

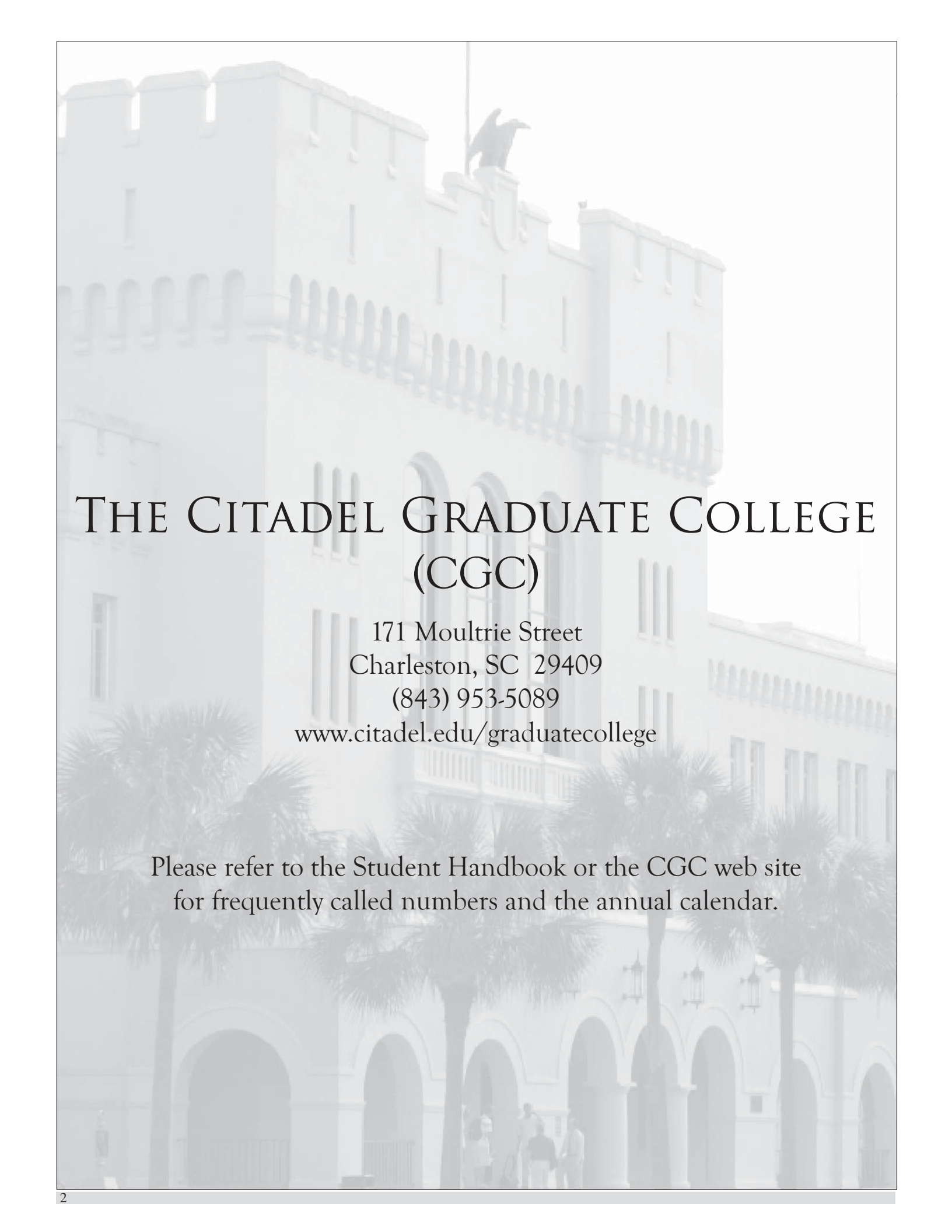
A HIGHER DEGREE OF LEADERSHIP

# THE CITADEL GRADUATE COLLEGE

## 2012 - 2013 ACADEMIC CATALOG

- › GRADUATE DEGREE PROGRAMS
- › GRADUATE CERTIFICATE PROGRAMS
- › EVENING UNDERGRADUATE DEGREE PROGRAMS





# THE CITADEL GRADUATE COLLEGE (CGC)

171 Moultrie Street  
Charleston, SC 29409  
(843) 953-5089

[www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege)  
[www.citadel.edu/eveningundergraduatestudies](http://www.citadel.edu/eveningundergraduatestudies)

Please refer to the Student Handbook or the CGC web site  
for frequently called numbers.

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# President's Message

Welcome to The Citadel Graduate College, where we extend our mission of educating principled leaders to people like you who seek graduate study to become leaders in their chosen fields. We take great pride in our distinguished faculty and excellent facilities that combine to offer a unique learning environment. You will find that our students - your friends, neighbors and colleagues - have chosen the CGC 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 the nearly 8,000 CGC alumni for whom a graduate degree from The Citadel was a stepping stone to success and continued growth.



Lt Gen John W. Rosa, USAF (Ret), '73  
President

## Board of Visitors

The Citadel Board of Visitors is composed of eleven graduates of the college; seven elected by joint vote of the SC General Assembly, three elected by alumni (Citadel Alumni Association) and one appointed by the Governor. All members serve six-year terms.

Colonel Douglas A. Snyder, '82, Chair  
Colonel Fred L. Price, Jr., '75, Vice Chair  
Colonel Allison Dean Love, CGC, '93  
Colonel Glenn D. Addison, USAFR (Ret), '79  
Lieutenant Colonel Ben W. Legare, Jr., USA (Ret), '63  
Colonel James M. McQuilla, '88  
Lieutenant General W. Michael Steele, USA (Ret), '67  
Colonel Dylan W. Goff, '02  
Lieutenant General John B. Sams, Jr., USAF (Ret), '67  
Colonel Tecumseh Hooper, Jr., '69  
Colonel Peter M. McCoy, Sr., '74  
The Honorable Nikki R. Haley, Governor, Ex Officio  
Major General Robert E. Livingston, Jr., Adjutant General, Ex Officio  
The Honorable Mitchell M. Zais, State Superintendent of Education, Ex Officio  
Colonel Leonard C. Fulghum, Jr., '51, Chairman Emeritus  
Colonel William E. Jenkinson III, Member Emeritus



# The Citadel's Statement of Vision, Core Values, and Mission

## Statement of Vision

Achieving excellence in the education and development of principled leaders.

## Core Values

Honor: First and foremost honor includes adherence to the Honor Code of The Citadel. A cadet “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: First and foremost duty means to accept and accomplish the responsibilities assigned to me. At The Citadel, my primary duty is to perform academically and then to perform as a member of the Corps of Cadets and the campus community. I accept the consequences associated with my performance and actions. Once I have held myself accountable for my actions, then I will hold others accountable for their actions. Finally, duty means that others can depend on me to complete my assignments and to assist them with their assignments. Duty is also a call to serve others before self.

Respect: First and foremost respect means 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 which include faculty, staff, administrators, active duty personnel and the leadership of the Corps of Cadets. 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, discipline, physical fitness, and moral and ethical values. The four pillars which define The Citadel experience for cadets consist of these four developmental dimensions.

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 1,900 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 (Bachelor of Arts, Bachelor of Science, Bachelor of Science in Business Administration, Bachelor of Science in Civil Engineering, and Bachelor of Science in Electrical Engineering) in the humanities, social and natural sciences, business administration, engineering, and education. These academic programs prepare graduates of the Corps of Cadets 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 undergraduate and graduate programs, The Citadel Graduate College serves a degree-seeking population of approximately 1,200. The primary service area is the South Carolina Lowcountry. The Citadel Graduate College offers three baccalaureate degree programs (Bachelor of Science in Business Administration, Bachelor of Science in Civil Engineering, and Bachelor of Science in Electrical Engineering) and seven graduate degree programs (Master of Arts, Master of Science, Master of Arts in Education, Master of Arts in Teaching, Master of Education, Master of Business Administration, and Specialist in Education). Meeting the needs of the South Carolina 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 and The Citadel Graduate College enroll approximately 3,200 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 is pursued 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 College's Mission/Purpose

The Citadel Graduate College provides adults in the Lowcountry and the State of South Carolina opportunities for higher education 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 adult students seeking traditional and demanding academic challenges. By providing graduate research, scholarly contributions, affiliations with educational, business and science professional associations nation-wide and around the world, community outreach and development, and contribution of other resources, The Citadel Graduate College supports and encourages stronger economic development in the region by identifying and creating new programs to benefit the community.

The Citadel, The Military College of South Carolina, was established in 1842. In 1966 the coeducational undergraduate Evening College was founded. In 1968, as part of its mission to serve the State and particularly the Lowcountry, The Citadel initiated graduate degree programs. In 1994, the Board of Visitors approved the formation of The College of Graduate and Professional Studies. In 2007, the name was changed to The Citadel Graduate College to help people more closely identify and recognize an important part of The Citadel. Programs under this college are open to all qualified students regardless of sex, race, age or ethnic origin.

The Provost and Dean of the College is the academic officer charged with the administration and supervision of all graduate study. The Graduate Council, made up of the Provost, the Associate Provost and Dean of The Citadel Graduate College, the Director of the Library, and a representative of each academic department with a graduate major, establishes standards and policies and approves program modifications.

## Accreditation

The Citadel is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools, an institutional accrediting body recognized by the Council on Postsecondary Education. The Commission on Colleges of the Southern Association of Colleges and Schools accredits The Citadel to award Bachelor's, Master's, and Specialist degrees.

Programs for the preparation of secondary education teachers at the bachelor's and master's levels, 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 National Council on Accreditation of Teacher Education (NCATE), a specialized accrediting body recognized by the Council on Postsecondary Accreditation. The head of the Department of Education serves as the Director of Teacher Education.

The School of Business Administration is accredited by the Association for the Advancement of Collegiate Schools of Business (AACSB) International.

The Clinical Counseling program is accredited by the Masters in Psychology Accreditation Council.

The Computer Science programs as well as the Civil and Electrical Engineering programs are accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

The School Counseling Programs that offer a Master of Education in Counselor Education (Elementary or Secondary Certification) were granted full eight years CACREP (Council for Accreditation of Counseling and Related Educational Programs) in July 2005.

The School Psychology Program is fully accredited by the National Association of School Psychologists.

# The Citadel Graduate College Academic Calendar 2012-2013

2012		2013	
Aug. 15	Payment for fall 2012 due	Jan. 2	Payment for spring 2013 due
Aug. 20	Fall 2012 classes begin	Jan. 7	Spring 2013 classes begin
Aug. 31	Last day to drop/add	Jan. 18	Last day to drop/add
Sept. 3	Labor Day - no CGC classes	Jan. 21	Martin Luther King Day - no CGC classes
Oct. 8	Last day to withdraw with a grade of "W"	Feb. 1	Last day to apply for spring or summer graduation for those participating in the commencement ceremony*
Nov. 1	Last day to apply for graduation*	Mar. 1	Last day to apply for spring graduation for those not participating in the commencement ceremony**
Nov. 5	Registration begins for spring 2013 for currently enrolled students	Mar. 4	Last day to withdraw with a grade of "W"
Nov. 6	Election Day - no CGC classes	Mar. 4	Registration for summer 2013 begins for currently enrolled students
Nov. 16	Fall Break begins	Mar. 15	Spring Break begins after class
Nov. 12	Registration for spring 2013 begins for all students	Mar. 18	Registration for summer 2013 begins for all students
Nov. 26	CGC classes resume	Mar. 25	CGC classes resume
Dec. 4	Last day for CGC classes	Apr. 8	Registration for fall 2013 begins for currently enrolled students
Dec. 5	CGC exams begin	Apr. 22	Registration for fall 2013 begins for all students
Dec. 11	CGC exams end Winter break begins	Apr. 22	Last day for CGC classes
Dec. 14	Semester grades due by 10:00 a.m.	Apr. 23	CGC exams begin
		Apr. 29	CGC exams end
		May 2	Semester grades due by 10:00 a.m.
		May 4	CGC Commencement

\* *Deadline is for CGC students completing requirements on December 14.*

\* *Deadline is for CGC students completing requirements in the spring or summer and are participating in the spring commencement ceremony.*

\*\* *Deadline is for CGC students completing requirements in the spring but are not participating in the spring commencement ceremony.*



# 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 are 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 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.

# Procedural Information

## Application and Admissions

The application process at The Citadel Graduate College (CGC) is a two-part process that occurs simultaneously. The applicant must be accepted into CGC and the program to which he/she seeks a degree. Requirements for acceptance into CGC include:

- a. Completed application for admission
- b. Non-refundable application fee
- c. Transcripts submitted directly from all colleges and universities attended. Transcripts from all schools are required, regardless of whether the coursework would apply to a degree program, to ensure good academic and financial standing. Transcripts must be from regionally accredited colleges and universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.).
- d. A standardized admissions test (GRE, GMAT, or MAT depending on the program) score.

Upon receipt of an application, each applicant is sent a letter acknowledging the application and outlining specific admission requirements for CGC and the program for which he/she applied.

The requirements for acceptance into specific programs and degrees are described in this catalog for each program/degree. Official copies of test scores must be sent directly to the CGC office and must be current within five years of application.

Full acceptance is not granted until both CGC and program requirements are met. After acceptance by the program, any non-US Citizen must be cleared for registration by The International Office. The TOEFL test is required of any applicant whose native language is not English. At this time a letter of acceptance is sent to the student which includes the name of the advisor. Students are encouraged to meet with his or her advisor.

## Application for Resident Status for Tuition and Fee Purposes

Any student or prospective student who is uncertain concerning entitlement to 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 two weeks prior to registration for any semester or summer term for which the student is attempting to qualify for payment of in-state tuition and fee rate.

## CGC Class Ring

All CGC students graduating from degree programs are eligible for the CGC Class ring. CGC students may order their ring upon completion of all but the final two semesters of coursework/ internship and must possess an overall 2.0 GPA for undergraduate

students or 3.0 GPA for graduate students. To place a class ring order, contact the Alumni Center at (843) 953-7698. The Alumni Center will verify eligibility with the CGC office.

## Forms and Deadline

To apply for financial aid at The Citadel, all students should file a Free Application for Federal Student Aid (FAFSA) as soon as possible after January 1. These forms are available online at <http://FAFSA.ed.gov>. Additional information may be requested by the Financial Aid Office. Students are responsible for checking their Lesesne Gateway accounts and completing all requested paperwork and financial aid requirements in a timely manner. Because funds are limited, those students whose applications are completed after the deadline dates will receive consideration for aid only as fund availability permits.

Priority deadline dates are as follows:

Academic year (fall and spring)	February 28
Fall only	February 28
Spring only	October 15
Summer	March 15

## Drop/Add and Withdrawals

To drop or add a course from the schedule or to change sections within a course, a student must come to the CGC office and complete a “drop/add” form or drop/add through Lesesne Gateway. The deadline for changes is listed in the calendar for each semester. Formal notice of intent to drop or withdraw from any class is necessary in all cases. After the drop period, students who choose to withdraw must complete a withdrawal form available in the CGC office or online. The dates for dropping and withdrawing are listed in the term calendar at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege). Course withdrawal means a student is withdrawing from a course after the refund date has passed. Refunds after the published refund date are granted only under extenuating circumstances (i.e. death in immediate family, serious medical issues, deployment.). A grade of “W” will appear on the student transcript. The “W” does not affect the student’s grade point ratio (GPR).

Applicants with financial aid paperwork not completed 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 at the established fee payment deadlines. Students will be reimbursed if they are subsequently determined to be eligible for financial aid.

To withdraw with the grade of “W,” the student must complete the course withdrawal form obtained from the CGC office or online and return the form to the CGC office. Students who do not follow this procedure will receive a failing grade in the course(s) which they cease to attend. Ceasing to attend a course does not constitute an official withdrawal from the course. The grade of “W” will be recorded if a student withdraws on or before the published deadline. Students should check the current calendar for the term found at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege) for deadlines.

## Determining Financial Need

The amount of financial aid is determined based on the FAFSA form the applicant files after January each year. This form solicits information about the applicant’s family’s current financial situation and produces an “expected family contribution”. 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 are 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.

## Fee Payment

All fees are due and payable at the time of registration. If fees are not paid by the published date on the term calendar, prior to classes starting, the student may be dropped from registered classes. Checks for the amount of charges should be made payable to The Citadel. Fees may also be paid with bank cards, however a service fee is incurred. Electronic check payment is also available at no charge. Deferred payment plans may be arranged in advance of a semester through a third party. Forms are available in the Treasurer’s office. The Citadel reserves the right at any time to adjust fees to meet the current cost of operation. Fee schedules are published each semester on The Citadel’s web page. The Citadel Treasurer is responsible for the collection of monies due to The Citadel. All correspondence concerning fees, payments, and status of accounts should be directed to that office.

## 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. Independent students will fall into one of the following categories. Students are automatically independent and therefore not required to submit parental data if:

- a. He/she is 24 years old or older by Dec 31 of the award year
- b. He/she is a graduate student
- c. He/she is married
- d. He/she is currently serving on active duty in the U.S. Armed Forces for purposes other than training
- e. He/she is a veteran of the U.S. Armed Forces
- f. He/she has children (or other dependents) and will provide more than half of their support
- g. He/she was in foster care or deemed a dependent or ward of the court

## Financial Aid and Scholarships

The Financial Aid Office handles student loan applications, grants, scholarships and work-study programs. Their office is located in Bond Hall, Room 138 and they can be reached at (843) 953-5187 or by email at [financial\\_aid@citadel.edu](mailto:financial_aid@citadel.edu).

- h. He/she was an emancipated minor or in legal guardianship as determined by a court
- i. He/she was determined to be an unaccompanied youth that was homeless or were self-supporting and at risk of being homeless.

Total Hours	Minimum GPR
0-39	1.300
40-69	1.500
70-99	1.700
100 & above	1.900

## 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 conditional 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) Generally, a student must be enrolled at least half-time. This is defined as 3 hours/semester for graduate students and 6 hours/semester for undergraduate students.
- 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 ratio and must make satisfactory academic progress (SAP) toward a degree to continue to receive 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

The Citadel is required by federal law to establish, publish and apply reasonable standards for measuring whether a student is maintaining satisfactory academic progress toward a degree objective, and to ensure progress toward the degree for all periods of enrollment, whether or not the student has received financial aid.

To be eligible to receive or remain eligible to receive financial aid, students must maintain “satisfactory progress” in their course of study. A determination of satisfactory progress incorporates three standards applied at the end of each 12 month period of enrollment:

1. Maintain a minimum amount of earned credit hours
2. Maintain a minimum Grade-Point Ratio
3. Complete program of study in a required amount of time

#### Minimum Earned Credit Hours

In general, students are expected to complete 75% of the hours for which they are funded each academic year. The Financial Aid Office will monitor hours completed at the end of each academic year to determine if the student: 1) has made academic progress; 2) will be placed on probation for one semester; or 3) will be disqualified from receiving financial aid.

#### Grade-Point Ratio (GPR) Requirements

##### Undergraduate Students

Graduate Students must maintain the minimum cumulative GPR as required by the Graduate College for continuance.

Note: Total hours are quality hours and any Transfer & Pass/Fail Hours combined.

#### Maximum Hours

Financial aid eligibility is limited to students that have reached 150% of attempted hours for their program of study.

#### Disqualification

Students will be disqualified at the end of each academic year in which one of the following occurs:

##### Undergraduate Students

- Full-time students who earn less than 24 hours
- Part-time students who earn less than 75% of the hours attempted
- GPR is less than minimum requirement for continuance on probation

##### Graduate Students

- Full-time students who earn less than 15 hours
- Part-time students who earn less than 75% of the hours attempted
- GPR is less than minimum requirement for continuance on probation

#### Re-Qualification

Undergraduate Students - The student must enroll without federal aid and complete the number of hours they are deficient. The minimum GPR must also be received for continuance on probation depending on your grade level. This work may be completed at The Citadel without aid or at another institution as long as the hours have been approved by the Registrar’s Office or The Citadel Graduate College. It is the student’s responsibility to notify the Financial Aid Office of hours transferred from another institution.

Graduate Students - The student must enroll without federal aid and complete the number of hours they are deficient. A minimum of 3.0 GPR must also be received. This work may be completed at The Citadel without aid or at another institution as long as the hours have been approved by The Citadel Graduate College. It is the student’s responsibility to notify the Financial Aid Office of hours transferred from another institution.

#### Appeals

Students who are determined to be ineligible for financial aid due to lack of satisfactory academic progress may appeal this decision. An appeal of any decision concerning initial or continued financial aid funding must be submitted on a SAP Appeal Form. The steps are outlined below:

1. Make an appointment to meet with a financial aid counselor once you have received notice that your financial aid will be disqualified.
2. Complete a SAP Appeal Form. Clearly explain your circumstances by attaching supporting documentation and

submitting the information to the Financial Aid Office.

3. Your information will be reviewed by the Financial Aid Appeal Committee. A decision will be based upon the information that you provided as well as your records at The Citadel.
4. You will be notified of the decision in writing. If you need to take additional action, you will be advised to do so. If you feel there were circumstances that were not reflected in the committee's decision, you may request an appointment with the Director of Financial Aid. You should bring with you any additional documentation that will specifically explain those pertinent issues you think should be considered. The final level of appeal rests with the Director of Financial Aid.

## Financial Aid Refund and Repayment Policy

### Refunds

Financial aid recipients who withdraw from school are eligible to receive only that portion of the institutionally determined refund which exceeds the financial aid received. This policy also applies to students on whose behalf a parent has borrowed a Title IV loan.

Refunds will be returned to the programs from which the student received aid. The Higher Education Amendments of 1998, Public Law 105-244 changed substantially the way funds paid toward a student's education are to be handled when a recipient of Federal Financial Aid withdraws from school. 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 7	43 percent
Week 2	12 percent	Week 8	50 percent
Week 3	18 percent	Week 9	56 percent
Week 4	25 percent	Week 10	60 percent
Week 5	31 percent	Week 11-16	100 percent
Week 6	37 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:

- Unsubsidized Student Loans
- Subsidized Student Loans
- Perkins Loans
- PLUS Loans/Graduate PLUS Loans
- Federal Grants
- 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
- 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.

- Federal Direct/Stafford loans;
- Federal Perkins loans;
- Federal PLUS loans received on behalf of the student;
- Federal Pell Grants;
- Federal SEOG Grants;
- other Title IV programs;
- other federal, state, private, or institutional student financial assistance received by the student for which refunds are required;
- the student.

## Other Assistance

*Vocational Rehabilitation Scholarships:* This program provides for education and training if the student has a physical or mental disability which 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:* Tuition Management Service (T.M.S.) is one of a number of special plans by many of the larger banks which will pay college fees when due and arrange for a parent or sponsor to repay on a prearranged monthly budget schedule extending over the year. Contact The Citadel's Treasurer's Office for information.

*Veterans' Services:* Veterans' services are administered under the umbrella of student financial aid at The Citadel. Veterans' 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
- Ch. 1607—(REAP, Reserve Education Assistance Program).

Veterans who believe they have an entitlement should check with their local VA Office, the regional office in Columbia (1-800-827-1000), or the VA Coordinator at The Citadel. An applicant should contact the VA Coordinator in the Financial Aid Office at The Citadel well in advance of the anticipated matriculation date so that the necessary documents may be obtained in order to certify attendance with the VA. All veterans and dependents receiving VA Educational Benefits are required to come to the Financial Aid Office each semester and complete a request for VA Certification card. Any changes in the veterans’ course of study should be cleared with the VA Coordinator in the Financial Aid Office to ensure continuation of benefits. Any reduction in course load should be reported immediately to avoid overpayment. Transfer students are reminded that the office must have copies of all transcript evaluations made by the Registrar’s Office before certification can be made to the Veterans’ Administration for payment.

## Joint Degree Programs

The Citadel participates in joint graduate degree programs with the College of Charleston in Computer Science, English, History, and Middle School Education. Students routinely take courses at both institutions. Citadel students will register for all their Computer Science, English, History, or Education courses at The Citadel, even when a particular course may be offered at the College of Charleston. More specific information is available from the respective program directors.

## Maymester and Summer School

The Citadel’s Maymester and Summer School is a component of CGC which has the responsibility for the coordination and administration of all aspects of The Citadel’s graduate and undergraduate summer school programs. The operation of Maymester and Summer School is the responsibility of the Dean of CGC and is administered under the guidelines established in coordination with the Provost and the Commandant. The operation encompasses all aspects of college administration.

All Maymester and Summer School students are ultimately the academic and administrative responsibility of the Provost. CGC students remain under their academic deans, while non-degree and transient students are the responsibility of the CGC Dean. Students residing in the barracks, regardless of academic status are the disciplinary responsibility of the commandment, all other non-cadet students remain as stated above.

Admissions—Undergraduate transient admission to Maymester and Summer School does not constitute admission to the regular academic session of The Citadel.

Undergraduate transient students seeking initial admission to Maymester and Summer School at The Citadel must complete an application and pay the application fee. High school or college transcripts are not required for enrollment in Maymester or Summer School. Rising high school seniors may be admitted on the basis of written recommendations from their high school guidance counselor or principal and may enroll in a maximum of two freshman level courses. Citadel undergraduate day students applying, having applied, or having been accepted past or present should contact the Registrar’s Office for admission and registration information and assistance.

