking, reading, and writing skills as well as understanding of cultural issues while performing service in a Spanish-speaking atmosphere. Students are required to spend several hours providing service for a community partner to improve their language skills and appreciation for the Latino community. Taught every semester.

Sport Management (SMGT)

SMGT 513 Sport Facility and Event Management
Three Credit Hours
Students will focus on advanced management principles, practices, and methods essential to successfully operating public and private sport facilities and plan and execute events. Budgeting, operations management, marketing, sponsorships, registrations, hospitality, and volunteer management will also be emphasized.

SMGT 514 Principles and Practice of Sport Management
Three Credit Hours
This course introduces the principles of sport management. It discusses practical applications in the sport industry to graduate-level students. Content related to sport management includes fundamental knowledge and skillsets of the sport managers and provides information on sport industry segments for potential job employment and career choices.

SMGT 518 Sport Marketing
Three Credit Hours
This course investigates principles and processes in marketing functions involved in the multi-billion-dollar sport industry. This course covers the fundamental marketing concepts related to sport, such as sport products, promotions, pricing, public relations, sport branding and sponsorship, sport media, and communication platforms. Also, students will learn how to apply these critical components in sport market research and real-world settings. Emphasis will be given on how marketing allows sport business managers to make decisions that will create successful organizations in the future.

SMGT 520 Special Topics in Sport Management
Three Credit Hours
This course offers the opportunity for graduate students to choose a special topic in Sport Management. For this course, the Director of Graduate Studies in Health and Human Performance permission is required.

SMGT 521 The Art of Selling in Sport
Three Credit Hours
This course investigates in-depth the concepts and practices of effective selling in sport marketing. Persuasion and communication theories will be introduced to students, and personal selling and direct applications will be conducted in class.

SMGT 523 Sport Leadership and Organizational Behavior
Three Credit Hours
This course examines organizational theory and behavior as well as leadership qualities related to sport. The effectiveness, structure, and design of sport operations will be addressed, and cultures, leadership styles, conflicts, changes, and human resources involved in these entities.

SMGT 529 Independent Study in Sport Management
Three Credit Hours

This course offers an independent research study in sport management. The independent study will enhance student's written communication skills, critical thinking, and scientific reporting.

SMGT 530 Practicum in Sport Management
Three Credit Hours
Prerequisites: Successful completion of SMGT 513 and SMGT 514, or instructor approval.
Practicum in sport management offers students the opportunity to work in a sport organization for a minimum of 175 hours. The practicum provides fundamental and valuable experiences in practicing the principles and concepts of sport management in the sport industry field.

SMGT 538 Internship in Sport Management
Six Credit Hours
Prerequisites: Successful completion of SMGT 513 and SMGT 514, or instructor approval.
An internship in sport management offers students the opportunity to work in a sport organization for a minimum of 350 hours.

SMGT 539 Sport Public Relations and Promotions
Three Credit Hours
This course is focusing on the marketing elements of public relations and promotions in the sport industry. Emphasis will be given on building positive and long-term relationships with the sport consumer and how to satisfy their needs and wants through promotional tactics.

SMGT 549 Sport Sociology
Three Credit Hours
This course introduces the sociological and cultural perspective of sport in the global society. Emphasis is given on the role of sport as a social institution and its influence on our social norms, cultures, and attitudes. Students will examine the role of sport across different cultures and countries and analyze the concept of the globalization of sport in both theory and practice.

SMGT 552 Sport Fundraising
Three Credit Hours
This course examines the traditional and innovative revenue acquisition methods for sport managers. Also, students will learn about the fundamental concepts and theories of fundraising applicable to the sport business industry.

SMGT 553 Sport Information Management
Three Credit Hours
This course provides students with an overview of the principles and practices of media in sport. Emphasis will be given on developing skills essential for sport communication professionals including, writing, interviewing, handling media interactions across platforms, social media and technology, e-commerce, and advertising for sport.

SMGT 555 Sport Law
Three Credit Hours
This course reviews legal considerations, responsibilities, liabilities, health, safety, and risk management issues in professional, intercollegiate, interscholastic, and amateur sport organizations. By examining the sport agency laws, players, and coaches' contracts, consolidation, and disputes, students will gain in-depth insights into practicing sport agent duties. Also, sport law educates students on the most critical regulations and liabilities of the sport governmental bodies at the regional, national, and international levels.