Undergraduate students seeking admission into evening undergraduate programs should refer to requirements outlined in each academic section of this catalog.

Graduate students enrolled in Maymester and Summer School must go through the admissions procedure outlined in the CGC catalog. Admission to the program and enrollment in courses are governed by the policies outlined for the program to which the student applies. Students enrolled in graduate courses are classified as “Graduate Students.”

Registration—Registration for all students, graduate and undergraduate, enrolled in Maymester or Summer School at The Citadel is conducted in the CGC office located in Bond Hall, Room 101. Admission and registration may be conducted in one of three ways:

- 1) Students may come to the office and complete the application/registration procedure
- 2) Students may mail or fax in an application/registration form.
- 3) Returning students may register through Lesesne Gateway online.

Parking—Ample lighted and secure parking is available on campus for all Maymester and Summer School students. All automobiles parked within The Citadel gates are required to have a parking tag. The tags are obtained in person in the Public Safety Office after paying the fee in the Treasurer’s Office. The fee for the parking tag is published in the “Schedule of Classes for Summer School” online at [www.citadel.edu](http://www.citadel.edu). The parking fee covers all sessions of Maymester and Summer School. Very limited parking is available for motorcycles on a first come, first served basis just outside the Hagood gate at the end of Huger Street. All motorcycles must have a Citadel parking tag. Two and three wheeled motorized vehicles may not be operated on campus.

Housing—Housing in barracks is available to any student enrolled in classes at The Citadel during Maymester or Summer School. However, it is not mandatory for any student to live on campus during Maymester and Summer School. The online “Schedule of Summer Classes” provides information on the cost of living in barracks housing.

Dining—Coward Hall (The Citadel Dining Hall)—The price of meals for students living in the barracks is included in room and board fees. All other students, graduate or undergraduate, may obtain noon meal tickets for the established fee indicated in the online “Summer Schedule of Classes.” Meal tickets for 3 meals a day (breakfast and lunch only on Fridays, no meals on Saturdays or Sunday) are also available to all interested students not living in the

barracks. Individual meal tickets will not be sold. All students may purchase snacks and light meals in the food court in Mark Clark Hall.

Student Identification Cards—Maymester and Summer School students attending on-campus courses may obtain a Citadel identification card. The identification cards are obtained after registering in Bond 244. This card is necessary for using The Citadel and area consortium libraries.

Recreation—Campus recreational facilities are available to students enrolled in classes upon payment of the activity fee in the Treasurer's Office. These facilities include the Deas Hall weight room, racquetball courts, swimming pool, gymnasium, tennis courts, track, and The Citadel Beach House located on the Isle of Palms. Students must show The Citadel identification card to use these facilities.

## Orientation

In order to assist new CGC students in becoming familiar with The Citadel facilities and support services, CGC offers two new student orientations each year. These orientation sessions are offered before the beginning of the fall term and before the beginning of the spring term. New students will be notified of the date, time, and place of these orientations.

## Refunds

No fees are refunded after the published drop deadline. This date is usually following two class meetings. To obtain the appropriate refund, a student must complete the drop form available in the CGC office or drop via the online system. The Dean of CGC may authorize a refund for extenuating circumstances after the scheduled refund date but only if a formal application is made in writing to the Dean of CGC. Extenuating circumstances are defined as a death in immediate family, serious medical issues and deployment. Registration, technology and application fees are not refundable.

## Registration

Registration is conducted by mail, online through Lesesne Gateway, or in person in the CGC office located on the first floor of Bond Hall, Room 101. Registration is not complete until all fees are paid. Students may not attend class until they are fully registered. Completed registrations will be honored on a first-come, first-serve basis. Any changes in registration must be made prior to the end of the term's Drop/Add period. Information concerning fees, class times, and registration calendars can be found each academic term online at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege).

## Transcripts and Transfer Credit

Graduate students applying for transfer credit will use the "Transfer Credit for Graduate Programs" form located online at <http://www.citadel.edu/graduatecollege/forms/>. The form will be submitted to CGC 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. Approval is granted by the student's department, contingent upon Citadel policy. Only courses with a "B" or higher are acceptable for transfer from regionally accredited colleges and universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.). Undergraduate students should refer to the undergraduate section of the catalog.

# Policy Information

## Academic Integrity Policy and Procedures

The following academic integrity policy is in effect for non-cadet students for fall and spring semester and all students including cadets in Maymester and Summer School.

Absolute integrity is expected of every Citadel student in all academic undertakings. Academic integrity is grounded on the concept of honesty with respect to the intellectual efforts of oneself and others. A student's submission of work for academic credit indicates that the work is the student's own. Students are responsible for knowing what constitutes violations of the Academic Integrity Policy. Examples of violations of the Academic Integrity policy include, but are not limited to the following:

- Plagiarizing or representing the words, ideas, or information of another person as one's own without documentation;
- Giving or receiving prior to an examination any unauthorized information concerning the content of that examination;
- Using, without authorization of the instructor, notes, books, prompts, or other materials, or receiving verbal or electronic assistance to aid in answering questions on an examination;
- Giving or receiving substantive aid during the course of an examination;
- Asking or permitting another person to take a test or engage in other academic work; or taking a test or engaging in academic work for another, whether voluntarily or for hire, in conjunction with class work or for admissions purposes;
- Violating personal property rights (for example, stealing or attempting to steal tests, keys, or grade books);
- Fabricating data in support of laboratory or field work;
- Engaging in other acts of academic misconduct.

While academic integrity is a shared responsibility, it is incumbent upon the student to abide by the academic integrity requirements. It is the responsibility of the faculty member to inform the student of any atypical academic integrity requirements.

1. When a faculty member suspects or has been informed that a student may have violated the Academic Integrity Policy, the faculty member should inform the student in writing within ten working days of discovery. Some situations may require more time; however in no case should this written notification be delayed by more than one month. Written notification will include the allegation and a suggested time, place and date for a meeting of the student, the professor, and Department Head of the department in which the alleged violation took place. If the faculty member making the allegation is the Department Head of the department in which the alleged violation took place, the meeting will include the student, the faculty member, and Dean of the school in which the alleged violation took place.

2. After this meeting, if the faculty member decides that no violation occurred, the matter will be dropped. If the faculty member decides that a violation has occurred but that only a grade penalty is warranted, the student may be assigned an "F" for the work in question, or, in more serious cases, an "F" in the course. If it is determined that a more serious penalty is warranted, or if the student does not accept the grade penalty offered, the accusation will be remanded to the

Dean of the school in which the alleged violation occurred. If that Dean participated in the meeting with the faculty member and the students, the matter is referred to the Provost.

3. Upon receiving the allegation, the Dean of the school where the alleged violation occurred or the Provost will appoint a four member hearing board comprised of the Dean of CGC, two faculty members from outside the program of the accused student and a currently enrolled CGC student of the same student classification, but outside the program of the accused student. The hearing will be convened within two weeks from the date the hearing board receives the case. If circumstances preclude meeting this deadline, the accused will be so informed in writing. A minimum of seven days notice will be provided the student prior to the hearing. The accused student may be advised by another student or member of the permanent faculty or staff, not to exceed two. The student and/or the student's advisor may cross-examine all witnesses and the accuser. A tape recording of the hearing, which will be closed, will be made. Upon conclusion of the hearing, the hearing board will vote and report its findings and recommendation to the Dean of the school in which the alleged violation occurred or the Provost.

4. Upon reviewing the recommendation, the Dean of the school where the alleged violation occurred, or the Provost will either exonerate the student; impose a sanction less than suspension, dismissal or expulsion; or recommend a sanction of suspension, dismissal, or expulsion to the President of the College. If the sanction is not suspension, dismissal, or expulsion, the student may appeal this sanction to the President of the College who makes the final decision. If the sanction is for suspension, dismissal, or expulsion, the President of the College will review the case and the process that has been followed and make the decision on removal of the student from The Citadel for a violation of academic integrity. The student may appeal that decision to the Board of Visitors.

*Appeals of Violations of Academic Integrity* - Students who have been found guilty of a violation of academic integrity where the punishment is suspension, dismissal, or expulsion shall be entitled to petition an Academic Integrity Board of Review to hear an appeal provided the petition is submitted to the Office of the President within five working days after receiving notice of the findings of the Provost, and provided the petition states the grounds on which the appeal is based. An Academic Integrity Board of Review is established by the President. An Academic Integrity Board of Review will consist of a Dean, who serves as chair; a department head; a senior member of the faculty; and a non-voting recorder. Once established, an Academic Integrity Board of Review will be furnished the record of the original proceedings and will evaluate the petition of appeal to determine if any of the following grounds have been met:

- new evidence has been found since the individual was found guilty;
- the individual's rights were not protected;
- there was a procedural error during the trial.

If after considering the petition of appeal, the Academic Integrity Board of Review determines that the request for appeal sets forth reasonable grounds for appeal and agrees to hear the appeal, the accused student and advisor will be present during the formal portion of the hearing, which will be taped. Oral arguments from

the student or advisor will be heard and will normally be limited to 30 minutes each. In addition, the student or advisor will have the opportunity to question any witnesses called by the Academic Integrity Board of Review. The formal appeal hearing will be taped, and the tape will become part of the record of the Academic Integrity Board of Review. The findings of the Academic Integrity Board of Review will be transmitted to the President in the form of sealed, confidential written recommendations, with appropriate justifications.

## 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:

- a. 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 program. 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.
- b. 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 program. 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.
- c. Any student admitted to a graduate program who has earned or attempted twelve (12) hours of graduate credit must have a cumulative GPR of 3.0 or higher to continue in the program. If a student’s GPR falls below a 3.0 any time after the completion of twelve (12) hours of graduate credit, the student must improve his/her GPR 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 GPR begins again. Failure to achieve the 3.0 GPR upon completion of the nine (9) additional graduate credit hours will result in termination from the program. 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. Some programs have more strict program requirements. Check with your program advisor for the standards for your program.

## Academic Support Center

The Citadel’s Academic Support Center 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. Graduate and undergraduate students have access to the Center. 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 Academic Support Center.

## Admission Categories

Graduate students may be admitted to CGC in one of the following two categories: degree seeking or non-degree seeking.

**Degree seeking** - A graduate student is classified as degree seeking when all admission requirements are met and the student has been admitted to a degree program. To obtain this classification a student must:

- Complete and return the application form along with the appropriate non-refundable application fee to The Citadel Graduate College.
- Submit to The Citadel Graduate College all official transcripts to include documentation of the baccalaureate and all other undergraduate or graduate work from regionally accredited colleges or universities. Transcripts must be sent directly from each school or university and must be from regionally accredited colleges and universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.).
- Submit the official score report on the appropriate admissions test (current within 5 years of application). Check individual program requirements in this catalog for the minimum acceptable score for the desired program. Official score report must be sent directly from the testing organization.
- Submit an official TOEFL score if native language is not English. The minimum acceptable score is 550 paper-based, 213 computer-based, or 79 internet-based.
- Additional admission requirements of specific programs are outlined in the information provided for each degree program.

**Non-degree seeking** - A graduate student is classified as non-degree seeking if he/she holds 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** for which he/she has the prerequisites. It 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 requirements stated above in "Degree Seeking". Program requirements will dictate the number of hours in non-degree status that will be accepted into any program. **No student shall register beyond 8 hours without being fully accepted into a degree program.** To obtain non-degree classification the student must:

- Complete and return the application form along with the appropriate non-refundable application fee to the CGC office.
- Submit a college transcript that shows completion of a bachelor's or higher degree before registration. Transcripts must be from regionally accredited colleges and universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.).

**Senior Citizens** - Persons over the age of 60 who meet degree or non-degree admissions requirements and are not employed full-time may register for courses on a space-available basis with no credit hours fee charged. All other fees must be paid.

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

- Have completed a degree equivalent to an American baccalaureate degree.
- Have his/her academic credentials officially evaluated by one of the accredited organizations suggested by the CGC office and sent directly from that organization to the CGC office.
- Meet all the admission criteria for the desired graduate degree program.
- Provide the appropriate score on the TOEFL exam.
- Provide completed CGC Immigration Request form.
- 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.
- International students may not register before full acceptance into a degree program and clearance from the International Student Director.

## Admission Policy (Graduate Students)

In keeping with the mission of The Citadel, The Citadel Graduate College seeks to enroll mature 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 other sections of this catalog, but every applicant for a graduate degree must submit to the CGC office:

- a. An application with a non-refundable fee,
- b. Official transcripts sent directly from all regionally accredited colleges attended (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.),
- c. Official scores on the appropriate admissions test (current within 5 years of application), and
- d. an official TOEFL score if English is not the native language.

## Admission Test

All graduate programs in The Citadel Graduate College require submission of an official admissions test score. The test must be current within five years of application. See the appropriate program for the type of test required. Applicants for graduate programs in The Citadel Graduate College who possess an earned doctorate degree from a regionally accredited institution may request permission to waive the requirement to supply an admissions test score. An applicant must request the waiver in **writing** from the academic program director.

## Advisement and the Planned Program

Upon acceptance into a degree program, a student is assigned an advisor in the area of academic concentration. 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 CGC 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 major or degree program must file an application and fee, meet all admission requirements of the new major or degree program, and be accepted into the new major or degree program before registration in the new program can occur.

## 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. Students must possess an undergraduate degree from a regionally 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 are admitted to class on a "space available" basis. The audit fee is the same as the regular credit hour fee. Students must be registered in the class they wish to audit.

## Catalog of Record

The catalog bearing the number of the academic year in which the student enters The Citadel will be their catalog of record for academic program requirements.

## Class Attendance

Regular attendance is required of all CGC 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. The attendance policy for any CGC class is determined by the instructor and will be presented in the course syllabus. At the discretion of the instructor, a student who violates the course attendance policy may be penalized. In general, missing more than 20% of the scheduled class meetings would be considered excessive.

## Comprehensive Examinations

The Citadel graduate programs vary in their exit requirements. While all degree programs require at least a 3.0 cumulative GPR (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, Dean of The Citadel Graduate College, 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. Any student desiring to keep directory information confidential must file notice each 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 fees paid.

## Course Load

The minimum semester hour load for students wishing to be classified as full-time graduate students is 9 semester hours. Students holding Citadel graduate assistantships will be considered as full time if they are taking at least 6 semester hours. Students who hold full-time employment should not register for more than 6 semester hours in any given term. Students may register for a maximum of 2 courses or no more than 7 credit hours each summer term (Summer I, Summer II). The evening session is considered a part of Summer I and Summer II. Permission to take more than 2 courses each summer term must be obtained from the Dean of the School, the Department Head, or program director. No more than one course may be taken during Maymester.

## Course Substitution

Course substitutions in degree programs can only be authorized by the approval of the Head of the Department, Dean of the School, or Dean of the CGC. Course substitutions are not permitted for graduate certificate programs. Forms to initiate this procedure are available in the CGC office or online.

## 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 the two programs share no more than twelve credit hours in common course requirements. Ordinarily, a minimum of 33 hours of new credits must be included in the planned program for the second degree. However, students who enter a second master's degree program at The Citadel after also earning a certificate will not necessarily be subject to this 33-hour minimum; such cases will be evaluated on an individual basis, with the number of hours ultimately accepted

subject to the approval of the CGC Dean.

## 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.

## General Conduct Policy for Students

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 responsible adults. 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. Due to the cadet aspect of The Citadel community, CGC students are reminded to be aware of and respect military college traditions. The CGC Student Handbook is a good source of information.

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." The Provost or his 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 accomplishments. 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.
- 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.

## 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 GPR.

## Graduation

Students must apply to graduate by the established deadline. 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.

There are three graduation dates each calendar year. There is a late April or early 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 April or May, following the Spring semester.

The graduation date is the term in which the student completes all requirements. An incomplete grade is a delay in the completion of requirements, and the posting of the final grade determines the completion of that requirement.

Applications for graduation are available in the CGC office and online. A late fee is charged for applications filed after the posted deadline. To be recommended for a degree, students must meet all admission requirements and satisfactorily complete the scholarship and curriculum requirements for the degree. Finally, students must be free from all financial indebtedness to The Citadel.

**These deadlines for the graduation application ensure your diploma will be ordered in a timely manner and prevent additional administrative costs. It is each student's responsibility to apply to graduate. 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.

Parents who are either graduates of the Corps of Cadets, the Veteran Day Program, or The Citadel Graduate College may present diplomas to their sons or daughters at the CGC commencement ceremony. The graduate must make arrangements with The Citadel Graduate College office prior to commencement.

## Intellectual Property

Ownership of intellectual property will reside with the originator, whether a member of the faculty, a member of the 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.

## 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).

## 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.

## 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.

## Registration

Registration is not completed until all fees are paid. Students may not attend class until they are fully registered. Knowingly attending class without paying is an integrity violation. Any changes in registration must be made prior to the end of the terms' Add/Drop period. All fees are due by published calendar dates.

## 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 GPR. 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 M.A. in Psychology: Clinical Counseling degree program have a five (5) year limit. Requests for a waiver must be initiated by the student in writing to the appropriate Department Head who is responsible for making the final decision and for notifying the student. Department Heads will forward recommendations through their appropriate Dean who sends it to the CGC office. This recommendation will be subject to the final approval of the CGC Dean. Waivers must be on file in the CGC office prior to application for graduation. It is the students responsibility to ensure the waiver is provided to the CGC office.

If a waiver 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. 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 Dean of CGC does not rule on academic matters. However, students are encouraged to provide a courtesy copy of grievances and appeals to the Dean of CGC for record. CGC 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 Grade

A student who wishes to appeal the final grade assigned in a course must first confer with the instructor of the course in which the grade was received. If this does not result in satisfaction, the student should contact the appropriate department head or Dean who will review the matter. The faculty member and the student are both obligated to provide requested relevant information to the department head or Dean. The department head or Dean will present his/her findings to the student within ten working days of being contacted.

If this does not result in satisfaction, the student should contact the Provost. If deemed appropriate, the Provost will appoint a hearing board of three faculty members, with one designated as chair, and a student in good standing of the same student type as the appellant. This board shall have the authority to request testimony, hear witnesses, and study records and materials. The board shall forward its findings and recommendations to the Provost, who shall decide the case. The decision of the Provost is final.

## 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 under-

stand 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.

## Theses

Thesis committee appointments will be made at the discretion of the thesis advisor and/or program director and/or department head. Guidelines for formatting and submitting theses will be determined by individual programs. Thesis students should consult the program handbook and/or the program director for specific guidance on such matters. The program or department is responsible for providing the student with specific directions about producing a copy of the thesis for The Citadel library.

## Transcript

A transcript is a confidential document and is released only when students make a request in writing. There is no charge for the initial transcript, but a fee is charged for all subsequent ones. Remittances for transcripts should accompany the request for the transcript and should be mailed directly to the Office of the Registrar. Official copies are not released to students but are sent to requested destinations.

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.

## Transfer Credit

No more than 12 hours, may be transferred from other regionally accredited colleges or universities (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.). Exceptions are granted by The CGC Dean. 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.

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.

# Specific Policies and Procedures for Evening Undergraduate Programs

*All other CGC policies and procedures apply.*

CGC courses cover a wide variety of areas and are open to interested persons from diverse backgrounds. In addition to graduate programs, CGC also offers four undergraduate degrees: bachelor of arts in criminal justice; bachelor of science in business administration; bachelor of science in civil engineering; and bachelor of science in electrical engineering.

Each of these degree programs is offered in cooperation with Trident Technical College (TTC). The first two years of each program are taken at TTC. The junior and senior years are completed at The Citadel through evening and summer courses offered by CGC. The degree is awarded by The Citadel.

Courses may also be transferred in from regionally accredited colleges and universities other than TTC (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.). The basic course requirements remain the same. The junior and senior years are completed at The Citadel.

In each of the undergraduate degree programs offered by CGC, a minimum of 36 of the total required credit hours must be taken at The Citadel. Credits gained through AP, CLEP, or any other “testing out” process may not be counted among those 36 credit hours. Acceptability of transfer credits is governed by the policy described under the Transfer Credits section below.

CGC spring, fall, and summer schedules are available online. Information on programs, classes, and fees can also be obtained from the CGC office, EUGS office, or online. Information on financial aid is available online through the Office of Financial Aid and Scholarships or by phone at (843) 953-5187.

## Academic Criteria for Continuance

Records of degree-seeking undergraduate students are assessed for academic criteria for continuance after each period of two semesters and the included summer sessions. In order to be eligible to continue at The Citadel, a student must meet minimum standards regarding hours earned at The Citadel or properly transferred from another accredited institution, and an acceptable cumulative grade-point ratio must be maintained. Full-time students, those taking at least 12 credit hours each semester, must earn at least 24 semester hours each two-semester period. Part-time students must have passed at least 50 percent of the coursework attempted in the two previous semesters and the included summer sessions. If a previously passed course is repeated, the hours may be used only once toward meeting requirements for hours passed.

The student must also meet the grade-point ratio (GPR) requirement for the appropriate category of credit hours of record

as listed in the table below. In determining the category for credit hours of record, hours transferred into The Citadel from other institutions are included as credit hours of record.

The column “Quality Hours Plus Transfer Hours” includes:

- 1) all credit attempted for which a grade of “A,” “B,” “C,” “D,” or “F” was received at The Citadel,
- 2) course work transferred from other colleges, and
- 3) courses taken on a Pass-Fail basis.

Quality Hours Plus Transfer & Pass/Fail Hours	Grade-Point Ratio for Continuance (on probation)	Grade-Point Ratio for Continuance (without probation)
0-39	1.100	1.300
40-69	1.400	1.600
70-99	1.700	1.800
100 & above	1.900	2.000

This table traces the minimum academic progress students must make toward attaining the minimum acceptable overall grade-point ratio of 2.000 as they approach the total number of hours required in the course of study of their selected major. For the purpose of determining academic probation, criteria for continuance, dean’s list, graduation, and other academic matters, grade-point ratios will not be rounded.

## Academic Discharge

An undergraduate student who fails to meet either or both of the academic criteria for continuance will be discharged for academic deficiencies. Although The Citadel will notify students that they are deficient in either or both areas, it is the responsibility of students to ensure that these criteria are met. To avoid academic discharge, a student must meet both hour and GPR requirements concurrently either at the end of the fall semester, at the end of the spring semester, or in August, as appropriate.

A student who is discharged for academic reasons for the first time may apply for readmission after being out of school for one semester. If approved for readmission, the student will be readmitted on academic probation.

If a student fails for a second time to meet minimum academic criteria for continuance, the Dean responsible for the academic program in which the student is majoring will review the academic record and any extenuating circumstances the student wishes to present in writing. Based on this review and in consultation with the faculty advisor and the department head or the CGC Dean, the responsible Dean will determine the conditions under which the student will be permitted to continue or will award the student a second academic discharge. Except under extremely extenuating circumstances, a student discharged a second time for academic reasons will not be considered for readmission and may not enroll in course work in any program at The Citadel—day, evening, or summer.

## Academic Probation

Undergraduate students are placed on academic probation for any semester when their cumulative grade-point ratio based

on courses taken at The Citadel fails to meet requirements for continuance without probation as outlined in the Academic Criteria for Continuance table. Students will be removed from academic probation after the semester their cumulative grade-point average meets the requirements of the table. Students on academic probation are not making satisfactory progress, and restrictions, such as limiting the number of credit hours in which they may enroll, may be enforced.

## Admission

Because of community service orientation, CGC permits participation by evening undergraduate students in non-degree status as well as those who are pursuing an undergraduate degree.

## Catalog of Record

The catalog bearing the number of the academic year in which undergraduate students enter The Citadel will be their catalog of record for matters of academic policy.

When a student is readmitted after an absence of at least three academic semesters (summer sessions will not be considered as semesters for this purpose), the catalog bearing the number of the academic year in which the student is readmitted will be the catalog of record for matters of academic policy and graduation requirements.

## College Level Examination Program

Through College Level Equivalency Program (CLEP) Subject Examinations, undergraduate students are permitted to earn college course credits for knowledge they have gained in certain subject areas prior to beginning their college experience.

CLEP credits may be earned under the following conditions:

1. Since all CLEP examinations are not accepted by The Citadel, the student must obtain prior approval through the Office of the Registrar.
2. The score earned must meet or exceed the current minimum score recommended by CLEP for that subject area exam.
3. The amount of credit will be determined by the scope of the material measured.
4. Because of the laboratory experience is such an integral part of the Core Curriculum Science Requirement, credit for only the lecture portion of a science course may be earned through CLEP. The lab portions must be earned through a laboratory course.
5. Because basic skills of listening to and speaking a language are such critical components of the Core Language Experience, completing any portion of this requirement through CLEP must be approved by the head of the Department of Modern Languages.

A complete listing of courses for which credit may be awarded through CLEP is available in the Office of the Registrar.

## Combining Courses

Courses may be combined to meet a maximum of one general

elective credit requirement under the following circumstances:

- a. The courses to be combined must all be offered by the same department and must be related in some way.
- b. The department head or Dean for the program in which the student is majoring must provide a recommendation and rationale for combining courses.
- c. The Dean responsible for the academic program in which the student is majoring must grant final approval for the combining of courses.

## Definitions

Elective refers to a course that is required for graduation and may be any three-credit course offered by the College.

Approved Elective refers to a course that must be selected from a list of courses provided by the individual school or department.

Non-Departmental Elective refers to a course that is required for graduation and must be taken outside the major department. Students are encouraged to study areas outside the major to ensure as broad an education as is practical.

Students are reminded that it is expected that all coursework in the first two years of these programs be taken at other regionally accredited institutions and transferred to The Citadel. Courses at the 100- or 200-level will rarely be offered through CGC in a fall or spring semester. Some courses may be available in Maymester or Summer School at The Citadel.

## Grades

Only letter grades are given to evaluate an undergraduate student's progress. The following definitions of letter grades are applicable:

- a. "A" represents superior attainment on the part of the student.
- b. "B" represents work that is clearly above the average, but not superior.
- c. "C" represents average attainment on the basic standards set for the course.
- d. "D" represents minimum attainment of the basic standards.
- e. "F" represents failure.
- f. "W" represents withdrawal from a course prior to the official deadline which is indicated in the college calendar and is no earlier than the Wednesday following the midterm grading period. Beyond that point, students will receive the grade of "F" should they fail to complete the course or complete it unsuccessfully. Under extenuating circumstances, the grade of "W" may be awarded after the established deadline to withdraw from a course. Such an action is taken only upon the recommendation of the instructor and requires the concurrence of the Dean responsible for the student's academic program. Supporting evidence is the responsibility of the student and must be submitted in writing to the responsible Dean.
- g. The notation of "I" (for Incomplete) is used in instances when course requirements have been very nearly met but for authorized reasons (illness, injury, family emergency, etc.) cannot be completed during the current semester. To be eligible for the grade of "I," students' work must be satisfactory at the time they are forced to terminate participation in the course. Unsatisfactory work will result in a failing grade. The grade of "I" must be cleared during the next semester in residence or within one year, whichever comes first, or the "I"

becomes an “F.” The summer session will not be considered a semester in this case. Students may not officially enroll in a course in which they currently have an “I.” An extension of time due to extenuating circumstances may be authorized by the Dean responsible for academic program upon the recommendation of the instructor. The removal of the incomplete is the responsibility of the student.

Should a student fail to complete a semester or summer session for any reason, the grade in each course in which the student is then enrolled shall be determined by the individual faculty member.

No numerical symbol, bracket, or percentage is assigned the equivalent of any grade. Arbitrary distribution of grades according to some formula or curve is not permitted. However, by means of departmental supervision and consultation between instructors, every effort is made to obtain consistent standards within the department.

Students are expected to use proper grammar in all their course work, whether written or oral. Proper usage is expected at the college level and is required by all professors.

Any change of grade deemed necessary by the faculty member concerned must be based on instructor error and made within one month after the beginning of the next semester in attendance following the recording of the grade. In no case will a grade be changed after one month into the second semester after it was awarded. The summer session will not be considered a semester in this case. After grades in a course have been submitted to the Registrar’s Office, every request for a change of grade must be approved by the department head and the Dean responsible for the academic program. Grade reports are available at the end of each semester and summer session.

## Grade-Point Ratio Computation

In computing the undergraduate grade-point ratio, grades are weighted as follows:

Grade	Quality-Points Per Semester Hour
A	4
B	3
C	2
D	1
F, I, W	0

The grade-point ratio for any semester is determined by dividing the total number of quality points earned by the total number of hours for which the following grades were received: A, B, C, D, or F.

The cumulative grade-point ratio on which graduation, academic probation, and academic discharge are based is determined by dividing the number of quality points earned at The Citadel by the number of quality hours attempted at The Citadel. The number of quality hours for this purpose includes all credit hours attempted at The Citadel for which the following grades were received: A, B, C, D or F. The number of quality points earned includes all quality points associated with quality hours earned at The Citadel. The Citadel does not award plus and minus grades for the undergraduate programs.

## Non-Degree Seeking Students

Non-degree seeking undergraduate students are permitted to participate under the following conditions:

- a. Students who provide documentation of having graduated from an accredited high school or having completed the General Education Development (GED) examination may register for up to 15 credit hours of course work for personal or professional development.
- b. Persons age 60 or above and not employed full-time may enroll tuition-free in courses in the CGC on a space-available basis. All other fees must be paid.
- c. High school seniors may be permitted to register for a maximum of two courses and the associated labs in the CGC on the basis of written recommendation from their high school guidance counselor or principal.
- d. Undergraduate transient students who wish to enroll in course work for transfer to another institution may be asked to present evidence that they are in good academic standing at their home institution and have met any course prerequisites.
- e. Students who are in cadet status and are enrolled in the Corps of Cadets for a fall or spring semester are not eligible to enroll in CGC courses. Students who are in cadet status and are not currently enrolled in the Corps of Cadets, but who have not been given a conduct or academic discharge, may, with the prior approval of the appropriate Dean, take a limited number of credit hours in CGC. A cadet who has been expelled from The Citadel is not eligible to attend any class at The Citadel—day, evening, or summer. A cadet who has been suspended or dismissed is not eligible to attend any class at The Citadel—day, evening, or summer—until accepted for readmission to the College.

## Pass-Fail

Juniors and seniors with cumulative grade-point ratios of 2.000 or higher may elect to take elective courses on a Pass-Fail option. Normally, no more than one course may be taken under this option each semester, and no more than four courses taken under this option may be used to meet graduation requirements. A student may take the Pass-Fail option only on courses which meet elective requirements. Students may not change their decision to take a course on the Pass-Fail basis after the first two weeks of the term. Courses completed on the Pass-Fail option carry graduation credit, but quality points are not awarded. These courses are not included in grade point ratio computations.

Instructors report grades as usual, A through F. The Registrar’s Office translates grades as follows:

- a. The grades of “A” through “C” as “S” (satisfactory, pass-for credit);
- b. The grades of “D” or “F” as “U” (unsatisfactory, fail-no credit).
- c. Students desiring to take a course on the Pass-Fail option should contact the Registrar’s Office.



## Requirements for Graduation

For graduation, an undergraduate student must complete one of the departmental major courses of study stated in the catalog of record and must achieve a minimum cumulative grade-point ratio of 2.000 and a minimum grade point ratio of 2.000 in all coursework in the major.

Recommendations for graduation are made by the Academic Board to the Board of Visitors, which in turn awards appropriate degrees.

## Transfer Credits

Normally, only courses which are comparable in content and credit hours to specific courses offered by The Citadel and in which grades of "C" or better have been earned at a regionally accredited institution (e.g. Southern Association of Colleges, North Central Association of Colleges and Schools, etc.) will be considered for transfer. However, the Dean responsible for the academic program in which the student is majoring may accept for transfer to meet General Elective credits courses that are not offered by The Citadel but which are considered to be worthy of credit as electives and in which grades of "C" or higher have been earned. The respective department heads or Deans, as appropriate, have responsibility for considering all transfer courses that are comparable to courses offered by The Citadel. Course work taken at another college and accepted for transfer by The Citadel need not be applicable to a student's major. Courses transferred from another college will not be noted in the student's grade-point ratio at The Citadel. Transcripts sent from other colleges to The Citadel become the property of The Citadel and cannot be issued to the student or a third party.

To ensure that courses taken away from The Citadel will be accepted for transfer, students must obtain written, prior approval through the Office of the Registrar.

All transfer credits are provisional. If an academic unit determines within a reasonable period of time after classes begin that the student is not prepared to take a course for which the course transferred is a prerequisite, the allowance of credit is withdrawn, and the student must take the prerequisite course at The Citadel.

## Transfer Students

An undergraduate student may be accepted into evening undergraduate degree-seeking status in the CGC under one of the following conditions:

- a. The Citadel and TTC have an articulated agreement that permits a student to complete the first two years of study in engineering, business administration, or criminal justice at TTC. These credits are transferred to The Citadel where a student can complete the final two years for a Bachelor of Arts Degree in Criminal Justice or a Bachelor of Science Degree in Business Administration, Civil Engineering, or Electrical Engineering. A student who completes in its entirety the TTC portion of one of these programs needs only to submit an application and an official transcript from TTC and certificate of completion in order to be admitted

for the final two years of study in CGC. Details of the 2+2 programs are available online or in the CGC office, Bond Hall, Room 101. These four programs are outlined in this catalog under their respective departments.

- b. Applicants may be admitted into degree seeking status if they have transfer credit from other regionally accredited institutions that meet the requirements of the first two years of the degree program they wish to pursue. The student must provide official transcripts from all other colleges attended. Admission is based on prior college-level academic performance and confirmation of completion of all coursework for the first two years of the degree program. Applicants whose prior college-level academic performance is questionable may be permitted to enroll in a limited number of courses in a probationary status at the discretion of the academic department. Upon completion of the first 15 semester hours with a grade point ratio of at least 2.0, the adult student will be admitted to degree-seeking status in the selected major upon review by the academic department. If this minimum grade point ratio is not achieved within the first 15 semester hours, admission will be denied and participation in the CGC will be terminated.
- c. After acceptance by the program, any non-U.S. citizen must be cleared for registration by the International Student Coordinator. An official TOEFL score is required of any applicant where English is not the native language.

# Graduate Degree Programs 2012-2013



# School of Business Administration

Master of  
Business Administration

**Master of Business Administration**  
**School of Business, 843-953-5056**  
**Dr. Wesley M. Jones, Director of Graduate and External Programs,**  
 wes.jones@citadel.edu  
**Ms. Kathy M. Jones, MBA Program Director,**  
 mbadirector@citadel.edu

### Mission Statement:

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

### Admission Requirements:

Applicants will be admitted to the MBA program on the basis of scholastic achievement and aptitude for graduate study. Other qualities appropriate to graduate study are also considered. Anyone holding a bachelor's degree in business administration from an accredited college or university (one recognized by the Council for Higher Education Accreditation) is eligible for consideration. Students with an undergraduate degree from a discipline other than business who would like to pursue the MBA must fulfill admission requirements by the completion of the five Pre-MBA courses: BADM 701, Foundations of Accounting, BADM 704, Foundations of Economics, BADM 707, Foundations of Marketing and International Business, BADM 710 Quantitative Methods and BADM 725, Foundations of Finance. Descriptions of these courses are listed on page 29 and 30 of this catalog in addition to the admissions requirements for the Pre-MBA program.

All material must be received by the CGC office on or before the following dates to assure consideration to the MBA program.

<u>Semester to begin:</u>	<u>Admission material due:</u>
Fall	June 15th
Spring	October 15th
Summer	March 1st

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university. Applicants whose degrees are from colleges or universities outside the United States are required to have transcripts translated by an academic credential evaluation organization recognized by The Citadel Graduate College.
3. Take the Graduate Management Admissions Test (GMAT) and submit an official copy of the scores to the CGC office. The GMAT must be taken within the last five years for The Citadel to accept the scores. GRE scores may be considered on a case-by-case basis.
4. Submit two signed letters of recommendation to the CGC office. These may be from faculty members where undergraduate work was done and/or from associates in business or military service. Recommendations should be able to evaluate the applicant's potential for graduate work in

- business.
5. Submit a resume detailing previous work experience.
6. Submit two brief essays that answer the following questions:
  - a. How have your education, knowledge, experience and skills prepared you for graduate business education, and how will these help you contribute to the program's educational community?
  - b. What do you hope to gain from your graduate education, both during the process and in the future?
7. Submit an official TOEFL score if the applicant's native language is not English. The minimum score is 550 paper-based, 213 computer based, or 79 Internet based.
8. All international students must apply for the MBA program to apply for a student visa.
9. The MBA Committee and/or the MBA Director may request an interview with the applicant.

**Admission Denied:** During the admission process, the applicant's records will be reviewed and results communicated in writing. If the application is denied admission, an applicant may petition the MBA Committee through the MBA Director for reconsideration, citing any extenuating or mitigating circumstances.

### Program Requirements:

Students that have an undergraduate business degree from an accredited college or university (e.g. AACSB accredited) are required to complete 36 hours of graduate study, which include nine required and three elective courses. A maximum of two courses (6 hours) may be transferred in from an approved AACSB MBA program at another institution.

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.

**Required courses:** BADM 713, BADM 716, BADM 719, and BADM 722 may be taken as co-requisites with the capstone course BADM 740; BADM 728, BADM 731, BADM 734, and BADM 737 are required to be taken before taking the capstone course, BADM 740. Students must successfully complete these courses with an overall GPR of 3.0 or better before taking BADM 740. Any prerequisites for advanced or elective courses must be met.

**Course load:** Students may take no more than six credit hours per semester. Students may request in writing to be considered for full time student status; requests must be sent to the MBA Program Director. Students with provisional status must secure permission from the MBA Program Director to take more than three credit hours in a semester. Summer terms are restricted to six credit hours per term for part and full-time students, except provisional students who are limited to three credit hours per summer term.

### Course of Study:

Students from AACSB accredited undergraduate programs who meet the admissions requirements of The Citadel MBA program will be allowed to begin MBA classes upon acceptance. This course of study consists of 27 specific required hours (9 classes) and 9 elective hours (3 classes) and will lead to the awarding of a general MBA from The Citadel School of Business Administration. The

required courses in the general MBA are listed below and must be taken by every student.

BADM 713 Communication for Leadership, 3 credit hours  
BADM 716 Legal and Ethical Environment For Decision Makers, 3 credit hours  
BADM 719 Information Technology Management, 3 credit hours  
BADM 722 Leadership in Organizations, 3 credit hours  
BADM 728 Accounting for Executives, 3 credit hours  
BADM 731 Quantitative Methods for Operations Management, 3 credit hours  
BADM 734 Financial Problems, 3 credit hours  
BADM 737 Strategic Marketing, 3 credit hours  
BADM 740 Global Business Strategy, 3 credit hours  
*Must be taken within the last six hours of a students' MBA program of study.*  
Three Electives, 9 credit hours  
Total Courses: 36 credit hours

**Transfer Credit:** A maximum of six credit hours for graduate courses from a regionally accredited institution (including consortia and AACSB International-accredited institutions) may be approved for transfer (except BADM-740), provided: (1) those courses are determined to be equivalent to one of the advanced or elective courses at The Citadel, (2) grades of "B" or better were received in the courses being considered, and (3) credit was earned within the five years prior to admission into The Citadel MBA program.

**Grading:** All students are subject to the Academic Standards section under Policy Information of The Citadel Graduate College catalog which can be found on page 15.

**Requirements for Graduation:** The degree of Master of Business Administration may be conferred upon those students who successfully complete the 36 hours of graduate coursework as specified above with a grade-point ratio (GPR) of 3.0 or better on hours earned at The Citadel. Completion of more than 36 credit hours of advanced graduate coursework will only be allowed (for exceptional circumstances) with approval of the MBA Program Director. Additional hours may not be used to increase GPR to the 3.0 required for graduation.

**Business School Website:** Find more information on the MBA program by visiting the school's website at <http://www.citadel.edu/root/mba-program>.

## Related Programs:

### Dual Degree Programs:

**PharmD/MBA Program** - Students earn a PharmD from MUSC and an MBA from The Citadel. The PCAT score will be accepted in lieu of the GMAT for these students. For more information regarding this program, please visit [http://www.sccp.sc.edu/students/pharmd\\_mba.aspx](http://www.sccp.sc.edu/students/pharmd_mba.aspx).

**MD/MBA Program** - Students earn an MD from MUSC and an MBA from The Citadel. For more information regarding this program, please contact The Citadel's MBA office by email at [mbadirector@citadel.edu](mailto:mbadirector@citadel.edu).

## Pre-MBA Program:

Applicants who do not have an undergraduate degree in business may be admitted into the Pre-MBA program. This program is open to anyone needing a background in business or as a refresher in business foundational concepts. Participation in this program may be used to meet the undergraduate business degree requirements for admission into the 36-hour MBA program. There are no GMAT or GPA requirements for admission into the Pre-MBA program. However, upon completion of the Pre-MBA program, those wishing to apply for the 36-hour MBA program, must meet the requirements for admission. Completion of the Pre-MBA program does not guarantee admission into the MBA program. Admission requirements for the MBA program are found on page 28 of this catalog.

## Admission Requirements for the Pre-MBA Program:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit an official transcript for the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit two essay questions, no more than one page each, which answers the following questions:
  - a. How has your experience/education prepared you for a graduate course in business?
  - b. What do you expect to gain from taking the foundation courses?
4. Submit a resume detailing previous work experience.
5. Submit the names and contact information (telephone number and email address) for three (3) references familiar with your work.

To be considered for admission to the Pre-MBA program, admission materials must be submitted by the same deadlines as stated on page 28.

## Course Descriptions: Pre-MBA Program

### BADM-701—Foundations of Accounting

Three Credit Hours

This course is designed to provide students with knowledge of the basic tools and concepts used in financial accounting. It emphasizes identifying and interpreting relevant accounting information for decision-making by external users. The focus is on the four financial statements: the income statement, the statement of changes in equity, the balance sheet, and the statement of cash flows.

Prerequisite: None.

### BADM-704—Foundations of Economics

Three Credit Hours

This course introduces students to microeconomics (the study of individual economic units, including product markets, individual consumers, and firms) and macroeconomics (the study of broad economic aggregates such as gross domestic product).

Prerequisite: None.

### **BADM-707—Foundations of Marketing and International Business**

Three Credit Hours

This course provides an introduction to the world of international business including the nature and fundamental concepts of international business, its environment, opportunities in the global marketplace as well as theoretical and applied examples. In addition, the course illustrates how concepts from international business are utilized in the marketing of products and services for the individual firm.

Prerequisite: None.

### **BADM-710—Quantitative Methods**

Three Credit Hours

This course is designed to equip graduate students in business with statistical and quantitative techniques that can be applied to real life business situations. To accomplish this, students will learn to apply statistical and quantitative algorithms by use of both a calculator and computer software. Software programs included in the course are Excel spreadsheets, Excel data analysis tools and graphics, SPSS for Windows. Students will learn various strategies to communicate results—written reports, online bulletin boards, multimedia presentations, oral presentations, computer supported presentations, and Power Point presentations. Topic coverage includes: descriptive statistics, probability, discrete probability distributions, continuous probability distributions, sampling distributions, estimating a single population parameter, quality and statistical process control, simple regression and correlation analysis, multiple regression analysis, forecasting, and chi-square analysis.

Prerequisite: None.

### **BADM-725—Foundations of Finance**

Three Credit Hours

This introductory course in finance provides students with the financial management tools necessary to analyze complex business financial problems, and offer reasoned alternative solutions. The course builds on principles presented in basic financial and managerial accounting courses, and introduces the student to new financial principles.

Prerequisite: Foundations of Accounting (BADM 701) or equivalent undergraduate coursework.

## **MBA Program:**

### **BADM-713—Communication 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.

### **BADM-716—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: None.

### **BADM-719—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: None.

### **BADM-722—Leadership in Organizations**

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-assessment, role play, team building exercises, and a leadership portfolio.

Prerequisite: None.

### **BADM-728—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: Foundations of Accounting (BADM 701) or equivalent undergraduate coursework.

### **BADM-731—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, 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: Quantitative Methods (BADM 710) or equivalent undergraduate coursework.

### **BADM-734—Financial Problems**

Three Credit Hours

This course provides students with a venue for applying the concepts and techniques from the Foundations of Finance course to complex business problems. The course content will be delivered primarily using the case method of analysis. Emphasis will be on teamwork and group analysis of directed and non-directed business finance cases. Students will be responsible for identifying relevant financial issues, offering alternative solutions, and making, justifying and critiquing recommended courses of action. A portion of the course will be devoted to analyzing cases

with a significant international component. The course may also utilize simulation as part of the course content.

Prerequisite: Foundations of Finance (BADM 725) or equivalent undergraduate coursework.

### **BADM-737—Strategic Marketing**

Three Credit Hours

This course examines how organizations gain and maintain a competitive advantage in a dynamic era. The course emphasizes the analysis of marketing decisions involving product, price, promotion, and distribution variables. Global opportunities are investigated.

Prerequisite: Foundations of Marketing and International Business (BADM 707) or equivalent undergraduate coursework.

### **BADM-740—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: Accounting for Executives (BADM 728), Quantitative Methods for Operations Management (BADM 731), Financial Problems (BADM 734), and Strategic Marketing (BADM 737). *Must be taken within the last six hours of a student's MBA program of study.*

## **Elective Courses:**

### **BADM-750—Seminar in Business Administration**

Three Credit Hours

This course may be elected by students desiring 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: None.

### **BADM-751—Seminar in Accounting**

Prerequisites: Foundations of Accounting (BADM-701) and Accounting for Executives (BADM-728)

### **BADM-752—Seminar in Economics**

Prerequisite: Foundations of Economics (BADM-704)

### **BADM-753—Seminar in Finance**

Prerequisites: Foundations of Finance (BADM-725) and Financial Problems (BADM-734)

### **BADM-754—Seminar in Management**

### **BADM-755—Seminar in Marketing**

Prerequisite: Foundations of Marketing and International

Business (BADM-707) or equivalent undergraduate coursework.

### **BADM-762—Negotiation Strategies**

Three Credit Hours

This course emphasizes negotiation, the art and science of creating agreements between two or more parties, 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.

### **BADM-764—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: None.

### **BADM-766—Human Resource Development**

Three Credit Hours

This course examines Human Resource Development (HRD) as a field involves 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: None.

### **BADM-768—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: None.

### **BADM-770—Internet Resources for Managers Online**

Three Credit Hours

This online course introduces MBA students to the resources available through the WWW that support all functional areas of business. In this course you will find, analyze, and report on resources for management, strategy, accounting, finance, marketing, information resources, communication, international business, and others. Although not a web site development course,

as part of the course, the student will learn to create basic web pages that contains tables, graphics, background images, and hyper links.

Prerequisite: None.

### **BADM-772—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: Foundations of Marketing and International Business (BADM 707) or equivalent undergraduate coursework.

### **BADM-774—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: Foundations of Marketing and International Business (BADM 707) or equivalent undergraduate coursework.

### **BADM-776—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: Foundations of Marketing and International Business (BADM 707) or equivalent undergraduate coursework.

### **BADM-778—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: None.

### **BADM-782—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 (BADM 719).

### **BADM-784—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 (BADM 731).

### **BADM-786—Contemporary Accounting and Advanced Problems**

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 (BADM 728).

### **BADM-788—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: Foundations of Marketing and International Business (BADM 707) or equivalent undergraduate coursework.

### **BADM-790—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 proved 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 (BADM 728), and Quantitative Methods for Operations Management (BADM 731).

### **BADM-792—Financial Institutions**

Three Credit Hours

This course analyzes financial markets and institutions - emphasizing the role, structure, and activities of financial intermediaries. The dynamic pattern of financial flows is analyzed by flow-of-funds analysis. The decision processes and market impact of both the suppliers of credit and the users of these funds are examined. The nature of economic and regulatory policy and its impact on markets and institutions are emphasized.

Prerequisites: None.

### **BADM-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.

Prerequisite: Advanced graduate standing and permission of the instructor, the Dean of The School of Business and the Dean of The Citadel Graduate College.





# School of Education

## Master of Arts in Teaching - Secondary Education:

- English Language Arts
- Social Studies
- Accelerated Program
  - Biology
  - Mathematics

## Master of Arts in Teaching - Middle Grades:

- English Language Arts
- Mathematics
- Science
- Social Studies

## Master of Arts in Teaching - Grades K-12:

- Physical Education

## Master of Education

- Educational Leadership  
Elementary or Secondary  
School Administration  
and Supervision
- Counselor Education  
Elementary or Secondary  
and Student Affairs &  
College Counseling
- Literacy Education

## Specialist in Education

- Educational Leadership  
School Superintendent

# SCHOOL OF EDUCATION

## Graduate Programs

The purpose of the Graduate Programs of the 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 secondary school teachers, school counselors, reading teachers and consultants, 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 approved The Citadel's educational preparation programs. In 1974, all professional education programs offered by the College 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 program reviews, conducted in the spring of 2000, 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 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.

In today's world we must educate all children and at unprecedented high levels. As noted by Ted Hershberg and his colleagues at the University of Pennsylvania, "the evidence makes clear that the current structure of public education designed for a different purpose and different century cannot help all students become effective citizens or productive workers in the new economy."

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.

The Citadel's Professional Educational Unit is on the march, transforming itself into a Center of Excellence for the preparation of principled educational leaders. 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 transforms cadets and graduate students into principled educational leaders capable of and committed to transforming our schools into learning communities where all children and youth 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 college. In pursuing these goals, the PEB will concentrate on communication, assessment, and governance issues. The Citadel's Dean of the 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 Web Site**

The 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 on the School of Education's web site: [www.citadel.edu/education](http://www.citadel.edu/education).

## **Admission Test Policy**

The minimum acceptable score for admission for all 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). Students 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 6 semester hours and maintain a 3.50 GPA and then will be classified as regular degree-seeking status (see respective programs for additional requirements). Students who score 379 or below on the MAT or 282 or below on the GRE will not be admitted. 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.