SMGT 556 Sport Finance
Three Credit Hours
This course offers an introduction to basic knowledge, skills, understanding, and implementation of sport finance within the sport industry. Emphasis will be given on budgeting and managing effective sales and revenue programs through the study and analysis of publications, statistics, news releases, publicity, press releases, media packets, and public relations.

SMGT 557 Sport Economics and Analytics
Three Credit Hours
This course introduces students to fundamental concepts of economics and analytics related to amateur, collegiate, and professional sport, sporting goods, and services industry, and sport betting. The specific fields of economics covered in the course include public finance and game theory. Topics related to sport analytics cover player performance, sports data strategies, and team tactics.

SMGT 558 Sport Advertising
Three Credit Hours
This course examines the knowledge, skills, and concepts required for successful advertising in the sport industry and developing and maintaining symbiotic relationships with the media. Strategies and techniques of advertising and media relationship building will be studied.

SMGT 559 Research Methods in Sport Management
Three Credit Hours
This course is designed to introduce to students the procedures for conducting, reviewing, analyzing, evaluating, applying, and presenting research in sport management. Students will acquire the skills to utilize fundamental research designs, data collection, and data analysis in the sport management scholarship.

Tactical Performance and Resiliency (TAPR)

TAPR-600—Strength and Conditioning I
Three Credit Hours
This course is designed to provide students with fundamental knowledge of applied anatomy, human movement, exercise science, and biomechanics as they relate to fitness and performance. Topics to be covered include but are not limited to: gross human anatomy, structural kinesiology, and bioenergetics as they relate to exercise technique and human performance.

TAPR-601—Introduction to Human Performance & Coaching
Three Credit Hours
A study of fundamental concepts in human exercise physiology as applied to programs for improving athletic performance. Theories, current research, and techniques for assessing human physiological responses to exercise, physical training, and coaching for a wide spectrum of populations will be studied, but with emphasis on tactical populations.

TAPR-610—Applied Exercise Physiology and Nutrition
Three Credit Hours
This course will provide students with an in-depth understanding of how exercise and nutrition affect the body's physiological systems including, but not limited to the cardiovascular, endocrine, nervous, musculoskeletal, and respiratory systems. Additional attention will be paid to bioenergetics and the effects that extreme environmental factors such as heat, cold, and altitude have on physiological performance. Current nutritional theories and practices related to performance and proper recovery are also investigated.

TAPR-640—Tactical Strength and Conditioning
Three Credit Hours
A study of fundamental concepts in bioenergetics, biomechanics, and cardiopulmonary and skeletal muscle function and adaptation, as it relates to the physical conditioning, training, and physical fitness of tactical personnel. Current research, and laboratory techniques for assessing human physiological responses to exercise and training, will be studied. Topics to be covered include but are not limited to: testing and evaluating tactical populations, nutrition for tactical populations, and physiological issues related to fire and recuse, law enforcement, and military personnel. This course will include a 10 hour practicum to help students directly apply concepts learned in a real-world setting. Content will prepare students for professional certification as a Tactical Strength and Conditioning Facilitator from the National Strength and Conditioning Association.
Prerequisites: TAPR 601

TAPR-695—Practicum in Tactical Performance & Resiliency
Three Credit Hours
A supervised experience of at least 150 hours in a private or public sector setting. Students will observe and assist experienced professionals in designing and implementing training programs aimed at improving human performance and resiliency. Additionally, students will construct a professional portfolio showcasing their knowledge, skills, and experience to assist them in obtaining future job opportunities.
Prerequisites: Students must have completed all required courses.

TAPR-699—Capstone Internship in Tactical Performance and Resiliency
Three Credit Hours
A supervised internship experience of at least 300 hours in a private or public sector host organization focused on performance and resiliency of tactical athletes. Students will actively participate in designing and/or delivering programs aimed at improving performance and resiliency for a single tactical athlete and/or groups of tactical athletes. This internship will provide the student with hands-on skills and knowledge for handling the nuances of training tactical athletes. Upon completion of the internship, students will present a comprehensive summary of their internship experience, and will be formally evaluated by the internship preceptor.
Prerequisites: Students must have completed all required courses.