## Master of Arts in Teaching (MAT) Secondary Education (Grades 9-12)

- English Language Arts
- Social Studies

## Accelerated MAT (Grades 9-12)

- Biology
- Mathematics

School of Education: 843-953-5097

### Teacher Education Division Coordinator:

Dr. Kathryn Richardson Jones,  
kathryn.jones@citadel.edu

### Education Advisors:

Dr. Stephenie Hewett, stephenie.hewett@citadel.edu

Dr. Renee Jefferson, renee.jefferson@citadel.edu

Dr. Kathryn Richardson Jones,  
kathryn.jones@citadel.edu

Dr. Tammy Graham, tammy.graham@citadel.edu

### Content Area Advisors:

#### Biology and General Science:

Dr. Joel Gramling, joel.gramling@citadel.edu

#### English:

Dr. James M. Hutchisson, hutchissonj@citadel.edu

#### Mathematics:

Col. Stephen D. Cotter, steve.cotter@citadel.edu

#### Physical Education:

Dr. Josey Templeton, josey.templeton@citadel.edu

#### Social Studies:

Dr. Joelle Neulander, joelle.neulander@citadel.edu

### **Mission Statement:**

The Master of Arts in Teaching (MAT) program is designed for students seeking initial teacher certification in the fields of Biology, English Language Arts, Mathematics, Physical Education, or Social Studies. The program shares the philosophy and conceptual base of the School of Education: Leadership for learner-centered education. Students will study learner-centered education in their courses and make its principles a part of their own philosophy. 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. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall, Room 101.
2. Submit an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each

- regionally accredited college and university.
3. Successfully complete either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). GRE minimum acceptable score is a verbal and quantitative combination of 290. MAT minimum is a raw score of 396.\*
4. Applicants are expected to have a cumulative undergraduate GPA of 2.5 or higher. Applicants with less than a 2.5 undergraduate GPR may appeal to The Admission, Retention, and Certification Committee. The Committee's recommendation regarding this appeal will be forwarded to the Dean of the School of Education for final action.
5. Students are expected to attend a MAT orientation session prior to their formal admission to the program.
6. MAT in Physical Education applicants requires three signed letters of recommendation and an evaluation by the department.

\*Students who score between 283-289 on the GRE or 380-395 on the MAT may apply for provisional status. Once admitted under provisional status, students may enroll for only one semester of 6 hours. If the student maintains a 3.50 GPA under provisional status, they will be considered for degree seeking status the following semester. Students who score 379 or below on the MAT or 282 or below on the GRE will not be admitted. Admission test must be current within five (5) years of application.

### **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 program advisor via 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.* In addition to the regular admission requirements of The Citadel Graduate College, **each MAT student must complete and pass the Praxis II Examination in the content field in which the student seeks certification.** A passing score, using South Carolina standards ([www.ets.org/praxis/prxsc.html](http://www.ets.org/praxis/prxsc.html)), must be achieved prior to placement in the Professional Internship. Prior to the internship in teaching, the teacher candidate must:

- Apply for the internship no later than May 1 for the subsequent spring internship semester and no later than October 1 for the subsequent fall internship semester.
- 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 100 hours prior to the student teaching internship.
- Successfully complete 60 full days during the student teaching internship.
- Negative TB test.

- MAT interns must successfully pass Red Cross Blood Borne Pathogens training prior to internship.  
Proof of current American Red Cross certification in First Aid and CPR must be submitted prior to the 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).

**Please note: Effective September 1, 2005, Secondary Teaching Certificates issued by South Carolina State Department of Education will cover grades 9-12 and Middle Grades Teaching Certificates will cover grades 5-8. Additionally, effective July 1, 2006, the PRAXIS- Principles of Learning and Teaching (PLT) pedagogy exam will be required prior to the issuance of an initial certificate.**

### Secondary Education

- English Language Arts
- Social Studies
- Accelerated Programs
  - Biology
  - Mathematics

*(Special Note: Beginning fall 2010 accelerated programs in Secondary Biology and Mathematics are available for interested full time students. Please see requirements under "Accelerated Program" below.)*

Prerequisite: 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.)

- EDUC 500 - Foundations of American Education or EDUC 522 - Critical Educational Issues in a Multicultural Society (if student has prior Education coursework)
- EDUC 512 - Data Collection and Analysis
- EDUC 514 - The Exceptional Child in the School
- EDUC 536- Educational Psychology

#### Professional Education 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.

- EDUC 501- Methods and Materials of Middle and High School Teaching \*
- EDUC 592- Teaching Reading in Middle and High School - Content Areas\*
- EDUC 520 - Professional Internship

*\*Not required for Physical Education students. Alternate requirements are listed under required content area courses.*

For Social Studies, 9 graduate hours in a content field is a

minimum. For candidates in English, a minimum of 12 graduate hours is required. For Physical Education programs, courses required at the graduate level are noted below. Transcripts will be evaluated against the following list of required courses in the possible certification areas of the MAT 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 students. To complete the program and be eligible for certification, in addition to education courses, students must have taken all of the content area courses below. Further, it is the responsibility of the teacher candidate 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.

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

Notes:

- ENGL 595 and three 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 standards.
- For MAT 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.

#### English Language Arts Required Courses:

- British Authors - 2 courses - ENGL 201 and 202 or ENGL 203 and 204
- American Literature- 1 course - ENGL 215
- Public Speaking- 1 course - ENGL 205 or ENGL 206
- World Literature -2 courses - ENGL 218/520 and ENGL 219/521
- Film Studies- 1 course - ENGL 209/560
- African American Literature - ENGL 349/535
- Adolescent Literature- 1 course - ENGL 370/552
- Literary Criticism- 1 course - ENGL 407/555
- Advanced Composition- 1 course - ENGL 413/565
- Modern Grammar- 1 course - ENGL 414/553
- History of English Language- 1 course - ENGL 415/554
- Methods and Materials for English Language Arts - ENGL 595 (Required for all candidates)

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

Note: At least 3 of the course requirements listed below must be completed successfully on the graduate level.

- History of World Civilization or Western Civilization -2 courses HIST 105 and HIST 106 or HIST 103 and HIST 104
- Survey of U.S. History- 2 courses- HIST 201 and HIST 202
- Introduction to Sociology- 1 course - SOCI 101
- Principles of Macroeconomics- 1 course - BADM 201

- American National Government- 1 course - PSCI 102 or PSCI 502
- Cultural Anthropology- 1 course ANTH 202 or ANTH 501
- Historiography- 1 course - HIST 594
- Urban Politics- 1 course - PSCI 302 or PSCI 509 or PSCI 306 or PSCI 506 or PSCI 307 or PSCI 401
- World Geography- 1 course GEOG 209 or GEOG 511
- History of the Non-Western World- 1 course - HIST 560
- Teaching of History and Social Sciences or Instructional Approaches to Social Sciences- 1 course - HIST 692 or PSCI 505

## Accelerated Programs Master of Arts in Teaching Biology or Mathematics (Grades 9-12)

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

### Biology Content Area Required Courses:

*Prior to admission - Teacher candidates remove undergraduate deficiencies in Science and plan for required graduate level program courses in Science (Developed through undergraduate transcript analysis with Biology content area advisor)*

Expected Science Content Preparation for all Biology Teacher Candidates:

- Behavior of Organisms and their Relationship to Social Systems - 1 course - ANTH 201, ANTH 202, ANTH 501 or SOCI 201, PSYC 201, PSYC 305, or PSYC 500
- Biology Survey with lab - 2 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 - 2 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 - 1 course - EART 201
- PHYS 254 or PHYS 221 and PHYS 271 or PHYS 222 and PHYS 272
- Introduction to Physics with lab - 1 course is required, 2 are recommended - PHYS 203 and PHYS 253 or PHYS 204 and
- Cell Biology with lab- 1 course - BIOL 205 or BIOL 612
- Ecology with lab - 1 course - BIOL 406 or BIOL 506
- Evolution - 1 course - BIOL 208 or BIOL 601 Genetics with lab - 1 course - BIOL 204 or BIOL 308 or BIOL 508
- Anatomy/Physiology with lab - 1 course - BIOL 403 or BIOL 317 with BIOL 327 or BIOL 318 with BIOL 328 or BIOL 502 or BIOL 603
- Microbiology with lab - 1 course - BIOL 310 or BIOL 607
- Biology Methods - select 1 course from the following:
- 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 should be chosen if all undergraduate course requirements have been met. Biology teacher candidates may choose from the following: BIOL 502 Comparative Vertebrate Anatomy, BIOL 505 Biometry, BIOL 508 Genetics, BIOL 509 Marine Biology, BIOL 510 Vertebrate Natural History, BIOL 512 Descriptive History, BIOL 514 The Vascular Flora of South Carolina,

BIOL 518 Ornithology, BIOL 519 Economic Botany, BIOL 526 Freshwater Biology, BIOL 531 Reproductive and Developmental strategies, BIOL 602 Morphological Survey of Plant Kingdoms, BIOL 603 General Physiology

### Tentative Cohort Required Education and Biology Content Course Sequence Based on Enrollment:

- A minimum of 2 Graduate level Biology courses from transcript analysis
- and**
- Biology Methods – BIOL 605, 606, or 609
  - EDUC 540 Integrative Foundations and Teaching in American Education
  - EDUC 541 Integrative Educational Psychology and the Exceptional Child
  - EDUC 542 Teaching Reading and Writing in Middle and High School Content Areas through Applied Research
  - EDUC 520 Internship

### 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 Science setting with content area certified teachers who are ADEPT trained.

### Mathematics Content Area Required Courses:

*Prior to admission - Teacher candidates remove undergraduate deficiencies in Mathematics (Developed through undergraduate transcript analysis with Mathematics content area advisor)*

### Expected undergraduate preparation:

- 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
- Fundamentals of Computing - CSCI 110

Note: Calculus I and II must be completed prior to enrolling in any graduate mathematics class.

### Tentative Cohort Required Education and Math Content Course Sequence Based on Enrollment:

- 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
- PSYC 500 Human Growth and Development (unless Candidate has verifiable undergraduate preparation in Developmental Psychology)
- EDUC 540 Integrative Foundations and Teaching in American Education
- EDUC 541 Integrative Educational Psychology and the Exceptional Child

- EDUC 542 Teaching Reading and Writing in Middle and High School Content Areas through Applied Research
- EDUC520 Internship

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 Mathematics setting with content area certified teachers who are ADEPT trained as well as participate in a Transition to the Profession Seminar Course during the final semester of the program.

## **Master of Arts in Teaching (MAT)**

### **Middle Grades (Grades 6-8)**

- Science
- English Language Arts
- Mathematics
- Social Studies

**School of Education: 843-953-5097**

#### **Teacher Education Division Coordinator:**

**Dr. Kathryn Richardson Jones,**  
kathryn.jones@citadel.edu

#### **Education Advisors:**

**Dr. Stephenie Hewett,** stephenie.hewett@citadel.edu

**Dr. Renee Jefferson,** renee.jefferson@citadel.edu

**Dr. Kathryn Richardson Jones,**  
kathryn.jones@citadel.edu

**Dr. Tammy Graham,** tammy.graham@citadel.edu

#### **Content Area Advisors:**

##### **Biology and General Science:**

**Dr. Joel Gramling,** joel.gramling@citadel.edu

##### **English:**

**Dr. James M. Hutchisson,** hutchissonj@citadel.edu

##### **Mathematics:**

**Col. Stephen Cotter,** scotter1@citadel.edu

##### **Social Studies:**

**Dr. Joelle Neulander,** joelle.newlander@citadel.edu

The Master of Arts in Teaching Middle Grades program is a joint program offered with the College of Charleston. Candidates who wish to enroll in this program will take half of their teacher preparation coursework at The Citadel and the other half at the College of Charleston.

#### **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
- Educational Research (CofC) - EDFs 635  
or Data Collection and Analysis (The Citadel) - EDUC 512
- The Exceptional Child in School (The Citadel) - EDUC 514  
or Introduction to Exceptional Children (CofC) - EDFs 710
- Middle Grades Organization and Curriculum (CofC) - EDEE 515

#### **Middle Grades Practicum - (6 semester hour - 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

### Culminating Professional Experiences in Middle School

(60 continuous full days during the internship - 9 semester hours - must be taken together at the same institution)

- 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

### Middle Grades Content Preparation

This program assumes substantial undergraduate preparation. Any of the following undergraduate content area courses not taken prior to admission to the program are added to the candidate's minimum graduate hours.

## **English**

### Expected Undergraduate Content

- Adolescent Literature (1 course)
- World Literature (2 courses)
- American Literature (1 course)
- Media Studies (1 course)
- Modern English Grammar (1 course)
- Creative Writing (short story, poetry, etc.) (1 course)

### Required Graduate English Courses - (12 semester hours)

- Teaching Writing in the Middle Grades (CofC)- EDMG 657
- Methods and Materials of Teaching Middle and High School Language Arts (The Citadel)- ENGL 595
- Success in Literacy for Older Readers (CofC) - EDEE 678
- Reading: Diagnosis and Remediation (The Citadel) - EDUC 698

## **Mathematics**

### Expected Undergraduate Content

- Algebra and Trigonometry (1 course)
- Geometry (1 course)
- Probability and Statistics (1 course)
- Discrete Math (1 course)

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

### Required Graduate Mathematics Courses - (9 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

\*All undergraduate math content courses must be completed before taking this course.

## **Science**

### Expected Undergraduate Content

4 hours minimum in science areas other than primary preparation

- Biology
- Chemistry
- Geology

- Physics

### Required Graduate Science Courses - (9 semester hours)

- Nature of Science, Mathematics, and Science/Mathematics Education (CofC)-EDFS 660
- Science methods course - 1 based on prior preparation and experience (The Citadel)
  - o Laboratory Methods in Biology - BIOL 605
  - o Field Method in Biology - BIOL 606
  - o Seminar in Environmental Science -BIOL 609
- Recommended elective(s) to have preparation in all science areas (CofC):
  - o Earth Science for Teachers - SMFF 523
  - o Topics in Botany for Teachers - SMFT 537
  - o Atomic Theory of Matter from Lucretius to Quarks - SMFT 548
  - o Applications of Physics for Teachers: How Things Work - SMFT 555
  - o Genetics and Molecular Biology for Teachers- SMFT 639
  - o Physics of Force and Motion for Teachers - SMFT 645
  - o Determination of Structure and Matter - SMFT 647
  - o Space Science for Teachers - SMFT 524

## **Social Studies**

### Expected Undergraduate Content

- World History or Western Civilization (2 courses)
- US History (2 courses)
- South Carolina History (1 course)
- Anthropology or Sociology (1 course)
- Microeconomics (1 course)
- Political Science that covers American Govt. (1 course)

### Required Graduate Social Studies Courses - (9 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, 522, 594, 693
- Teaching History and Social Sciences (The Citadel) HIST 692



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

Dr. Josey H. Templeton, 843-953-7952,  
josey.templeton@citadel.edu

Dr. Lori H. Williams, 843-953-7954,  
lori.williams@citadel.edu

Dr. Tim Bott, 843-953-7959,  
tim.bott@citadel.edu

Dr. Kathryn Richardson-Jones, 843-953-3163,  
kathryn.jones@citadel.edu

### Admission Requirements:

1. Contact one of the pedagogy specialists in the Department of Health, Exercise, and Sport Science.
2. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
3. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university.
4. Applicants are expected to have a cumulative undergraduate GPA of 2.5 or higher. Applicants with less than a 2.5 undergraduate GPA may appeal to The School of Education Admission, Retention, and Certification Committee. The Committee's recommendation regarding this appeal will be forwarded to the Dean of the School of Education for final action.
5. Successfully complete either the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE) and have scores sent to the CGC office. The test must be current within five years of application. Minimum acceptable score for the MAT is 396. The minimal acceptable GRE score is a combined verbal and quantitative score of 290. Applicants who score between 380-395 on the MAT or between 283-289 on the GRE may apply for provisional status provided all other requirements are met. A student admitted into provisional status who completes 6 graduate semester hours and maintains a 3.5 grade point ratio will be classified as a regular degree-seeking student. Students who score 379 or below on the MAT or 282 or below on the GRE will not be admitted.
6. Three signed letters of recommendation must be sent to the CGC office.
7. A Program of Study completed by the applicant and his/her MAT-PE program advisor must be submitted to the CGC office.

### 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 content 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 student must successfully pass the PRAXIS II Examination in the content field in which the student seeks certification. A passing score, using South Carolina standards, must be achieved prior to placement in the Professional Internship.

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

- Apply for the internship no later than May 1 for the subsequent spring internship semester and no later than October 1 for the subsequent fall internship semester.
- 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.
- Negative TB test.
- MAT interns must successfully pass Red Cross Blood Borne Pathogens training prior to internship.
- Proof of current American Red Cross certification in First Aid and CPR must be submitted 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 (Principles of Learning and Teaching, Physical Education Content Knowledge) and any other certification tests for the State of South Carolina. The candidate must also successfully complete 60 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:

Students must have completed these pre-requisite or co-requisite courses (undergraduate or graduate) within the last six (6) years with a grade of "C" or better.

- Biology (4) or Chemistry (4) or Physics (4) with laboratory;
- Health & Wellness (3) or pass a departmental competency exam;
- Human Anatomy (4) and Human Physiology (4) or Anatomy/Physiology (8) (each course must include a laboratory);
- Adolescent Psychology (3) and Child Psychology (3)

OR

- PSYC-500 Human Growth and Development (3)

## Course Requirements:

Transcripts will be evaluated against the following list of required courses in physical education. Guidelines from the National Association for Sport and Physical Education (NASPE) are used to determine courses that students take in either graduate or undergraduate school. The M.A.T. in Physical Education will require forty-two (42) hours. Each student is assigned an advisor from the School of Education and from The Department of Health, Exercise, & Sport Science. Both advisors will examine transcripts and develop a program of study for each student.

### Required Education and Physical Education Courses - 42 hours

EDUC-536	Educational Psychology
EDUC-512	Data Collection & Analysis
HESS-505	Motor Development and Motor Learning*
HESS-525	Scientific Principles of Physical Education and Health, Exercise, & Sport Science*
HESS-527	Content and Methods of Teaching Health Education and Health-Related Aspects of Physical Fitness
HESS-528	Content and Methods of Teaching Rhythmic Activities and Movement Education
HESS-533	Content and Methods of Teaching Elementary School Physical Education
HESS-534	Accommodating Persons with Disabilities in Sport & Physical Activity
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*
HESS-620	Professional Internship (6 hours)

The Professional Internship requires that a minimum of sixty (60) full days be spent in the schools, and during the Professional Internship, it will not be possible for the teacher candidate to take any additional courses.

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

### Field Experiences:

Many education courses require field experiences that vary from course to course and are related to specific course objectives. All field experiences provide opportunities for Master's candidates to develop pedagogical knowledge and skills. At a minimum, teacher candidates are expected to successfully complete 75 hours of field experiences prior to the Professional Internship that is an additional sixty (60) days.

## Course Descriptions:

### HESS-505—Motor Development and Motor Learning

Three Credit Hours

This course provides the study of appropriate learning and development theories, and heredity and environmental factors that influence human performance.

### 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-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

This course provides the study of legal, ethical, and practical definitions of involving people with disabilities in physical activity, physical education, and sport settings.

### HESS-535—History, Philosophy, and 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-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 and 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-561—Advanced Measurement and 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-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.

## Master of Education in Educational Leadership - Elementary or Secondary School Administration and Supervision

School of Education, 843-953-5097

Dr. Mary Lou Yeatts, Coordinator, Division of Educational Leadership, marylou.yeatts@citadel.edu

Dr. Kathy Brown, brownk2@citadel.edu

Dr. Kent Murray, kent.murray@citadel.edu

### Mission Statement:

The mission and goals of the Masters 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
- New curricular developments and trends
- Skills in practical applications of educational research
- Competence in applying principles of human and group behavior in problem situations.
- Knowledge and competencies in staff personnel administration
- Different leadership and management styles and a clear understanding and working knowledge of Learner-Centered Education.

### Admission Requirements:

Admission is based on assessment of the following:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC) Bond Hall, Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university.
3. An overall undergraduate grade point average of 2.5 or a 2.7 ratio for the last 60 semester hours of undergraduate credit. Applicants with less than a 2.5 undergraduate GPR may appeal to The Admission, Retention, and Certification Committee. The Committee's recommendation regarding this appeal will be forwarded to the Dean of the School of Education for final action.
4. Official scores of the Graduate Record Exam (GRE)—minimum score accepted is a verbal and quantitative combination of 290 or official scores of the Miller Analogies Test (MAT)—minimum score of 396, taken within the past five years for full admission. Candidates, who score between 380 and 395 on the MAT or between 283 and 289 on the GRE may apply for provisional status. Provided all other admission requirements have been met, candidates, admitted under this provisional status, may enroll for only one semester of 6 hours and maintain a 3.5 GPA in order to be classified as a degree seeking or certification-only candidate.

5. A copy of a valid South Carolina elementary or secondary teaching certificate. Applicants must be in good standing with the State Board of Education at the time of acceptance.
6. A copy of a South Carolina Professional Certificate verifying three years teaching experience. **At least one year of teaching at the appropriate level for Advanced Level certification for which the candidate is applying must be validated.**

### R 43-64 REQUIREMENTS FOR CERTIFICATION AT THE ADVANCED LEVEL

#### I. ADMINISTRATION

(A) Elementary School Principal and Supervisor

- (1) Master's degree
- (2) Valid South Carolina Educator's Professional Certificate at the elementary 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
- (5) Completion of an advanced program approved by the State Board of Education for the training of elementary principals and supervisors

South Carolina Educator Certification Manual, p. 62 (Revised August 2008)

### R 43-64 REQUIREMENTS FOR CERTIFICATION AT THE ADVANCED LEVEL

#### I. ADMINISTRATION

(B) Secondary School Principal and Supervisor

- (1) Master's degree
- (2) Valid South Carolina Educator's Professional Certificate at the 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 7-12
- (5) Completion of an advanced program approved by the State Board of Education for the training of secondary principals and supervisors

South Carolina Educator Certification Manual, p. 62 (Revised August 2008)

Note: Courses taken prior to official admission or courses taken through other programs do not count toward the School Administration and Supervision program/degree without written approval from the School of Education's Dean.

## 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. An application form, along with appropriate non-refundable application fee, must be returned to The Citadel Graduate College (CGC) Bond Hall, Room 101.
2. An official transcript directly from each regionally accredited college or university attended - Bachelor's through Master's degree.
3. A copy of valid South Carolina teaching certificate.
4. Official scores of the Graduate Record Exam (GRE)—minimum score accepted is a verbal and quantitative combination of 290 or official scores of the Miller Analogies Test (MAT)—minimum score of 396, taken within the past five years for full admission. Candidates, who score between 380 and 395 on the MAT or between 283 and 289 on the GRE may apply for provisional status. Provided all other admission requirements have been met, candidates, admitted under this provisional status, may enroll for only one semester of 6 hours and maintain a 3.5 GPA in order to be classified as a degree seeking or certification-only candidate.
5. A copy of a South Carolina Professional Certificate verifying three years teaching experience. At least one year of teaching at the appropriate level for Advanced Level certification for which the candidate is applying must be validated.

### R 43-64 REQUIREMENTS FOR CERTIFICATION AT THE ADVANCED LEVEL

#### I. ADMINISTRATION

- (A) Elementary School Principal and Supervisor
- (1) Master's degree
  - (2) Valid South Carolina Educator's Professional Certificate at the elementary 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
  - (5) Completion of an advanced program approved by the State Board of Education for the training of elementary principals and supervisors

South Carolina Educator Certification Manual, p. 62 (Revised August 2008)

### R 43-64 REQUIREMENTS FOR CERTIFICATION AT THE ADVANCED LEVEL

#### I. ADMINISTRATION

- (B) Secondary School Principal and Supervisor
- (1) Master's degree
  - (2) Valid South Carolina Educator's Professional Certificate at the 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 7-12
- (5) Completion of an advanced program approved by the State Board of Education for the training of secondary principals and supervisors

South Carolina Educator Certification Manual, p. 62 (Revised August 2008)

Note: Courses taken prior to official admission or courses taken through other programs do not count toward the School Administration and Supervision program/degree without written approval from the Dean, 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 Program Audit.
4. 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
  - (d) Apply in person or via fax 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.

### **M.Ed. Required Program:**

*Note: Maximum course load is (6) hours.*

1. Core requirements—9 semester 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

2. Professional Requirements—30 semester 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

### **Certification-Only Required Program:**

1. Professional Requirements - 30 semester 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

## Specialist in Educational Leadership - School Superintendent

School of Education, 843-953-5097

Dr. Mary Lou Yeatts, Coordinator, Division of  
Educational Leadership, marylou.yeatts@citadel.edu

Dr. Kathy Brown, brownk2@citadel.edu

Dr. Kent Murray, kent.murray@citadel.edu

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 certification at the superintendent's level.

### Admission Requirements:

Admission to the Specialist in Educational Leadership Program is based on assessment of the following:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC) office, Bond Hall Room 101.
2. All official transcripts directly from each regionally accredited college or university attended (including a Master's Degree or Certification-only in administration) with a minimum 3.25 grade point average.
3. A South Carolina State Professional Certificate with school administrator endorsement **and two years in an administrative position equivalent to assistant principal or higher** in education.
4. A South Carolina Professional Teaching certificate that is valid and three years teaching experience **and two years** as a school or district administrator, post secondary administrator, or school business administrator.
5. Official scores of the Graduate Record Exam (GRE) minimum score accepted is a verbal and quantitative combination of 290 or official scores of the Miller Analogies Test (MAT) minimum score of 396, taken within the past five years.
  - a. **No Provisional Status granted.**
  - b. Regular admission is granted upon completion of CGC requirements and respective program requirements including completion of review by the department.

### R 43-64 REQUIREMENTS FOR CERTIFICATION AT THE ADVANCE 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 of 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 or

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 Educator Certification Manual, p. 63 (Revised August 2008)

Note: Specialist in Educational Leadership courses taken prior to official program admission will not count toward the degree without written approval from the School of Education.

### Transfer Credit:

Six credit hours of graduate courses, which are appropriate for the major in Educational Leadership, may be approved for transfer from a regionally accredited institution of higher learning. Transfer courses must be no older than 6 years from the first semester of degree work taken at The Citadel. All additional courses must be taken at The Citadel.

### 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 performing 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:

- (a) Complete 21 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.
- (d) Apply in person to CGC to register for an internship.

Applicants for spring administrative internships should file and 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.

### **Required Program:**

1. Professional Requirements - 33 semester 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 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.**



## Master of Education in Counselor Education (Elementary or Secondary and Student Affairs & College Counseling)

School of Education, 843-953-5097

Dr. George T. Williams, 843-953-2205

Coordinator of Counselor Education Programs

williamsg@citadel.edu

Dr. Guy Ilagan, 843-953-7087

gilagan@citadel.edu

Dr. Aaron H. Oberman, 843-953-7123

aaron.oberman@citadel.edu

The Council for Accreditation of Counseling and Related Educational Programs (CACREP) granted accreditation in July 2005, effective until October 31, 2013, to the School Counseling Programs which offer Master of Education degrees in Counselor Education.

### Mission Statement:

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

The Division of Counselor Education offers six program options including: MEd in Elementary School Counseling, MEd in Secondary School Counseling, Elementary School Counseling Certification only, Secondary School Counseling Certification only, MEd in Student Affairs and College Counseling, and a Graduate Certificate in Student Affairs.

### 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:

- PD1: Long-Range Planning
- PD2: Short-Range Planning of Guidance and Counseling Activities
- PD3: Development and Use of Assessments
- PD4: Providing Guidance and Counseling Services
- PD5: Providing Consultation Services
- PD6: Coordinating Guidance and Counseling Services
- PD7: Professional Responsibilities

Students in both the elementary and secondary school counseling programs complete both a School of Education Core and Counselor Education Core (refer to Division of Counselor Education Handbook online at [http://www.citadel.edu/education/academic\\_programs/counseling.html](http://www.citadel.edu/education/academic_programs/counseling.html)) for a total of 51 credit hours.

Students enrolled in the Master of Education in Counselor Education with a concentration in Student Affairs and College Counseling degree program complete Student Affairs and College Counseling Core and College Counselor Education Courses for a total of 48 credit hours.

Students enrolled in the Graduate Certificate in Student Affairs complete only 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. These five courses are also required of the MEd in Student Affairs and College Counseling degree program. However, students considering applying to the MEd in Student Affairs and College Counseling program will need to meet the admissions requirements before being accepted into the program. (See page 111 for details).

### **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 following:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university.
3. A minimum GPA of 3.0 for the last 60 sequential units completed.
4. Official scores of the Graduate Record Examination or the Miller Analogies Test taken within the last five years.\*
5. Three signed letters of reference, at least two of which should be from instructors or supervisors who will assess a prospective student's academic ability and/or potential for effectiveness in the field.
6. A detailed personal statement (1,500 - 3,000 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 counseling profession, and long-term professional goals. This statement is very important because it enables the faculty to make informed decisions regarding admission.
7. A personal group admissions interview with an Academic Review Board to assess personal and professional readiness and satisfactory completion of requirements.
8. Completed Admissions Questionnaire (<http://www.citadel.edu/graduatecollege/forms>)

\* The minimum acceptable score for all degree programs is a score of 396 on the MAT or 290 on the GRE (or 900 prior to 2012). Students who score between 380 and 395 on the MAT or 281-289 (or 750-899 prior to 2012) on the GRE may apply for provisional status. Provided all other admission requirements have been met, candidates, admitted under this provisional status, may enroll for only one semester of 6 hours and maintain a 3.5 GPA in order to be classified as a degree seeking or certification-only candidate.

Applicants should provide all of the above materials to The Citadel Graduate College, 171 Moultrie Street, Charleston, SC 29409-6250. The application deadlines are:

- June 1st for fall admission
- October 1st for spring admission
- March 1st for summer admission

The formal application in School Counseling or Student Affairs

and College Counseling at The Citadel is procured from the office of The Citadel Graduate College, located in Bond Hall 101 or online at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege). The telephone number is (843) 953-5089.

All successful applicants are initially admitted in a “conditionally classified” status. Admitted students will receive a letter from The Citadel Graduate College. It is the student's responsibility to meet with a faculty advisor early in the first term to begin preparing an official study plan. 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 required to attend Counselor Education Town Hall Gatherings each semester. An official study plan is submitted after the student has successfully completed the three courses, EDUC 514 (School Counseling) or 622 (Student Affairs), EDUC 515 (School Counseling) or 537 (Student Affairs), and EDUC 551 and the student has made adequate personal, academic and professional progress during the three designated courses for the Academic Review Board to grant “Unconditional” or “fully classified” status.

NOTE: 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 shall not register for more than 6 semester hours in any given term.

Effective summer 2007, 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.

### **Transfer of Credits:**

Counselor Education M.Ed. degree applicants may transfer a maximum of 12 credit hours of graduate coursework taken at other regionally accredited institutions. Coursework accepted for transfer must be parallel course work within the Counselor Education programs at The Citadel. Transfer of credit is not acceptable for the following Citadel courses: EDUC 515, 552, or 624. Transfer of credit approval must be documented in writing by the faculty advisor and the Dean of the School of Education.

### **School Counseling Program Requirements:**

Students in either elementary or secondary school counseling pro-

gram 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 elementary (K-8) or secondary (6-12) school counseling settings. Students are required to earn a minimum score of 550 on the PRAXIS II test for guidance and counseling prior to enrolling in the practicum (EDUC 629). This must be on file at The Citadel Graduate College.

Once students finish nine (9) credit hours of graduate study in the program, including the three courses, EDUC 514, EDUC 515, and EDUC 551, they must meet with a faculty advisor and complete an official study plan. The faculty advisor, in consultation with other school counseling faculty, reviews the study plan and determines whether the student has made adequate personal, academic, and professional progress during the three designated courses, totaling nine (9) credit hours. "Unconditional" or "fully classified" status is then given by the Academic Review Board. (Refer to Appendix in Division of Counselor Education Handbook, for "Counselor Education Student Evaluation Form.")

The study plan specifies required courses for the M.Ed. degree. A schedule for completion of the courses is devised at this time. The study plan takes into account the prerequisites and sequencing of coursework to meet a student's degree objective.

### Field Experience Requirements:

Counselor Education students must formally request permission from the faculty advisor to enroll in a 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 that in which the field experience is sought. The coordinator of the field experiences must approve all field experience applications, which are due by the last Friday in September for spring placements and 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 guidance and counseling 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. Interns are supervised primarily by the field site supervisor, with supervision by The Citadel instructor as well.

### Requirements for Graduation:

Students pursuing M.Ed. degrees in School Counseling 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.

Students are required to take the Counselor Preparation Comprehensive Examination (CPCE) during the beginning of the semester while enrolled in the Internship I course (i.e., EDUC-650 and EDUC-651). Students enrolled in Internships I for Student Affairs and College Counseling (i.e., EDUC 655) are not required to take the CPCE. However, 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). Student Affairs & College Counseling students present their portfolios during their last semester in the program.

### Elementary and Secondary School Counseling Curriculum (51 Credit Hours):

Based upon these objectives, 51 semester hours of study for Elementary and Secondary School Counseling are offered as follows:

#### School of Education Core - 12 Credit Hours

PSYC 500	Human Growth and Development (3 credit hours)
EDUC 500	Foundations of American Education
EDUC 514	The Exceptional Child in the Schools (3 credit hours)
EDUC 522	Critical Educational Issues in a Multicultural Society

#### Elementary and Secondary School Counselor Education Core - 36 Credit Hours

##### A. Foundations - 18 Credit Hour

EDUC 515	Introduction to the Counseling Profession (3 credit hours)
EDUC 521	Program Planning, Management, and Evaluation in School Counseling (3 credit hours)
EDUC 550	Career Counseling and Development (3 credit hours)
EDUC 551	Counseling Theories and Practice (3 credit hours)
EDUC 552	Group Counseling (3 credit hours)
EDUC 561	Counseling Diverse Populations (3 credit hours)

##### B. Research/Appraisal - 6 Credit Hours

EDUC 512*	Data Collection and Analysis (3 credit hours)
EDUC 549*	Applied Measurement Techniques (3 credit hours)

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

##### C. Helping Relationships - 12 Credit Hours

EDUC 624	Basic Counseling Skills (3 credit hours)
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EDUC 629	Practicum in School Counseling (3 credit hours)
EDUC 650*	Elementary School Counseling Internship I (3 credit hours)
and	
EDUC 652	Elementary School Counseling Internship II (3 credit hours)
OR	
EDUC 651*	Secondary School Counseling Internship I (3 credit hours)
and	
EDUC 653	Secondary School Counseling Internship II (3 credit hours)

#### D. Elective - 3 Credit Hours

Approval of the 3 credit hour course elective must be documented by the student's faculty advisor.

\*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.

### Student Affairs & College Counseling Curriculum (48 Credit Hours):

The Student Affairs & College Counseling Curriculum is based on 48 credit hours of study as follows. Individuals interested in pursuing a Graduate Certificate in Student Affairs can refer to page 111.

#### Student Affairs and College Counseling Core - 15 Credit Hours

EDUC 537	Student Development Services in Higher Education (3 credit hours)
EDUC 538	Theories of Student Development in Higher Education (3 credit hours)
EDUC 539	Higher Education Administration (3 credit hours)
EDUC 613	Foundations of American Higher Education (3 credit hours)
EDUC 622	Critical Multicultural Issues in Higher Education (3 credit hours)

#### College Counselor Education Courses - 33 Credit Hours

##### A. Foundations - 15 Credit Hours

EDUC 550	Career Counseling and Development (3 credit hours)
EDUC 551	Counseling Theories and Practice (3 credit hours)
EDUC 552	Group Counseling (3 credit hours)
EDUC 561	Counseling Diverse Populations (3 credit hours)
EDUC 562	Legal & Ethical Leadership Issues in Education (3 credit hours)

##### B. Research/Appraisal - 6 Credit Hours

EDUC 512*	Data Collection and Analysis (3 credit hours)
EDUC 549*	Applied Measurement Techniques (3 credit hours)

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

##### C. Helping Relationships - 12 Credit Hours

EDUC 624	Basic Counseling Skills (3 credit hours)
EDUC 634	Practicum in Student Affairs and College Counseling (3 credit hours)
EDUC 655**	Internship I in Student Affairs and College Counseling (3 credit hours)
EDUC 656**	Internship II in Student Affairs and College Counseling (3 credit hours)

\*\* The internship in Student Affairs consists of 16 weeks of full-time placements and a total of 600 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.

#### Four Additional Courses for Seeking Licensed Professional Counselor (LPC) - 12 Credit Hours

EDUC ____	Elective approved by faculty advisor (3 credit hours)
EDUC 567	Assessment of Abnormal Behavior (3 credit hours)
EDUC 568	DSM-IV-TR (3 credit hours)
PSYC 500	Human Growth and Development (3 credit hours)

### 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 Citadel 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-IV-TR (diagnosis) and EDUC-567: Assessment of Abnormal Behavior (assessment and treatment of psychopathology).

#### 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/counselor.html> under "Program Information."

## Master of Education in Literacy Education

School of Education, 843-953-5097

Dr. Jennifer L. Altieri, 843-953-3162

jennifer.altieri@citadel.edu

Dr. Stephenie M. Hewett, 843-953-5019

stephenie.hewett@citadel.edu

Dr. Dan Ouzts, 843-953-5201

dan.ouzts@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 general goals and objectives of the program are:

1. A knowledge and mastery of all aspects of the literacy process;
2. 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;
3. A knowledge of the abilities and skills which enhance a wholesome teacher-student-parent relationship in working with students identified as at-risk readers in order to develop a case study;
4. A knowledge of those skills necessary to recognize and accommodate for individual differences in literacy instruction;
5. A knowledge of how to plan, supervise, and enhance programs as a reading consultant;
6. A knowledge of and ability to demonstrate effective literacy instructional strategies;
7. A knowledge of communicating information about literacy;
8. A knowledge of the relationship of literacy skills to subject-matter content areas;
9. A knowledge of significant research conducted in literacy education; and
10. A knowledge of a broad range of children's and adolescent literature and how to incorporate this literature into the classroom.
11. A knowledge of how to effectively support and mentor educators and serve as a literacy leader.

### Admission Requirements:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall room 101.
2. Applicants must have a 2.50 overall undergraduate grade point average in order to be accepted into the Master of Education in Literacy Education program. Applicants with less than a 2.5 undergraduate GPR may appeal to The Admission, Retention, and Certification Committee. The Committee's recommendation regarding this appeal will be forwarded to the Dean of the School of Education for final action.
3. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university.
4. Submit a valid teaching certificate issued by South Carolina or another state.
5. The minimum acceptable score is a score of 396 on the MAT or 290 on the GRE (Current within five years of application). Candidates who score between 380 and 395 on the MAT or 283-289 on the GRE may apply for provisional status provided all other requirements are complete. After enrolling for one semester under provisional status, completing 6 hours and earning a 3.50 GPA, the candidate will be considered as regular degree seeking.
6. Candidate must be in good standing with the State Board of Education at the time of acceptance.

Note: 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.

### Program Requirements:

The Master of Education in Literacy Education is a 36-hour program, consisting of 2 professional core requirements and 10 literacy 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, exam number 0204: *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.

Recommendation for certification as Literacy Teacher in South Carolina requires two years teaching experience. Recommendation for certification as Literacy Coach in South Carolina requires five years teaching experience. 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 both Literacy Teacher and Literacy Coach provided the candidate already possesses a valid teaching certificate in the state of South Carolina.

## Required Program:

All courses must be taken in sequence as laid out in the program of study.

### Professional Core Requirements-6 semester hours

EDUC-536 Educational Psychology

And select one course from the following:

EDUC-512 Data Collection and Analysis

EDUC-549 Applied Measurement Techniques

### Professional Educational Specialization-30 semester hours

EDUC-570 Developing Literacy Knowledge with At Risk Readers

EDUC-588 Developing Literacy Skills PreK-Grade 5

EDUC-589 Methods and Materials for Developing Literacy Skills

EDUC-590 Literacy Assessment and Instruction

EDUC-591 Practicum in Literacy Education

EDUC-592 Teaching Reading in the Middle and High School 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

## Course Descriptions:

### 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. An 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. A passing score on the PRAXIS II must be achieved upon completion of this class.

### 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 exceptional children and youth. There is a focus on cause, identification, and educational and community programs for exceptional individuals.

### 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 evening seminars. This last course in the MAT sequence requires an Application: for fall semester, April 1, for spring, October 1. Application forms are available in the Department of Education. Prerequisite: all other program of studies requirements. Passing scores on the PRAXIS II specialty area examinations are required before enrollment in this course.

### **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-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-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-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

Coursework is designed for practicing and prospective educational administrators that present current and emerging technology in using instructional and administrative technology in such areas as record keeping, scheduling, data collection and analysis, and the evaluation and instructional technology.

### **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-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. (for Student Affairs major, this course replaces EDUC 515, Introduction to the Counseling 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 exceptional individuals. 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-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-551 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-IV-TR courses.

### **EDUC-568—DSM-IV-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—Developing Literacy Knowledge with At Risk Readers**

Three Credit Hours

A survey of the nature, problems, and learning needs of at-risk readers, the course provides participants with information and techniques necessary for appropriate instructional decisions and actions.

### **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 in Education**

Three Credit Hours

A course designed for the intensive study of a current problem in the field of education. The instructional design will emphasize field research and applied practice. No more than 6 credit hours under this listing can be credited toward a degree program.

### **EDUC-588—Developing Literacy Skills Pre K-Grade 5**

Three Credit Hours

A foundational course designed to focus on developing literacy skills from pre-kindergarten through fifth grade. 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-589

### **EDUC-591—Practicum in Literacy Education**

Three Credit Hours

A field-based course in which each candidate engages in the supervised teaching of an individual student. Candidates synthesize the knowledge they have gained in the program to demonstrate ability to appropriately assess and instruct a student at that student's level of literacy instruction. A case study approach is used.

Prerequisite: EDUC-590. An application for practicum and 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. Practicum applications are due the last Friday of January for the Fall semester practicum.

### **EDUC-592—Teaching Reading and Writing in the Middle and High School—Content Areas**

Three Credit Hours

A course designed for the middle school and high school teacher emphasizing pupil diagnosis followed by instructional decision making directed toward a balanced teaching approach. Candidates focus on literacy skills while teaching the subject matter of the secondary content areas.

### **EDUC-594—Internship in Literacy Education**

Three Credit Hours

A field-based course in which each candidate engages in the supervised teaching of small groups of students. Candidates synthesize the knowledge they have gained in the program to demonstrate ability to appropriately assess and instruct a group of students at each student's level of literacy instruction.

Prerequisites: EDUC 591 and EDUC 512 or 549. An application for practicum and 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. Practicum applications are due the last Friday of January for the Fall semester practicum.

### **EDUC-596—Analysis of Literacy Research**

Three Credit Hours

An in-depth analysis of significant literacy studies is provided. Analysis is directed toward reviewing, exploring, and evaluating the research techniques and findings.

Prerequisite: 12 Hours of Literacy Coursework

### **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-599—Supervision of School Literacy Programs**

Three Credit Hours

A course designed primarily for principals, supervisors, and reading consultants. Included is the study of the nature and functions of supervision for literacy programs; supervisory techniques; the role of the principal, supervisor, and reading consultant in the improvement of instruction; administration of a literacy program; and other cognate problems and issues.

Prerequisite: 12 Hours of Literacy Coursework

### **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—Literature for Children and Adolescents**

Three Credit Hours

A survey of literature for children. Appreciation and enjoyment of noteworthy books including award winners and multicultural literature will be the focus of instruction. The ability to effectively use a variety of texts with children throughout the school program 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-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-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 professional development presentation 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 a literacy plan for a classroom or school.

Prerequisite: 12 Hours of Literacy Coursework

**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.

Prerequisite: 12 Hours of Literacy Coursework

**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

**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

**EDUC-652—Elementary School Counseling Internship II**

Three Credit Hours

Prerequisite: EDUC-650 and permission from advisor. May be taken concurrently with EDUC-650.

**EDUC-653—Secondary School Counseling Internship II**

Three Credit Hours

Prerequisite: EDUC-651 and permission from advisor. May be taken concurrently with EDUC-651.

**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.

**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.

**Prerequisite: Permission from a faculty advisor.**

**EDUC-661—Internship in Elementary Administration I**

**(fall/spring/summer)**

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.

**EDUC-662—Internship in Elementary Administration II**

**(fall, spring, summer)**

Three Credit Hours

Coursework includes supervised field studies and experiences in elementary administration.

Prerequisite: Successful completion of EDUC 661 and permission of advisor.

**EDUC-663—Internship Middle and High Administration I**

**(fall, spring, summer)**

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.

**EDUC-664—Internship in Middle and High Administration II**

**(fall, spring, summer)**

Three Credit Hours

Coursework includes supervised field studies and experiences in secondary school administration.

Prerequisites: Successful completion of EDUC-663 and permission of advisor.



# School of Humanities & Social Sciences

## Master of Arts:

- English
- History
- Psychology: Clinical Counseling
- Social Science

## Specialist in Education:

- School Psychology

## Master of Arts in English

Department of English, 843-953-5068

Dr. James M. Hutchisson, hutchissonj@citadel.edu

### Mission:

The Citadel and the College of Charleston offer a joint Master of Arts degree in English. The 36 hour program, with a thesis option, provides advanced course work 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, comprehensive examinations, 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.

### Admissions Requirements:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit to the CGC office official transcript(s) directly from each institution of higher learning attended, including documentation of graduation from a regionally accredited four-year college or university. The transcript(s) should be sent directly from the institutions attended to the CGC office. Applicants are expected to have a cumulative undergraduate GPA of at least 2.5 on a 4.0 scale and a 3.0 in the major.
3. Submit 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.
4. Submit a two-page statement about educational goals and interest in a graduate program in English.
5. Submit 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.
6. Submit an official copy of scores from the general test of the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). (Applicants who do not have an undergraduate degree in English are also required to take the GRE advanced test in literature.) The test scores must date from the past five years. 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.

7. 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 course work as a provisional student. Upon completing nine semester hours with a minimum GPA of 3.25 the student will be eligible for degree-seeking status.

### Application Deadlines

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

- Fall: May 1  
Spring: November 1  
Summer: April 1

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 36 semester hours of graduate credit with a cumulative GPA of 3.0. Specific requirements are listed below:

Thesis Option:

- British Literature before 1800, 6 hours
- British Literature after 1800, 6 hours
- American Literature, 6 hours
- Seminar (English 700), 3 hours
- Electives, 12 hours
- Thesis and Oral Defense of Thesis, 6 hours
- Demonstration of competency in one foreign language
- Comprehensive Examination

Non-thesis Option:

Same as above, except that the thesis is omitted and the number of elective hours is eighteen.

Notes:

- At least nine hours must be taken at each campus.
- English 700 satisfies the seminar requirement and may also be used to satisfy a core requirement in British or American literature, depending on the topic.
- 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 (3), 699 (3), and 701 (6) in any combination may count toward the required 36 hours.
- Students may demonstrate their competency in a foreign language by completing two years or their equivalent of college-level study in a single foreign language with an average grade of B or higher: or completing, with a grade of B or higher, English 517: Old English Language. The foreign language requirement must be met before a student can take the comprehensive examination.
- The comprehensive examination is prepared and administered by the Joint Program Committee and is taken

by all candidates after the completion of at least 27 hours of coursework. Copies of all previous examinations are available on the websites of both English departments.

### Concentration in African American Literature:

In 2004 an African American Literature Concentration was added to the Master of Arts degree program. The fifteen hour (15) concentration, with a thesis option, offers advanced course work in African American literature, independent study courses for further exploration into an African American literature topic, and cross disciplinary opportunities with courses in other departments that have a central concern with African American literature. Students opting to add a concentration in African American literature must meet the normal requirements for the M.A. In addition, they must complete one of these two courses of study:

#### Standard Option:

- 9 hours of African American literature (any combination of 535, 570, 571, and 573)
- 3 hours of study of an African American topic in another discipline, as approved by the graduate director
- 3 hours of study in an African American topic, such as an independent study or internship, as approved by the graduate director

#### Thesis Option:

- 6 hours of African American literature (any combination of 535, 570, 571, 572, and 573)
- 3 hours of study of an African American topic in another discipline, as approved by the graduate director
- 6 hours of thesis on an African American topic

#### Notes:

- A student may substitute 3 hours of independent study on an African-American topic (as approved by the graduate director) for any 3 hours of coursework.
- Students taking this concentration may apply only one of their African American literature courses to the six hour American literature requirement of the M.A.

### Course Descriptions:

#### 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 Riwe*, *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-503—English Drama to 1642

Three Credit Hours

A study of English drama from its origins in the Middle Ages, through the predecessors and contemporaries of Shakespeare, and on to the closing of the theatres in 1642.

#### ENGL-504—Poetry and Prose of the English Renaissance

Three Credit Hours

Non-dramatic poetry and prose of the sixteenth and early seventeenth centuries, with emphasis on the major authors (Spenser, Sidney, Marlowe, Jonson, Donne, and Herbert) and on the major literary types.

#### 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 such 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 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 Rosetti.

#### ENGL-512—Literature of the U.S. South

Three Credit Hours

A study of selected texts, both canonical and lesser-known, by and about residents of the U.S. South. The course will emphasize works produced since 1900 and will explore some of the recurring themes often associated with the region: race, class, family, and place; land, labor, and the pastoral ideal; nostalgia, history, and the global South.

#### ENGL-516—Continental Literature

Three Credit Hours

A study of European literature in translation since the Renaissance, including works by such authors as Cervantes, Moliere, Racine,

Goethe, Stendhal, Balzac, Tolstoy, Dostoyevski, and important writers of the twentieth century.

**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 beginnings to around 1650 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 around 1650 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 eighteenth 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 20th-century British writers up to 1945, 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

of the early twentieth century, including such figures as Fitzgerald, Hemingway, Faulkner, and Stein.

**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-530—Special Topics in The Humanities**

Three Credit Hours

A study of special areas of the humanities or related areas which are outside the normal course offerings of the English Department. The subject for each course will be announced.

**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 twentieth-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 twentieth-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 - 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. Special attention is given to the varieties of American English, particularly African American Vernacular 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-557—Creative Writing—Poetry**

Three Credit Hours

Class discussion of student writing using twentieth-century poems as models.

**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

A study of films from a variety of nations and filmmakers. Attention is given to how techniques of filmmaking such as *mise en scène*, montage, and lighting communicate a filmmaker's construction of meaning. In some cases, comparisons may also be made between films and their written sources to demonstrate differing approaches to conveying comparable meaning.

**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-563—Creative Writing—Fiction**

Three Credit Hours

Class discussion of student writing using twentieth-century fictional works as models.

**ENGL-570—Topics in African American Literary Genres**

Three Credit Hours

A study of a particular genre of African American literature, such as drama, novels, or poetry. Topics will vary according to instructors.

**ENGL-571—Topics in African American Literary Periods**

Three Credit Hours

A study of a particular period of African American literature, such as the Harlem Renaissance. Topics will vary according to instructors.

**ENGL-572—Topics in Major African American Writers**

Three Credit Hours

A study of a particular African American writer, such as Langston Hughes or Toni Morrison. Topics will vary according to instructors.

**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-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-650—Literary Research**

Three Credit Hours

Study of textual bibliography, research methods and resources, and methods of presenting research.

**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-702—Internship**

Three Credit Hours

A supervised field experience in which the student observes and participates in a professional occupation related to the English degree. The internship will consist of 300 hours of work and the completion of a formal report. Permission of the graduate director required. Graded on a pass/fail basis.

## Master of Arts in History

Department of History, 843-953-5073

Dr. Kurt M. Boughan, Director

boughank1@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, and 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 which 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. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit one official copy of a transcript directly from each institution of higher learning attended, including documentation of graduation from a regionally accredited four-year college or university.
3. Submit three 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.
4. Submit evidence of ability to conduct research and present findings. A term paper, honors thesis, or critical essay from a graduate or upper-level 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.
5. Submit an official copy of test scores of the Graduate Record Examination or Miller Analogies Test. Tests must have been taken within last five years. Applicants are expected to have a composite GRE verbal and quantitative score exceeding 300 (or MAT score of 410).
6. Applicants are expected to have a cumulative undergraduate GPA of at least 2.5 on a 4.0 scale and a 3.0 in the major. They are also expected to have 15 hours of history course work beyond the initial survey. An applicant who fails to meet

these requirements may be allowed to pursue course work as a provisional student only upon application to the Joint Program 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. The student must make this request in writing to the Joint Program Committee. 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.

7. The Admissions Committee will consider complete applications for the program on the following dates:  
March 1st for the summer or fall semester  
October 1st for the spring term

### 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 M.A. 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 M.A. program students exclusively. Work expected of juniors and seniors will not be as great as that expected of the graduate students. The qualitative expectations remain the same for all students.

### Required Program:

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. The distribution of courses follows this general scheme:

Major concentration: 18 hours  
Minor concentration: 6 hours  
Historiography: 3 hours  
Third concentration: 3 hours\*  
Electives: 3 hours\*\*

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

1. **Thesis track** students must take HIST-801, HIST-802 and successfully defend their thesis. (These courses count towards the 18 hours in the major concentration.)
2. **Non-thesis track** students must take two research seminars, preferably within their area of concentration, and a comprehensive exam in their major field.

\*All students must take at least three hours in each concentration 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.

### **Concentration in African American Studies:**

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.

### **Course Descriptions:**

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

#### **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-503—The Jeffersonian and Nationalist Period**

Three Credit Hours

A study of American history, 1800-1850, with an emphasis on the clash of Federalist and Jeffersonian principles; emerging political and cultural nationalism; the war of 1812; the influence of Jacksonian Democracy on political, social, and economic life; growing sectionalism and the Mexican War.

#### **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-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-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.

### **\*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-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, 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-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-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) M.A. students and normally are conducted as seminars with discussions of assigned readings in the scholarly literature. Emphasis is placed upon the analysis and synthesis of diverse historical materials, and a longer research paper of 20 to 25 pages is required on a suitable topic in the historiography of the field. In general, these distinctions in size, methodology, and assignments apply to all 500 and 600-level courses.

**Courses for the MAT Degree:**

**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-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. (This course does not count

towards the requirements for the MA in History.)

### **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.

## **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 (MA and Ed.S.). The two programs share 27 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 Accreditation Council (MPAC), and it is a member of the Council of Applied Masters Programs in Psychology (CAMPP). Students enrolled in the Clinical Counseling program work to achieve a Master of Arts in Psychology degree by completing a total of 54 credit hours. The program includes 30 credit hours of core courses, 12 hours of advanced courses, 3 hours of electives, and 9 hours of field work. Field work is completed in agencies throughout the tri-county area and involves a 150-hour practicum and 600-hour internship. Students completing the Clinical Counseling program meet the educational requirements for licensure as Professional Counselors 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](http://www.citadel.edu/psychology/graduate.html).

## Master of Arts in Psychology: Clinical Counseling

Department of Psychology, 843-953-5320  
Dr. William G. Johnson  
will.johnson@citadel.edu

### Mission Statement:

The mission of the Master of Arts in Psychology: Clinical Counseling program at The Citadel is to prepare students to become scholarly practitioners of psychosocial counseling in community agencies, including college counseling centers, hospitals, mental health centers, and social services agencies. The program emphasizes the application of theories of human development, psychopathology, and behavior change to psychosocial problems of a diverse population of individuals and families seeking mental health services in the community. The program's model blends didactic and experiential training to facilitate students' ability to utilize an empirical approach to assessment, goal development, intervention, and evaluation of services for a wide range of individuals and families experiencing a variety of psychosocial difficulties. It is the expectation of the program that students will be trained to be competent and ethical professional service providers who will apply a scholarly perspective as well as compassion and caring to their work.

### Admission Requirements:

Admission to the Clinical Counseling Program is based on a competitive review of all application materials. All applicants must request admission packets from CGC and submit for review:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university. Minimum requirements for consideration include an overall undergraduate grade point average of 3.0 (or graduate grade point average of 3.0) and 12 credit hours in psychology. A score of 600 on the GRE Subject Examination in Psychology is acceptable in lieu of the credit hour requirement;
3. The Graduate Record Examination (GRE) score of 297 (minimum of 150 on the verbal reasoning and 141 on the quantitative reasoning section) or a score of 410 or higher on the Miller Analogies Test (MAT). Current within five years of application;
4. A completed admissions questionnaire;
5. Two signed letters of reference.

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 materials can be requested from The Citadel Graduate College, The Citadel, Charleston, South Carolina 29409: (843) 953-5089 or online at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege).

All application requirements must be met and materials submitted to The Citadel Graduate College by March 15 to be considered for fall admission in the Clinical Counseling Program.

### 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 54 credit hours, including 30 credit hours of core courses, 12 hours of advanced courses, 3 hour elective, and 9 hours of fieldwork. Fieldwork is completed in agencies throughout the tri-county area and involves a 150-hour practicum and 600-hour internship. Students who successfully complete this program (and take Career Counseling as one of their elective courses) meet the educational requirements for professional licensure as a Professional Counselor in South Carolina. The program addresses the development of counseling skills in a variety of treatment modalities, including individual, family and group. While some graduates have sought and gained admission to doctoral programs, the program is designed as a terminal masters degree program. The program is a member of the Council of Applied Master's Programs in Psychology and is accredited by the Masters in Psychology Accreditation Council. 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 non-degree-seeking student will be applied toward program requirements. Registration for psychology courses as a non-degree seeking student is available no sooner than one week prior to the start of classes each term. The only exception to this is PSYC 500, registration may occur at any time.

### Required Program for Clinical Counseling Students:

#### Core Courses:

Course	Credit
PSYC-500	Human Growth and Development , 3 hours.
PSYC-501	Principles of Cognitive and Behavioral Change, 3 hours
PSYC-507	General Psychopathology: Assessment and Differential Diagnosis, 3 hours
PSYC-508	Counseling and Personality Theories, 3 hours
PSYC-514	Ethics and Mental Health Law, 3 hours
PSYC-523	Statistics and Research Design, 3 hours
PSYC-525	Basic Counseling Techniques, 3 hours
PSYC-549	Applied Measurement Techniques, 3 hours



PSYC-553	Introduction to Family Dynamics, 3 hours
PSYC-561	Social-multicultural Perspectives, 3 hours

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

### Advanced Courses:

Course	Credit
PSYC-552	Group Counseling Techniques, 3 hours
PSYC-611	Clinical and Professional Issues in Counseling, 3 hours
PSYC-643	Contemporary Psychological Assessment and Psychotherapy, 3 hours
PSYC-644	Advanced Counseling Techniques, 3 hours
PSYC-629	Practicum: Clinical Counseling, 3 hours
PSYC-651	Internship I, 3 hours
PSYC-652	Internship II, 3 hours

### Electives:

PSYC-557	Counseling & Psychotherapy for Couples, 3 hours
PSYC-602	Social and Biological Basis of Child and Adolescent Behavior, 3 hours
PSYC-603	Affective and Cognitive Interventions: Child/Adolescent, 3 hours
PSYC-555	Special Topics: Alcohol and Substance Abuse Counseling, 3 hours
PHED-511	Special Topics: Sports Psychology, 3 hours
EDUC-550	Career Counseling, 3 hours (Required for ..... Licensed Professional Counselor)

### Field Placement Requirements:

Clinical Counseling students complete one 150-hour practicum and one 600-hour internship providing clinical services in a community agency subsequent to successful completion of PSYC-643 and PSYC-552. Field placement opportunities are available in many agencies within the tri-county area and are listed on the website. 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-508	Counseling and Personality Theories
PSYC-552	Group Counseling Techniques
PSYC-643	Contemporary Psychological Assessment and Psychotherapy
PSYC-644	Advanced Counseling Techniques

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.

List of Psychology Courses begins on Page 75.

## Specialist in Education in School Psychology

Department of Psychology, 843-953-5320  
Dr. Kerry Lassiter, lassiterk@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, the group, and the systems level. 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 II level 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. All applicants must submit for review:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate and graduate work directly from each regionally accredited college or university. Minimum requirements for consideration include an overall undergraduate grade point average of 3.0 (or graduate grade point average of 3.0);
3. A current (within five years of application) Graduate Record Examination (GRE) score of at least 297 (minimum of 150 on the verbal reasoning and 141 on the quantitative reasoning section). The Miller Analogies Test (MAT) can be substituted for GRE scores with a score of at least 410 or higher.
4. A completed admissions questionnaire ([www.citadel.edu/graduatecollege/forms](http://www.citadel.edu/graduatecollege/forms));
5. Two signed letters of reference.

Application materials can be requested from The Citadel Graduate College, The Citadel, Charleston, South Carolina 29409: (843) 953-5089 or online at [www.citadel.edu/graduatecollege](http://www.citadel.edu/graduatecollege).

All application requirements must be completed and materials submitted to The Citadel Graduate College by March 15 to be considered for fall admission in the School Psychology program.

## Program Requirements:

The Ed.S. degree in School Psychology consists of 75 semester hours with 4 interacting components:

1. Core knowledge courses focusing on psychological foundations with emphasis on the role, functions, and scope of the profession of school psychology (30 hours).

- a. PSYC-500: Human Growth and Development
- b. PSYC-501: Principles of Behavior and Cognitive Change
- c. PSYC-507: General Psychopathology: Assessment & Differential Diagnosis
- d. PSYC-508: Counseling and Personality Theories
- e. PSYC-512: Ethics, Roles, & Law
- f. PSYC-523: Statistics & Research Design
- g. PSYC-525: Basic Counseling Techniques
- h. PSYC-549: Applied Measurement Techniques
- i. PSYC-553: Introduction to Family Dynamics
- j. PSYC-561: Social-multicultural Perspectives

2. Advanced knowledge and skills courses which emphasize the knowledge and skills more specific to educational settings (30 hours).

- a. PSYC-502: Psychological & Educational Exceptionalities: Child/Adolescent
- b. PSYC-503: Objective Assessment
- c. PSYC-504: Special Techniques in Assessment
- d. PSYC-505: Personality, Social, & Emotional Assessment
- e. PSYC-602: Social & Biological Basis of Child & Adolescent Behavior
- f. PSYC-605: Systems Theory & Consultation: Prevention and Intervention\*
- g. PSYC-606: Educational Interventions\*
- h. PSYC-607: Behavioral and Emotional Interventions\*
- i. PSYC-612: Reading Assessment and Interventions
- j. 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.

3. 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 can not begin this block of courses until they have officially been admitted into the School Psychology Program and completed all prerequisites.**

- a. PSYC-615: Practicum in School Psychology I
- b. PSYC-616: Practicum in School Psychology II
- c. PSYC-617: Consultation & Intervention Practicum I
- d. PSYC-618: Consultation & Intervention Practicum II
- e. PSYC-621: Internship in School Psychology I
- f. PSYC-622: Internship in School Psychology II

**\*NOTE: PSYC 615/617 & 616/618 are co-requisites**

4. Experience as a scientist practitioner in gathering and analyzing data (3 hours).

- a. PSYC-599: Thesis (**must be completed prior to award of the M.A.**)

Students in the School Psychology program who successfully complete the 75 semester hours and other Program requirements (see Handbook

of School Psychology) are awarded the Ed.S. degree. Students must complete all course requirements within a 5-year period from the date of initial enrollment. Internship requirements must be completed within 2 years of the completion of course work or 7 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 be the thesis.

No more than 8 hours of graduate credit taken as non-degree-seeking student will be applied toward program requirements. Registration for psychology courses as a non-degree seeking student is available no sooner than one week prior to the start of classes each term. The only exception to this is PSYC 500, registration may occur at any time.

## Field-Based Placement Requirements:

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

To meet South Carolina requirements, students who plan to complete an internship must apply through the South Carolina Department of Education (SCDOE) for an internship certificate. Further, 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 SCDOE by the deadline for the intended semester of Internship (January 15 for Fall Semester internship and May 1 for Spring internship).

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

## Program Sequence:

PSYC-503, 504, 505, and 615/616 **must** be taken in prescribed sequence, with each course building on the preceding one incrementally. The intervention courses (PSYC-605, 606, 607 and 617/618) must be completed prior to (or 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 during their first Fall semester enrolled in order to avoid an extension of their course work by one year.**

## 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. Unless stated differently in course syllabi, this general policy is in effect and course instructors can fail a student who misses more than 20% of classes.

The Graduate program in School Psychology is, by its nature, an applied practitioner program leading to anticipated passing scores on

the PRAXIS II and certification as a practicing 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 by the Program to ensure that learning experiences are not compromised. Specifically, those courses that fall under this absence policy are as follows: PSYC-503, PSYC-504, PSYC-505, PSYC-512, PSYC-615/616, PSYC-617/618, PSYC-605, PSYC-606, PSYC-621, and PSYC-622. Students enrolled in these classes are advised to consult their syllabus and instructor for more specific details

## Course Descriptions:

### 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.

### 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-IV) will be emphasized.

### 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 these instruments with emphasis on utilizing this information within the data-based

problem-solving model, particularly the problem definition, problem analysis and intervention planning stages.

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 intelligence, achievement, visual-motor measures as well as 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 focus on several diagnostic systems and methodologies (e.g., DSM-IV, IDEA, etc.). Emphasis will be on acquiring and interpreting 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, projective, and observational techniques. Practical experiences will be integrated with analysis of the literature relating to legal issues, validity of data, and clinical studies. Emphasis 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 DSM-IV. 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.

### 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 (including assessment and research techniques), and normal, and abnormal personality with a particular emphasis on therapeutic application of the major theories of counseling intervention.

Prerequisite: Human Growth and Development (PSYC-500).

### 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.

#### **PSYC-514— Ethics and Mental Health Law**

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 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).

#### **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: 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-549—Applied Measurement Techniques**

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.

#### **PSYC-552—Group Counseling Techniques**

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-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: Human Growth and Development (PSYC-500).

#### **PSYC-555—Special Topics in Psychology**

Three 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: Family Dynamics (PSYC-553).

#### **PSYC-561—Social-Multicultural Perspectives**

Three Credit Hours

This course uses principles of social psychology to examine the influences of cultural, ethnic, minority, gender, and life-styles on psychological, educational and social development. Particular attention will be focused on variations in experiences and perceptions of individuals from divergent backgrounds as these impact on educational and psychological environments. Students will be provided practical experiences that will enable them to shift focus from their own perspectives.

Prerequisite: Human Growth and Development (PSYC-500).

#### **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

A supervised applied research project related to a topic or issue in psychology. A prospectus, to be approved by the supervising faculty member, shall detail the nature of the study and the methodology to be used. The thesis shall be submitted according to designated format, and its acceptance (and the award of credit) shall depend upon an oral defense before departmental faculty. The student will also be expected to submit the research for presentation at a state, regional, or national psychology association meeting or equivalent.

Prerequisite: 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: 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. Students will cover systems theories and models of consultation to include mental health consultation, behavioral consultation, organizational change, and collaborative decision-making as well as primary/secondary prevention methods with a focus on the learning and psychology of the school age child/adolescent. Interventions that promote positive school cultures will be examined across classroom, school, family, and community systems.

Prerequisite: Ethics, Roles and Law (PSYC-512).

Corequisites: 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.

Corequisites: Practicum in School Psychology I (PSYC-615) and Practicum in Consultation and Intervention I (PSYC-617)

### **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. Crisis intervention and threat assessment will also be addressed.

Corequisites: Practicum in School Psychology II (PSYC-616) and Practicum in Consultation and Intervention II (PSYC-618)

### **PSYC-611—Clinical and Professional Issues in Counseling**

Three Credit Hours

Counseling does not occur in a vacuum and clinical counselors working within the community must possess basic knowledge of a number of topics that affect the provision of care to clients. This course addresses a number of topics that relate to the practice of counseling. Topics to be addressed include: 1) licensure and professional development; 2) advanced personality theory with a focus on assessment and treatment of personality disorders; 3) psychopharmacology for the non-physician; and 4) use of empirically validated treatments.

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 programs and methods of instruction used to prevent reading problems before they occur will also be reviewed.

Corequisites: Practicum in Consultation and Intervention: I and II (PSYC-616/618)

### **PSYC-615/616 —Practicum in School Psychology: I and II**

Two Credit Hours each

These practica 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.

Corequisites: 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 practica 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.

Corequisites: 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 provided 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, as well as review methods and procedures involved in assessing institutional programs (i.e., program evaluation, implementation and efficacy).

### **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 multicultural 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 community counseling students who are at the end of their program. The practicum consists of 150 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 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 readiness to function in a professional role in the community.

### **PSYC-643—Contemporary Psychological Assessment and Psychotherapy**

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, conceptualization, and treatment for the most common clinical problems.

Prerequisite: Students must have completed all core courses and passed comprehensive examination.

### **PSYC-644—Advanced Counseling Techniques**

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-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 prior course work, including Practicum (may take elective with Internship)

## Master of Arts in Social Science

Department of Political Science  
& Criminal Justice, 843-953-5069  
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, homeland security, 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. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. All students must successfully complete either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). 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 fail to meet the minimum score requirement may be provisionally accepted into the MA 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 apply for provisional status. Upon completion of the first eight hours of degree coursework, with a minimum GPA of 3.50, the student is considered fully admitted. 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.
4. Completed program of study with advisor.

### Required Program:

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

1. Required Core (6 hours)  
PSCI-500/ CRMJ-500 Seminar in Social Science  
PSCI-501/ CRMJ-501 Research Methods in Social

Science

\*NOTE: these 6 hours must be included in the first 12 hours taken in the program.

2. Cluster A: Foundation Courses (15 hours)  
Students should select five courses from any political science, criminal justice, sociology, or anthropology courses the Department offers.
3. Cluster B: Electives (15 hours)  
Students should select five courses from those listed in this cluster, three of which must be Psychology graduate courses (9 hours). Other courses may be used as electives with the permission of the Departmental Graduate Director.
4. Students wishing to focus on homeland security or leadership may take as many as 10 courses from Cluster B with the approval of the Director of the MA program and either the Director of Homeland Security Programs (for homeland security focus) or the Director of Academic Leadership Programs (for leadership focus). Students who choose to focus on social sciences as a general area will take 5 courses from Cluster A and 5 courses from Cluster B with the approval of the Director of the MA program.

Students accepted for the MASS degree program may *simultaneously* enroll in the Graduate Certificate in Leadership and/or the Graduate Certificate in Homeland Security programs. Each certificate involves a separate application and acceptance. Students dual 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 dual enrolled in the MASS degree and Graduate Certificate in Homeland Security may apply the five required courses for the certificate as the Cluster A of the MASS degree. Students dual enrolled in the MASS degree and Graduate Certificate in Homeland Security and Graduate Certificate in Leadership may apply the five required courses for the former certificate as the Cluster A of the MASS degree and the five required courses for the latter certificate as the Cluster B. If a student is dual 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 page 110 for more details on the Graduate Certificate in Leadership and page 113 for more details on the Graduate Certificate in Homeland Security.

### List of Courses: (Cluster B)

PSYC-500	Human Growth and Development
PSYC-501	Principles of Cognitive & Behavioral Change <i>*With Instructor Permission Only</i>
PSYC-507	General Psychopathology <i>*With Instructor Permission Only</i>
PSYC-508	Counseling and Personality Theories <i>*With Instructor Permission Only</i>
PSYC-553	Introduction to Family Dynamics
PSYC-555	Special Topics in Psychology <i>*With Instructor Permission Only</i>
PSYC-561	Social-Multicultural Perspectives
PSYC-570	Social and Cognitive Foundations of Interpersonal Behavior



BADM-704	Foundations of Economics
BADM-713	Communication for Leadership
EDUC-500	Foundations of American Education
EDUC-561	Counseling Diverse Populations
EDUC-600	Professional Negotiations
ENGL-512	Southern Literature
ENGL-516	Continental Literature
ENGL-520	Survey of World Literature I
ENGL-521	Survey of World Literature II
ENGL-530	Special Topics in the Humanities
ENGL-535	African-American Literature
ENGL-558	Technical and Professional Writing
ENGL-570	Topics in African-American Literary Genres
ENGL-571	Topics in African-American Literary Periods
ENGL-572	Topics in Major African-American Writers
ENGL-573	Special Topics in African-American Literature
GEOG-511	World Geography
Any 500 level	History course EXCEPT:
HIST-560	History of Non-Western World (MAT only)
HIST-594	Historiography for Social Science Teachers (MAT only)
HESS-502	Drug and Substance Abuse
HESS-503	Human Sexuality
HESS-504	Public Health

Total: Thirty six (36) hours.

### Course Descriptions: (Cluster A)

#### **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-505—Instructional Approaches to Social Sciences**

Three Credit Hours

This course is designed to provide an overview of the social sciences, to show how they differ from the humanities and the natural sciences, to review how the scientific approach and the scientific method may be applied to the study of social sciences, and to introduce students to a variety of pedagogical techniques; special emphasis will be given to the use of technology in the teaching of the social sciences and will include instruction on the use of the internet, on the gathering and analysis of social science data, and the utilization of simulations in the classroom.

#### **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**

Three Credit Hours

Selected topics in political leadership application. Topics could range from leadership studies of the American presidency; US 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-569/CRMJ-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.

**PSCI-570—The Civil Rights Movement**

Three Credit Hours

An examination of the Civil Rights Movement from World War II to the present with extended attention given to the critical period from 1954 to 1965; the course will consider the impact of this “civil rights decade” on American politics and political behavior during the last third of the 20th century. Key events, organizations, and personalities will be examined, and continuing issues (such as affirmative action, majority-minority legislative districting, and racial typing) will be discussed. Secondary analyses will be supplemented by the use of videotapes, first-hand accounts, and primary documents to enhance students’ understanding of the movement and its effects.

**PSCI-592—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.

**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/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/PSCI-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/laundrying, 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-567— 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.

### **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.

### **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.

### **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.

### **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.



# School of Science & Mathematics

Master of Arts:

- Biology

Master of Arts in Education:

- Mathematics

Master of Science:

- Computer Science
- Health, Exercise, & Sport Science

## Master of Arts in Biology

Department of Biology, 843-953-5203

Dr. John Weinstein,

john.weinstein@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. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. All students must successfully complete either the Graduate Record Examination (GRE) or the Miller Analogies Test (MAT). The minimum for the GRE is a verbal and quantitative combination of 290. The minimum for the MAT is a raw score of 396. 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 eight hours of degree coursework with a minimum grade point average of 3.25, the student is considered fully admitted. 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.

### Program Requirements:

The Master of Arts in Biology program requires a minimum of eight graduate level courses totaling at least 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 M.A. 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.

### Course Descriptions:

#### 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-531—Reproductive and Developmental Strategies**

Four Credit Hours

A study of reproductive and developmental strategies used across the phyla, this course will consider how the choices of the reproducing adults affect the development and survival of the offspring. The laboratory will include use of model systems to investigate the theories discussed in lecture.

Lecture: three hours a week; laboratory: three hours a week

**BIOL-601—Evolution of Animals**

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**

Four 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: three hours a week; laboratory: three 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 experience. 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

General coverage of the anatomy, morphology, ecology, and chemistry of microorganisms. The emphasis of the course will be on bacteria, however, some time will be spent on the study of fungi, viruses, rickettsiae, and protozoans.

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: three hours a week.

**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-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.

## Master of Arts in Education in Mathematics

### Department of Mathematics and Computer Science

**Dr. John I. Moore, Jr., Department Head,**

843-953-5048, john.moore@citadel.edu

**Dr. Isaac S. Metts, Jr., Program Director**

843-953-5042, spike.metts@citadel.edu

**Col. Stephen D. Cotter, Associate Program**

**Director,** 843-953-5035, steve.cotter@citadel.edu

Graduate courses in Mathematics are also offered in support of other degree programs, primarily the Master of Arts in Teaching (MAT) with a concentration in the field of Mathematics.

### Mission:

The purpose of the M.A.E. in Mathematics is to enhance the mathematical knowledge and teaching techniques of middle and secondary mathematics teachers. The program is intended for individuals who currently hold a teaching certificate, but a certificate is not required. Courses associated with this program do not require that the participant have an undergraduate major in mathematics. However, the mathematics background and maturity must include at least twelve hours of mathematics at the undergraduate level, with at least 8 semester credit hours in calculus. Participants whose preparation may not be adequate should confer with the department head or the program director.

### Admission Requirements:

1. Complete and return a graduate application form, along with the appropriate non-refundable fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university. Applicants are expected to have a cumulative undergraduate GPA of 2.5 or higher. Applicants with less than a 2.5 GPA may appeal to the Department of Mathematics and Computer Science, and their application will be reviewed by the Program Director and the Department Head. The department recommendation will be forwarded to the Dean of Science and Mathematics for final action.
3. An official copy of the Graduate Record Exam (GRE) or the Miller Analogies Test (MAT). The minimum combined score for the GRE on the verbal and quantitative sections of the general test is 290. The minimum score for the MAT is a raw score of 396.\*
4. Completion of a minimum of 12 hours of undergraduate mathematics that includes at least 8 semester credit hours in calculus.

\*Students who score between 283-289 on the GRE or 380-395 on the MAT may apply for provisional status. Under provisional status, students may enroll for only one semester of 6 hours. If the student maintains a 3.50 GPA under provisional status, they will be considered for degree seeking status the following semester. Stu-

dents who score 379 or below on the MAT or 282 or below on the GRE will not be admitted. Admission test must be current within five (5) years of application.

### Degree Requirements:

The minimum number of hours required is 33 semester hours, of which at least 21 must be mathematics courses and 9 must be education courses. The other three hours can be either mathematics or education.

#### Required Mathematics Courses:

MATH-518 Technology in Mathematics Classrooms (3)

MATH-542 Probability and Statistics (3)

MATH-553 Calculus from an Advanced Standpoint (3)

Electives Four or five courses\* (12-15 semester hours)

\*MATH-501, 509, 517, and 541 are excluded as electives.

CSCI-562 and CSCI-563 may be counted.

**Required Education Courses** (one course from each of the following areas):

a. Humanistic Orientation (one course) (3)

EDUC-500 Foundations of American Education

EDUC-522 Critical Education Issues in Multicultural Society

b. Behavioral Science Foundation (one course) (3)

EDUC-536 Educational Psychology

c. Research (3)

EDUC-512 Data Collection and Analysis

### Course Descriptions:

#### MATH-501—Arithmetic and Algebraic Structures for Middle School Teachers

Three Credit Hours

This course is designed to relate the content of arithmetic and algebraic structures to middle school teachers. It will address the special needs of middle school teachers and identify resources and assistance. Course instruction will model the recommendations of NCTM and the content will be consistent with the South Carolina Curriculum standards.

#### MATH-505, 506—Mathematics for Middle/Secondary School Teachers

Three Credit Hours

These courses are designed to introduce students to topics in finite mathematics with applications to “real” world problems. Either spreadsheets or some other technology will be used to model the problems and expedite the calculations.

#### MATH-509—Geometry and Measurement for Middle School Teachers

Three Credit Hours

A course designed to introduce appropriate geometric concepts and measurements for middle school. Course instruction will model the recommendations of NCTM and the content will be consistent with South Carolina Curriculum standards.



### **MATH-510—Problem Solving Techniques**

Three Credit Hours

Strategies and techniques for problem solving will be introduced and used to solve mathematical problems. The emphasis will be on middle and secondary level problem solving. A major portion of the course consists of hands-on experience in problem solving, both individually and in groups.

### **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 under represented 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-517—Concepts of Pre-Calculus for Middle School Teachers**

Three Credit Hours

This course will review the topics in pre-calculus with an emphasis on conceptual understanding and how middle school mathematics leads into pre-calculus. Technology will be used to assist in the motivation and development of algebraic and trigonometric ideas. Prerequisite: MATH-501 or equivalent.

### **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.

### **MATH-519—Using Technology in Teaching Middle School Mathematics**

Three Credit Hours

This course will demonstrate how calculators and other technological advances can be used to motivate and develop conceptual understanding of arithmetic, algebra, and geometric concepts. Various applications which make use of calculators will be investigated. The appropriateness of calculator use in teaching certain topics will be discussed.

Note: Credit may not be received for both MATH-518 and 519.

### **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-541—Probability and Statistics for Middle School Teachers**

Three Credit Hours

The course will demonstrate basic ideas of data collection and the use of elementary statistical ideas to analyze the data. Various graphical representations and models will be explored. Interpretations of the data and possible extrapolations will be investigated.

### **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.

**CSCI-562—Microcomputer Applications for Teachers**

Three Credit Hours

This course is specifically designed to help teachers/administrators prepare to use microcomputers and Internet resources in their classroom/school. Topics include a general introduction to computers, word-processing, spreadsheets, databases, and telecommunications. Emphasis will be on actual classroom/school applications. This course is not intended for anyone who has already taken another computer course.

Note: This course can not be used for the Master of Science in Computer Science.

**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 can not be used for the Master of Science in Computer Science.

## Master of Science in Computer Science

### Department of Mathematics and Computer Science

Dr. John I. Moore, Jr., Department Head,  
843-953-5048, john.moore@citadel.edu

Dr. Shankar Banik, Program Director,  
843-953-5039, shankar.banik@citadel.edu

#### Mission:

The Master of Science in Computer Science 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 science program is a joint program with the College of Charleston.

#### Admission Requirements:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college and university. Students admitted to the program are normally expected to have an undergraduate grade point average of at least 3.0.
3. Approval from the Program Director or Department Head before registering for any graduate Computer Science (CSCI) courses.
4. Completion of the Graduate Record Examination (GRE) with a 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. The GRE must be current within five years of the application for admission to the program.
5. Evidence of a command of spoken and written English such as a TOEFL score of 550 paper-based, 79-80 internet based or 213 computer-based (if English is not the native language of citizenship).
6. 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.

#### Degree Requirements:

The Master of Science in Computer Science 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.

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-603 Object-Oriented Design Patterns
  - CSCI-604 Distributed Computer Systems Architecture
2. Declare an area of specialization from among software engineering, information systems, or computer science, and complete four courses in that area (12 hours).
    - a) Degree candidates in the Software Engineering specialization must complete four courses from the courses numbered 634, 654, 656, 657, 658, 659, 672, or 690 when approved by the department head or program director. One of these courses must be 656 and one of the courses must be chosen from 654 and 658.
    - b) 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 these courses must be 632 and 631.
    - c) Degree candidates in the Computer Science specialization must complete four courses from the courses numbered 612, 614, 616, 618, 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.
  3. Complete one of the following three options (9 hours).
    - a) CSCI-699 Research Thesis (6 hours) plus one elective.
    - b) CSCI-698 Project thesis (3 hours) plus two electives.
    - c) Three electives (9 hours).

The Citadel's School of Engineering offers a Graduate Certificate in Technical Project Management consisting of four courses. PMGT-650 (Overview of Technical Project Management) may be substituted for CSCI-634 in satisfying degree requirements for the Master of Science in Computer Science, and the remaining three courses, PMGT-651, PMGT-652, and PMGT-653, may be taken as electives satisfying requirement 3c above.

Students accepted for the MS in Computer Science degree program may simultaneously enroll in the Graduate Certificate in Technical Project Management program. The certificate involves separate enrollment and acceptance.

#### Course Descriptions:

##### 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 and construction 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-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.

### **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—Advanced Topics in Database Systems**

Three Credit Hours

Topics such as algorithms for query processing and optimization, physical database design, transaction processing, concurrency control, database backup and recovery techniques, database security, distributed databases, multimedia databases, object and object-relational databases, data warehousing, and data mining. Prerequisite: CSCI-601.

### **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 and CSCI-603.

### **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-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-603, and CSCI-604, and approval by the MSCS program director.

### **CSCI-699—Research Thesis**

Six Credit Hours

Research Thesis is a six-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-603 and CSCI-604, and approval by the MSCS program director.

# Department of Health, Exercise, & Sport Science

## Mission Statement:

Goals of the degree programs M.S. in Health, Exercise, and Sport Science and M.A.T in Physical Education 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; application of physical, biological, and behavioral sciences to the teaching and learning processes; and management and administration of sport, exercise, and recreation programs.

These two programs provide scholarly approaches to study of professions for those interested in health science, exercise science, sport science, physical education, and human performance. These advanced degree programs prepare graduates for leadership positions including those within schools and other teaching and coaching venues; the recreation industry; college and university sports, intramurals, recreation, and sports club programs; resort programming; wellness and fitness industries; and sport and athletic administration.

The Department of Health, Exercise, and Sport Science also provides a Graduate Certificate in Sport Management (see page 109 for details).

## Master of Science in Health, Exercise, & Sport Science

Dr. Dena P. Garner, Program Director,  
843-953-7960, dena.garner@citadel.edu

## Admission Requirements:

1. Contact the Director of Graduate Studies for the Department of Health, Exercise, and Sport Science.
2. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
3. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university. Students whose degrees are from colleges and universities outside the United States will be required to have their transcripts translated by one of several academic credential evaluation organizations recognized by the CGC office.
4. Successfully complete either the Miller Analogies Test (MAT) or the Graduate Record Examination (GRE) and have official scores sent directly to the CGC office. This test must be current within five years of application. 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 380-395 on the MAT or between 283-289 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.
5. Three signed letters of recommendation must be sent to the CGC office. These may be from faculty members of the applicant's undergraduate institution and/or from associates in business, government, education, or military service.
6. Submit a resume detailing previous work experiences to the CGC office.
7. Submit an official TOEFL score if your native language is not English. Minimum acceptable score is 550 paper-based, 213 computer-based, or 79 internet-based.

## Program Requirements:

The program consists of thirty-nine (39) or forty-two (42) semester credit hours depending on course selection. Either twenty-one (21) or twenty-four (24) hours are derived from seven (7) or eight (8) required core courses. The balance of hours (18) may be taken from approved health, exercise, and sport science electives and a maximum of three (3) hours of free electives. Within the broad scope of courses offered, each program of study is individually structured to accommodate 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 will undergo an oral investigation consisting of questions selected by members of the departmental graduate faculty. Any student who does not satisfactorily complete the exit competency examination may be required to take additional courses or accomplish individualized study to strengthen identified areas.

## Core Requirements:

Depending upon program emphasis, seven (7) or eight (8) courses within the curriculum are designated "Core Courses" are required for each student:

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 and Methods of Analyzing Research in Health, Exercise, & Sport Science I
HESS-560	Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science II
HESS-507	Special Problems in Health, Exercise, & Sport Science *
(OR)	
HESS-542	Practicum in Health, Exercise, & Sport Science *
(OR)	
HESS-598	Thesis I in Health, Exercise, & Sport Science (3) *
HESS-599	Thesis II in Health, Exercise, & Sport Science (3) *

\* HESS-540 is a prerequisite or co-requisite for this course

TOTAL HOURS of CORE REQUIREMENTS: 21 or 24

### Approved Electives

Each student is required to choose a **minimum** of six (6) courses (18 hours) from the following list of approved elective courses.

HESS-502	Drug & Substance Abuse
HESS-503	Human Sexuality

HESS-504	Public Health
HESS-508	Epidemiology
HESS-509	Preventive and Rehabilitative Aspects of Physical Activity
HESS-511	Special Topics in Health, Exercise, & Sport Science (Exercise Science)
HESS-512	Special Topics in Health, Exercise, & Sport Science (Sports Management)
HESS-513	Sport Facility & Event Management
HESS-518	Sport Marketing
HESS-520	Special Topics in Sport Management
HESS-521	The Art of Selling in Sport
HESS-523	Administration and Leadership of Exercise and Sport Organizations
HESS-530	Practicum in Sport Management
HESS-534	Accommodating Persons with Disabilities in Sport & Physical Activity
HESS-538	Internship in Sport Management (6 hours)
HESS-539	Sport Public Relations & Promotions
HESS-541	Current and Future Trends in Health, Exercise, & Sport Science
HESS-543	Consumer Health
HESS-544	Exercise Testing & Assessment
HESS-545	Nutrition for Exercise, Sport, and Physical Activity
HESS-546	Environmental Physiology
HESS-547	Techniques of Conditioning for Sport and Physical Fitness
HESS-548	Psychology of Sport & Motivation
HESS-549	Sociological and Cultural Aspects of Sport
HESS-552	Fundraising for Sport Organizations
HESS-553	Sport Communications
HESS-558	Advertising in Sport
HESS-560	Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science II * **
HESS-554	Analysis of Sport Skills and Techniques
HESS-555	Legal Aspects of Sport
HESS-556	Sport Finance
HESS-557	Economics of Sport

\* HESS-540 is a prerequisite or co-requisite for this course

\*\* This course or an equivalent course may be required if a student chooses the thesis option

- **Opportunities exist for development of specialized programs of study emphasizing Health Science, Exercise Science, or Sport 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 program hours: 39 OR 42**  
(21/24 core hours + 18 elective)

## Course Descriptions:

### **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 and 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 and 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.

Prerequisite: Human Physiology or Exercise Physiology

### **HESS-507—Special Problems in Health Science, Exercise Science, and 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 and 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 and Measurements, Statistics, or equivalent.

### **HESS-509—Preventive and 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.

Prerequisites: Anatomy and/or Physiology

### **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-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 and 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-529—Special Problems in Sport Management:**

##### **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-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-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-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 and 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 and 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.

Prerequisites: HESS-540 Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science I

#### **HESS-542—Practicum in Health, Exercise, and 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.

Prerequisites: HESS-540 Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science I

#### **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, and 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.

#### **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.

#### **HESS-547—Techniques of Conditioning for Sport and 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 and 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 affects on society, including race, gender, adherence, values, and violence.

**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 and 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-560—Research Techniques and 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; Statistics, Tests and Measurements, or equivalent.

**HESS-598—Thesis I in Health Science, Exercise Science, and 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.

Prerequisites: HESS-540, HESS-560 Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science I, II

**HESS-599—Thesis II in Health Science, Exercise Science, and 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.

Prerequisites: HESS-540, HESS-560 Research Techniques and Methods of Analyzing Research in Health, Exercise, & Sport Science I, II and HESS-598, Thesis I in Health Science, Exercise Science, and Sport Science.



# School of Engineering

Master of Science:

- Project Management

**Master of Science in Project  
Management**  
**School of Engineering, 843-953-9811**  
**Dr. Charles Skipper,**  
 Charles.skipper@citadel.edu

**Mission Statement:**

The mission of The Citadel's Master of Science in Project Management 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. Other qualities appropriate to graduate study are also considered. Anyone holding a bachelor's degree from a regionally 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.

<u>Semester to begin:</u>	<u>Admission material due:</u>
Fall	July 20th
Spring	December 1st
Summer	March 20th

For degree-seeking students:

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate academic course work from each regionally accredited college or university must be submitted directly to The Citadel Graduate College.
3. Submission of official copy of GRE or GMAT test score, current within the previous five years, to the CGC office.
4. Evidence of a minimum of one year of professional experience, or permission from Department Head.
5. Submit two signed letters of reference to the CGC office.
6. Submit a resume detailing previous work.
7. Prepare and submit a statement of purpose.
8. Submission of an official TOEFL score if the applicant's native language is not English. The minimum score is 550 paper-based or 213 computer-based or 79 Internet-based.

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

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate academic course work from each accredited college or university recognized by the CHEA must be submitted directly to The Citadel Graduate College.
3. Submit a resume detailing previous work.
4. Submission of an official TOEFL score if the applicant's native language is not English. The minimum score is 550 paper-based or 213 computer-based or 79 internet-based.
5. Permission of department is required.

**Admission Denied:** During the admission process, the applicant's records will be reviewed and results communicated in writing. If the application is denied, the applicant may petition the Dean of Engineering for re-consideration, citing any extenuating or mitigating circumstances.

**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. Any prerequisites for applicable courses must be met.

All degree candidates must:

1. Complete the following 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:
 

BADM-713	Communication for Leadership
BADM-722	Leadership in Organizations
PMGT-671	Project Manager Leadership Development
PMGT-672	Applied Leadership Concepts
3. No transfer credit will be accepted for core courses.
4. Declare a plan of study totaling 12 hours of elective courses taken from the following areas.

## Areas of Study:

- Leadership
  - PMGT-671 Project Manager Leadership Development
  - PMGT-672 Applied Leadership Concepts
  - PMGT-690 Independent Study
  - PSYC-500 Human Growth and Development
  - PSYC-570 Social and Cognitive Foundations of Interpersonal Behavior
- 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 Advanced Energy Conversion
  - ELEC-675 Computer Architecture
- Civil and Environmental Engineering
  - CIVL-502 Sustainability
  - CIVL-504 Natural Hazards and Preservation of Historical Structures
  - CIVL-506 Geographic Information Systems
  - CIVL-508 Monitoring of Civil Engineering Infrastructure
  - CIVL-602 Water Quality Modeling and Management
  - CIVL-604 Aquatic Chemistry
  - CIVL-608 Building Load Analysis
  - CIVL-610 Timber Design
  - CIVL-612 Urban Transportation Planning
  - CIVL-614 Ground Improvement
  - CIVL-616 Deep Foundations
  - CIVL-650 Special Graduate Topics in Civil Engineering
- Systems Engineering Management
  - PMGT-680 Systems Engineering Management Fundamentals
  - PMGT-681 Requirements Development and Management
  - PMGT-682 System Verification and Validation

And one of the following elective courses:

  - PMGT-683 Systems Modeling and Integration
  - PMGT-684 Human System Integration
  - PMGT-685 Decision and Risk Analysis

**Transfer Credit:** A maximum of two courses (6 hours) may be transferred in from a regionally 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 received in the courses being considered, (2) credit was earned within six years prior to admission into The Citadel MSPM program, and (3) each course has been approved by the department head.

**Transfer Credit From The Citadel:** A maximum of 12 hours may be transferred from one Citadel 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 Project Management may be conferred upon those students who successfully complete the 30 hours of graduate coursework as specified above with a grade-point ratio (GPR) of 3.0 or better on hours earned at The Citadel. Completion of more than 30 credit hours of advanced graduate coursework will only be allowed for professional development, and may not be used to increase GPR to the 3.0 required for graduation.

## Required Technical Project Management Courses:

### 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 nine knowledge areas of Integration, Scope, Time, Cost, Quality, Human Resources, Communication, Risk and Procurement. 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 and risk planning and mitigation. 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, and if PMGT-652 and PMGT-653 have been successfully completed, will formally present the completed project as part of this course.

Prerequisite: PMGT-650 or instructor permission.\*

### PMGT-652—Applications of Quality Management

Three Credit Hours

This course investigates 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 function point analysis will be addressed. Each student will continue working on their Capstone Project started in PMGT-650, and if PMGT-651 and PMGT-653 have been successfully completed, will formally present the completed project as part of this course.

Prerequisite: PMGT-650 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, 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 or instructor permission.\*

\*PMGT-651, PMGT-652, PMGT-653 may be taken in any order.

### **Required Leadership Courses (Total 6 hours):**

#### **BADM-713—Communication 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.

#### **BADM-722—Leadership in Organizations**

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-assessment, role play, team building exercises, and a leadership portfolio.

Prerequisite: None.

#### **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.

#### **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 international projects, virtual project teams, executive leadership issues, conflict resolution, effective oral and written communications, changing a corporate culture, stakeholder management, and how to lead the team development lifecycle. Course content will include case studies, guest speakers, executive interviews, and classroom simulations.

Prerequisites: PMGT-650

### **Elective Courses (Total 12 hours):**

#### **Civil and Environmental Engineering Courses:**

##### **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: CIVL-330 or equivalent or permission from instructor.

#### **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–Building Load Analysis**

Three credit hours

Structural engineering applications of analysis methodologies used to determine loads in accordance with ASCE 7. Course provides thorough overview of all practical load considerations.

Prerequisites: CIVL-309 or approved equivalent.

#### **CIVL-610–Timber 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.

Prerequisites: CIVL-304 or approved equivalent.

#### **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 travel demand software and transportation planning applications will also be covered.

Prerequisites: BS in mathematics, science, or engineering, or permission from instructor.

#### **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-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.

Prerequisites: None.

### **Electrical and Computer Engineering Courses:**

#### **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-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–Adaptive 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-665–Fundamentals of Advanced Energy Conversion**

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.

## **Leadership Courses**

PSYC-500 and PSYC-570 are currently provided by The Citadel under the Department of Psychology. PMGT-671, PMGT-672 and PMGT-690 are currently provided by The Citadel School of Engineering.

### **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-570–Social and Cognitive Foundations of Interpersonal Behavior**

Three credit hours

This course presents a survey of the scientific study of social influence ~ or social psychology, in other words. The class is based on the premise 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, and is thus critical to successful performance in virtually every professional endeavor. The topics addressed include social judgment and decision-making, attitudes and attitude change, persuasion, group processes, prejudice and discrimination, and conflict resolution.

Prerequisites: None

### **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 with engineering and technical backgrounds, 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.



### **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 international projects, virtual project teams, executive leadership issues, conflict resolution, effective oral and written communications, changing a corporate culture, stakeholder management, and how to lead the team development lifecycle. Course content will include case studies, guest speakers, executive interviews, and classroom simulations.

Prerequisites: PMGT-650

### **PMGT-690–Independent Study**

Three credit hours

This course is designed to give students real-world work experience to complement the classroom education they have previously received or to allow for working 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 experiences to a variety of managerial issues and/or to the investigation of some advanced topic. Topics shall not be directly related to the student's past work experiences. Applicable efforts, activities, and topics will be approved through the School of Engineering.

Prerequisites: PMGT-650 and instructor permission.

## **Systems Engineering Management Courses:**

### **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 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 takes 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.

# Graduate Certificate Programs 2012-2013

## Graduate Certificate in Technical Project Management

School of Engineering, 843-953-9811

Dr. Charles Skipper

Charles.skipper@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 leaders.

### Admission Requirement:

Successful applicants must meet the following criteria for admission into the TPM graduate certificate program.

1. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a resume detailing work experience.
4. Submit 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?
5. Evidence of a minimum of one year work experience, or permission of Department Head.

All material must be received by the CGC office and evaluated by the department to receive consideration to the TPM graduate program. An undergraduate engineering degree is not required. Course substitutions or transfer courses cannot be used for certificate programs.

### 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.

#### Required Program:

The required courses for the TPM Graduate Certificate Program are:

- PMGT-650: Overview of Technical Project Management, 3 credit hours
- PMGT-651: Technical Project Planning and Scheduling, 3 credit hours

- PMGT-652: Applications of Quality Management, 3 credit hours
- PMGT-653: Technical Project Support and Operations, 3 credit hours

Total Required Courses: 12 credit hours

All students are required to complete a capstone project that spans the four TPM courses.

A formal presentation of the completed capstone project to industry professionals will be made upon completion of the fourth TPM course.

### Required Courses:

#### 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 nine knowledge areas of Integration, Scope, Time, Cost, Quality, Human Resources, Communication, Risk and Procurement. 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; schedule compression; and risk planning & mitigation. 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, and if PMGT-652 and PMGT-653 have been successfully completed, will formally present the completed project as part of this course.

Prerequisite: PMGT-650 or instructor permission.

#### PMGT-652—Applications of Quality Management

Three Credit Hours

This course investigates 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 methodol-

ogy, business process improvement, and function point analysis will be addressed. Each student will continue working on their Capstone Project started in PMGT-650, and if PMGT-651 and PMGT-653 have been successfully completed, will formally present the completed project as part of this course.

Prerequisite: PMGT-650 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, 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 or instructor permission.\*

PMGT-651, PMGT-652, and PMGT-653 may be taken in any order.

## Graduate Certificate in Sport Management - Sport Sales & Marketing

Department of Health, Exercise, and Sport Science  
843-953-5060

Department Head  
Dr. John S. Carter, 843-953-7953  
john.carter@citadel.edu

Program Coordinator  
Dr. Harry Davakos, 843-953-7957  
Harry.Davakos@citadel.edu  
Dr. Linda Schoonmaker, 843-953-7958  
linda.schoonmaker@citadel.edu

### The Sport Management Certificate Program

This certificate program in Sport Management offers five (5) courses that will enhance the student's breadth and depth of knowledge and skills in sport sales and marketing. These courses were specifically developed to broaden knowledge, skills, and abilities of working professionals in the field of sport management as well as provide such skills to students who wish to enhance their career marketability. In addition, graduate programs, such as the M.S. in Health, Exercise, and Sport Science program at The Citadel, may accept these certificate program courses as credits towards completion of a Master's degree with an emphasis in Sport Management if admission is granted to both simultaneously.

### Admission Requirements:

Requirements and application procedures for admission into the Sport Management Certificate Program:

1. Contact the Program Coordinator of the Sport Management Program in the Department of Health, Exercise, and Sport Science, Deas Hall, Room 205, Tel: (843) 843-7957 or (843) 953-5060, email: harry.davakos@citadel.edu.
2. Complete and return a graduate application form, along with a non-refundable application fee to The Citadel Graduate College (CGC), Bond Hall, Room 101.
3. Submit an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college and university attended. Students whose degrees are from colleges and universities outside the United States will be required to have their transcripts translated by one of several academic credential evaluation organizations recognized by The CGC.
4. Submit a resume to the CGC detailing previous work experience.
5. A letter of intent to the CGC that addresses the following questions:
  - a. How have your past experiences prepared you for the Sport Management Certificate Program's graduate work?

- b. How will your knowledge, skills, and attitudes contribute to the sport marketing/sales learning community?
- c. What do you hope to gain if accepted to the Sport Management Certificate Program?

All materials must be received by the CGC and evaluated by the department to receive consideration for entrance into the Sport Management Certificate Program. Coursework is not to begin until admission has been granted into the program. Course substitutions or transfer courses cannot be used for certificate programs.

### Course Descriptions:

#### HESS-518—Sport Marketing

Three Credit Hours

Course covers basic components of sport marketing; use of sports as marketing tool for other products; marketing of sports; and current considerations relevant for both marketing through and marketing of sports.

#### 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 and Leadership of Exercise and Sport Organizations

Three Credit Hours

A course examining organizational theory and behavior as well as leadership qualities related to exercise and sport organizations. Effectiveness, structure, and design of exercise and sport organizations are also addressed as well as cultures, leadership styles, conflicts, changes, and human resources involved in these entities.

#### HESS-539—Sport Public Relations and Promotions

Three Credit Hours

A course focusing on public relations principles and practices in the sport management 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.

## Graduate Certificate in Leadership

Dr. Mick Fekula

Director of Academic Leadership Programs,  
843-953-5826

The graduate certificate in Leadership consists of five (5) three (3) hour courses at the graduate level which can be used in each of the following programs or can be completed as a stand alone certificate in leadership for those interested individuals who are not enrolled in one of these three programs;

- Master of Arts in Social Science
- Master of Science in Project Management
- Master of Business Administration

### Admission Requirements:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit an official transcript for the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a 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 leadership?
  - 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. Submit the names and contact information for three (3) references familiar with your work.

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.

Students who are not enrolled in a degree program and pursuing the stand alone certificate must complete all 5 courses at The Citadel. Course substitutions or transfer courses cannot be used for certificate programs.

### Course Descriptions:

#### 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 development processes.

#### 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.

#### BADM-713—Communication 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.

Prerequisites: None.

#### BADM-722—Leadership in Organizations

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-assessment, role play, team building exercises, and a leadership portfolio.

Prerequisites: None.

#### Application of Leadership

Three Credit Hours

Choose one (1) of the following courses:

- Master of Arts in Social Science  
PSCI-555—Topics in Political Science Leadership Application  
CRMJ-555—Leadership Application Course in Criminal Justice
- Master of Science in Project Management  
PMGT-672—Applied Leadership Concepts
- Master in Business Administration  
BADM-740—Global Business Strategy

## Graduate Certificate in Student Affairs

School of Education, 843-953-5097

Dr. George T. Williams, 843-953-2205

williamsg@citadel.edu

The Citadel Graduate College (CGC) and the Division of Counselor Education within The Citadel School of Education (SOE) 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 Student Affairs graduate certificate 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.

The program also provides supportive educational background for those interested in pursuing a doctoral degree in Educational Leadership with a concentration in Higher Education Administration currently offered by Clemson University at the Lowcountry Graduate Center.

### Admission Requirements:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall, Room 101.
2. Submit an official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit one letter of recommendation.

Once all admission requirements have been satisfied, the SOE Division of Counselor Education Admissions Committee will review the application and the applicant will be notified of their admission decision. Coursework is not to begin until admission has been granted into the program. Course substitutions or transfer courses cannot be used for certificate programs.

### Curriculum:

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. Courses in the program are typically offered at the Lowcountry Graduate Center (LGC).

#### 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-613—Foundations of American Higher Education Three Credit Hours

This course is designed to assist students in understanding the historical trends and events that have influenced contemporary American higher education and the resulting evolution of the American college student.

#### EDUC-634—Practicum 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 100 clock hours. Prerequisite: Permission from a faculty Advisor

## Graduate Certificate in Environmental Studies

Department of Biology, 843-953-5203  
Dr. John Weinstein, 843-953-7796  
john.weinstein@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.

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. Course substitutions or transfer courses cannot be used for certificate programs.

Courses taken as part of the Environmental Studies graduate certificate can be counted toward the Master of Arts in Biology at The Citadel if admission is granted to both simultaneously

### Admission Requirements:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. A letter of intent outlining the applicant's purpose in pursuing the certificate program.
4. 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.

### 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 Civil and Environmental Engineering courses.

#### Required Course (3 credit hours)

BIOL-609 – Seminar in Environmental Studies

#### Biology Elective Courses (2 courses, minimum of 7 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-610 – Tropical Rainforest and Reef Ecology\*

BIOL-611 – Graduate Research<sup>^</sup>

BIOL-621 – Aquatic Toxicology\*

BIOL-631 – Environmental Physiology

\*4 credit hours with lab

<sup>^</sup>variable credit hours

#### Civil and Environmental Engineering Elective Courses (2 courses, 6 semester hours)

CIVL-502 – Sustainability

CIVL-504 – Natural Hazards and Preservation of Historical Structures

CIVL-506 – Geographic Information Systems

CIVL-602 – Water Quality Modeling and Management

CIVL-604 – Aquatic Chemistry

Please refer to page 85 of this catalog for the Biology course descriptions and to page 104 for the Civil and Environmental Engineering course descriptions.



## Graduate Certificate in Homeland Security

Department of Political Science and Criminal Justice 843 953-5072

Dr. Martha Hurley, 843-953-0319  
martha.hurley@citadel.edu

The Citadel because of its history, reputation, and affiliation with the military, state, and federal law enforcement is uniquely placed to help develop leadership capabilities in the area of homeland security. The Homeland Security Certificate is designed to give students a broad understanding of homeland security issues and to enhance leadership capabilities among those who currently work in local, state, and federal government. The courses also benefit non law enforcement personnel working in areas related to homeland security such as cyber security, engineering, defense contractors and emergency management personnel who are expected to understand the nature, purpose, and history associated with individuals and groups who pose threats to the United States.

Courses in this program are oriented around providing a common homeland security framework which can be utilized as part of strategic decision-making processes within agencies. This program introduces the student to basic homeland security concepts, applicable management principles, policy analysis, and enhances critical leadership skills necessary to successfully address security challenges within the United States and abroad.

### Learning Outcomes:

Students in the Homeland Security Certificate program will gain knowledge proficiency in the following areas:

- Homeland Security Strategy and Interagency Collaboration
- Homeland Security Management Principles, Tools, and Applications
- National Security Policy Development
- Domestic and International Terrorist Groups
- Ethics and Integrity Challenges Associated with Homeland Security
- Leadership Principles and Issues related to Homeland Security

### **Admission Requirements:**

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit an official transcript for the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a 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 homeland security?
  - b. How will your knowledge, skills, and experiences contribute to this program's learning community?
  - c. What do you hope to gain from this Homeland

Security graduate certificate program?

4. Submit 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. Course substitutions or transfer courses cannot be used for certificate programs.

### **Program Requirements:**

Students enrolled in the graduate certificate in Homeland Security offered by the Department of Political Science and Criminal Justice must complete five (5) out of the seven three (3) hour homeland security courses offered at the graduate level. Students who are dual enrolled in both the Master of Arts in Social Science (MASS degree) and the Homeland Security graduate certificate may count the five Homeland Security courses as their Cluster A requirements for the MASS degree. A stand-alone certificate in homeland security is provided to individuals who are not enrolled in a degree program at The Citadel but are interested in receiving a Certificate in Homeland Security.

### **Course Descriptions:**

#### **CRMJ-515—Topics in Homeland Security**

Three Credit Hours

Selected special topics or problems in the general area 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.

#### **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-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.

**PSCI-569/CRMJ-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 processes 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.

## Graduate Certificate in Systems Engineering Management

School of Engineering, 843-953-9811  
Dr. Charles Skipper, charles.skipper@citadel.edu

The Systems Engineering Management (SEM) program provides a multidisciplinary approach to the management and delivery of complex projects and programs. The 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. Complete and return a graduate application form, along with appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. An official transcript of the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a resume detailing work experience.
4. Submit a one-page letter of intent (form available at [www.citadel.edu/graduatecollege/forms](http://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 to receive consideration to the SEM graduate program. An undergraduate engineering degree is not required. Coursework is not to begin until admission has been granted into the program. Course substitutions or transfer courses cannot be used for certificate programs.

### Program Requirements:

Students must complete three required courses and one of the elective courses identified below:

#### Required Program:

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 requirements for the Master of Science in Project Management if admission is granted to both simultaneously. Please see your advisor for eligibility.

### Required Courses:

#### **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 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.

### Elective Courses:

#### **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 takes 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.

## Graduate Certificate in Intelligence Analysis

Department of Political Science and Criminal Justice, 843-953-5072

Dr. David Hurley, hurleyd1@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, Transportation Security, Port Authority Personnel, Military 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. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit an official transcript for the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a 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?

Students who are currently admitted to a graduate degree program at The Citadel are automatically eligible to pursue the graduate Certificate in Homeland Security but are required to apply for acceptance into the certificate 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. Course substitutions or transfer courses cannot be used for certificate programs.

### Program Requirements:

Students must complete 15 hours of graduate study (5 courses). The program consists of three required intelligence courses (3 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 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. Simultaneous MASS degree/Intelligence certificate must meet all the requirements (admission, declaration, by course completion without substitution) of the simultaneous MASS degree/Homeland Security certificate.

Students may **NOT** enroll in the simultaneous MASS/Homeland Security **AND** MASS/Intelligence certificate programs (since both would fill the Cluster A requirements) but **MAY** enroll in a simultaneous MASS/Leadership and MASS/Intelligence certificate programs (since the former fills the Cluster B and the latter fills the Cluster A) as currently outlined in the CGC catalog.

### Intelligence Analysis Required Courses:

#### 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.

#### 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.

### **Elective Courses:**

#### **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-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.

#### **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.

### **Elective Courses (from Homeland Security):**

#### **CRMJ-515/PSCI-515—Topics in Homeland Security**

Three Credit Hours

Selected special topics or problems in the general area of homeland security to fit the needs of students as well as the specialized knowledge of the faculty.

#### **CRMJ-555/PSCI-515—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.

#### **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-566— 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-567—Homeland Security**

Three Credit Hours

Seminar on homeland defence 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.

#### **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.

#### **PSCI-569/CRMJ-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.

## Graduate Certificate in Hispanic Studies

### Department of Modern Languages

**Dr. Guy Toubiana, Department Chair, 843-953-6804, toubianag@citadel.edu**

**Dr. Zane U. Segle, Program Director, 843-953-7083, seglez1@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 low country.

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 Requirement:

One of the three options below must apply for acceptance into the program:

1. Baccalaureate degree in Spanish literature, Spanish linguistics or Spanish education.
2. Baccalaureate degree in any field with a minor in Spanish literature, Spanish linguistics or Spanish education.
3. Baccalaureate degree in any field with 12 credits hours of upper-division classwork in Spanish literature, Spanish linguistics or Spanish education.

### Admission Process:

1. Complete and return a graduate application form, along with the appropriate non-refundable application fee, to The Citadel Graduate College (CGC), Bond Hall Room 101.
2. Submit an official transcript for the baccalaureate degree and all other undergraduate or graduate work directly from each regionally accredited college or university attended.
3. Submit a 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. Submit the names and contact information for three (3) references familiar with your work.

Students who are currently admitted to a graduate degree program at The Citadel are automatically eligible to pursue the graduate Certificate in Hispanic Studies but are required to apply for acceptance into the certificate 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. Course substitutions or transfer courses cannot be used for certificate programs.

### Curriculum:

The Graduate Certificate Program in Hispanic Studies 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. The required number of credits to complete the Graduate Certificate is 12.

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 Spanish.
- 2) The demographic with whom these teachers have contact is primarily Latin American students from Mexico, the Caribbean and Central America.

### Required Courses:

#### 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 economical 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-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, 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 Hernández. The study of Argentine literature will also include the Modernista Poetry of Alfonsina Storni and the new narrative with Jorge Luis 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.



# Undergraduate Degree Programs

2012-2013

## Bachelor of Arts in Criminal Justice

Department of Political Science & Criminal Justice, 843-953-5072

Dr. Bob McNamara, 843-953-2072  
mcnamara1@citadel.edu

The 2 + 2 program in criminal justice was created in 2011 to provide students with an opportunity to receive a four-year degree from The Citadel in the evening. The requirements for the major consist of a total of 60 upper division credit hours: 45 credit hours in the major and 15 credit hours of elective courses, 36 of which must be taken at The Citadel.

### Mission:

The mission of the 2 + 2 program in Criminal Justice is to foster an intellectually stimulating educational experience that prepares students to work within the criminal justice system and its related fields as well as laying the academic foundation for graduate study. This is accomplished by developing students' understanding of the causes of crime, which includes a grasp of the larger social context in which crime occurs, the operation and effectiveness of agencies within the criminal justice system, as well as developing students' analytical and skills that enable them to conduct and evaluate criminal justice-related research.

### Expected Student Learning Outcomes:

Upon completion of the program, students should generally possess:

- An understanding of the theories relating to crime causation and criminality.
- An understanding of the interdisciplinary nature of the criminal justice system.
- Develop skills that enable the student to conduct and evaluate criminal justice-related research.
- Advanced reading, writing, and verbal communication skills.
- An understanding of administrative principles and practices found in criminal justice agencies.

### Admission Requirements:

1. Apply to Trident Technical College. List either A.A. or CRJ as your major and Citadel-Criminal Justice as your career path.
2. Submit SAT/ACT scores or take Trident Tech's placement exam
3. Visit the Trident Technical College Orientation Center to be assigned a Trident Advisor.
4. Submit official transcripts of all colleges attended.
5. Meet with your advisor and complete a 2 + 2 Enrollment Form.

6. Complete courses at Trident Technical College with a minimum GPA of 2.0
7. Apply to The Citadel (upon acceptance, you may take courses at both institutions at the same time).
8. Meet with your Citadel advisor.

Courses taken at TTC or equivalent: 65 hours

### Required Courses

<u>Course</u>	<u>Hours</u>
<b>Writing/English Composition-6 hours</b>	
ENG-101 English Composition I	3
ENG-102 English Composition II	3
<b>Humanities/Foreign Language-6 hours</b>	
MUS-105 Music Appreciation	3
ART-101 Art History and Appreciation	3
ART-107 History of Early Western Art	3
ART-108 History of Western Art	3
PHI-101 Introduction to Philosophy	3
PHI-110 Ethics	3
REL-101 Introduction to Religion	3
Any Introductory Language sequence 101/102	6
<b>History-6 hours</b>	
(Select one Sequence)	
HIS-101/102 History of Western Civ.	6
HIS-104/105 History of World Civ.	6
<b>Mathematics-6 hours</b>	
MAT-109 College Algebra with Modeling	3
MAT-120 Probability and Statistics	3
MAT-123 Contemp. College Mathematics	3
<b>Science-8 hours</b>	
Courses must have lab, not necessarily sequential	
BIO-101 Biological Science I + lab	4
BIO-102 Biological Science II + lab	4
CHM-106 Contemporary Chemistry I + lab	4
CHM-107 Contemporary Chemistry II + lab	4
PHY-201 Physics I + lab	4
PHY-202 Physics II + lab	4
AST-101 Solar System Astronomy + lab	4
AST-102 Stellar Astronomy + lab	4
<b>Social Science-6 hours</b>	
SOCI-101 Introduction to Sociology	3
Take <b>one</b> of the following	
ANT-101 Cultural Anthropology	3
PSC-201 American National Gov.	3
PSY-201 General Psychology	3
<b>Criminal Justice Major-6 Hours</b>	
CRJ-201 Introduction to Criminal Justice*	3
CRJ-125 Criminology	3

Lower Division Electives 21 hours (Any Courses Apply)  
Recommended for TTC                      Recommended for TTC AA  
CRJ Students                                      Students

CPT-101 Intro to Computers	CPT-101 Intro to Computers
CRJ-120 Constitutional Law	Oral Communication (3 hours)
CRJ-130 Police Administration	Literature (3 hours)
CRJ-210 Juvenile and the Law	Humanities/Social Sci/Comm.
CRJ-220 Judicial Process	(9 hours)
CRJ-236 Criminal Evidence	
CRJ-242 Correctional Systems	

**Courses Taken at The Citadel: 55 hours**

<u>Course</u>	<u>Hours</u>
<b>Orientation Course</b>	<b>1</b>
(must be taken in first semester at The Citadel)	
EUGS-101 Orientation Seminar	

**Required courses if not taken at TTC - 6 hours**

CRMJ-201 Intro to Criminal Justice	3
CRMJ 202 Criminology	3

**Required Courses - 6 hours**

CRMJ-370 Police Systems	3
CRMJ-380 Corrections	3

**Upper Level Elective Courses in the Major 33 Credit Hours**  
(Must be at 300 level or higher)

33 hours must be taken from the courses listed below:  
Note: CRMJ-201 is a prerequisite for all criminal justice courses except CRMJ-202. Students may choose from the following list of upper level elective courses in criminal justice.

CRMJ-371 Critical Issues in Law Enforcement	3
CRMJ-373 Criminal Evidence	3
CRMJ-375 Criminal Justice Administration	3
CRMJ-381 Organized Crime	3
CRMJ-382 Drugs and Crime	3
CRMJ-383 Comparative Criminal Justice Systems	3
CRMJ-384 International Crime	3
CRMJ-385 Juvenile Delinquency	3
CRMJ-386 Research Methods in Criminal Justice	3
CRMJ-387 Criminal Investigation	3
CRMJ-388 White Collar Crime	3
CRMJ-390 Victimology	3
CRMJ-391 Criminalistics	3
CRMJ-392 Computer Crime	3
CRMJ-465 Special Topics in Criminal Justice	3

Three of the following courses can count as an upper level elective in the major:

Electives: (3 courses, 9 credit hours)	
PSCI-302 Urban Politics	3
PSCI-310 Domestic Terrorism	3
PSCI-342 International Terrorism	3
PSCI-361 Law and Legal Process	3
PSCI-392 Political Theory	3
PSCI-401 Public Policy Process	3
PSCI-461 Issues in Contemporary Constitutional Law	3
SOCJ-201, 202 and any 300-400 level course in sociology	

Credit for CRMJ-498 (Independent Study) and CRMJ-499 (Internships): Approval is required from the participating faculty member, the 2 + 2 program director, and the Associate Dean of Evening Undergraduate Studies. Non 2+2 students' transfer credit will be evaluated according to Citadel policy.

**Upper Level Elective Courses: 15 Credit Hours**  
Must be courses at the 300-400 level.

**Criminal Justice Course Descriptions**

**CRMJ-201—Introduction to Criminal Justice**

Three Credit Hours. Prerequisite for all criminal justice courses (CRMJ-370-499) except CRMJ-202 for non-departmental majors. An introduction to the American criminal justice system, including the history and philosophy of law enforcement, the nature of crime in the United States, an introduction to the substantive criminal law, the nature and theory of the criminal justice process from arrest to corrections, and the roles of the major actors in that process (police, prosecutors, defense lawyers, judges, and corrections personnel).

**CRMJ-202—Criminology**

Three Credit Hours  
A study of the theories that seek to explain criminal behavior.

**CRMJ-370—Police Systems & Practices**

Three Credit Hours  
An introduction to law enforcement in the United States, including a brief history of policing, contemporary trends in criminality, and current issues facing police administrators. Attention will also be given to the Fourth, Fifth, and Sixth Amendments to the U.S. Constitution and their implications for law enforcement.  
Prerequisite: CRMJ-201

**CRMJ-371—Criminal Law**

Three Credit Hours  
This course examines the origin and general principles of criminal law, principles of criminal liability, and elements of offenses.  
Prerequisite: CRMJ-201

**CRMJ-372—Critical Issues in Law Enforcement**

Three Credit Hours  
A critical analysis of contemporary issues in the law enforcement community, including the following: police stress, use of deadly force, police brutality, corruption, unionization, substance abuse by police officers, and other issues currently confronting law enforcement administrators and policymakers.  
Prerequisite: CRMJ-201

**CRMJ-373—Criminal Evidence**

Three Credit Hours  
An introduction to the 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.  
Prerequisite: CRMJ-201

**CRMJ-375—Criminal Justice Agency Administration**

Three Credit Hours. An introduction to criminal justice agency administration, including the following: the nature of criminal justice organizations, criminal justice personnel, group behavior in criminal justice organizations, and processes in criminal justice organizations.

Prerequisite: CRMJ-201

**CRMJ-380—Corrections**

Three Credit Hours

An introduction to corrections, correctional theory, and correction policy through the in-depth study of key areas in corrections, including correctional history, systems, policy, treatment programs, prison life, community-based corrections.

Prerequisite: CRMJ-201

**CRMJ-381—Organized Crime**

Three Credit Hours

An examination and analysis of organized crime, of controversies surrounding the phenomenon, and of efforts aimed at its control. Attention will be given to defining organized crime, to its development, and to various theories that seek to explain its existence. Other topics include the activities that constitute the business of organized crime, the relationship between organized crime and corruption of governmental officials, and the techniques used to control it.

Prerequisite: CRMJ-201

**CRMJ-382—Drugs and Crime**

Three Credit Hours

An examination of drug use as it relates to addiction, social problems, crime, enforcement, and treatment. Issues involving domestic and international drug supply, demand, trafficking, and interdiction are studied.

Prerequisite: CRMJ-201

**CRMJ-383—Comparative Criminal Justice Systems**

Three Credit Hours

An examination of the ideology, structure, and justice process of various criminal justice systems in the United States, Europe, Asia, Africa, the Middle East, and Latin America. The comparative study involves analysis of diverse social control, legal, police, court, correction, and juvenile systems from representative justice approaches around the world.

Prerequisite: CRMJ-201

**CRMJ 384—International Crime**

Three Credit Hours

A study of transnational crime, criminals, and criminal organizations in a global context including an examination of international and national organizations, laws, and justice practices responsible for controlling multi-national criminal activity.

Prerequisite: CRMJ-201

**CRMJ-385—Juvenile Delinquency**

Three Credit Hours

An introduction to delinquency, to the juvenile justice process from intake to disposition, to trends in the treatment of juvenile offenders, and to juvenile justice reform (decriminalization, diversion, deinstitutionalization, and due process).

Prerequisite: CRMJ-201

**CRMJ-386—Research Methods in Criminal Justice**

Three Credit Hours

An introduction to research and to statistical methods, data bases, and computer applications in relation to the various fields of criminal justice. Special attention will be given to the problems associated with collection and analysis of criminal justice data.

Prerequisite: CRMJ-201

**CRMJ-387—Criminal Investigation**

Three Credit Hours

An examination of the criminal investigation process that combines forensic applications with investigative procedures. Crime scene preservation, management, evidence collection, and process are included in the examination of the investigative process. Interrogation and interviewing techniques, as well as physical evidence used to investigate specific types of offenses, are studied.

Prerequisite: CRMJ-201

**CRMJ-388—White Collar Crime**

Three Credit Hours

A study of “white collar” crime as a specific type of deviance. The course explores aspects of organizational, corporate, occupational, and governmental criminality and its detection, investigation, prosecution, and punishment.

Prerequisite: CRMJ-201

**CRMJ-390—Victimology**

Three Credit Hours

The scientific study of the extent, nature, and causes of criminal victimization, its consequences for the persons involved and the reactions to such victimization by society, in particular the police and the criminal justice system. Additional areas of examination include history of victimology, legal recourse for crime, victims, and informal methods of addressing the needs of victims.

Prerequisite: CRMJ-201

**CRMJ-391—Criminalistics**

Three Credit Hours

The application of science to the investigation of crime. Designed to acquaint non-science majors with the philosophy and methodology of dealing with physical evidence in criminal investigation.

Prerequisite: CRMJ-201

**CRMJ-392—Computer Crime**

Three Credit Hours

An exploration of the current state of computer crime in the United States. The course traces the history of technological crime and identifies areas ripe for exploitation from technology savvy deviants. It also evaluates forensic practices and software in light of government legislation together with an analysis of emerging case law. The course also addresses guidelines for the development of computer forensic laboratories, the creation of computer crime task forces, and the search and seizure of electronic equipment.

Prerequisite: CRMJ-201

### **CRMJ-465—Special Topics in Criminal Justice**

Three Credit Hours

An advanced seminar designed to examine in-depth selected topics in criminal justice.

Prerequisite: CRMJ-201

### **CRMJ-498—Independent Study**

Three Credit Hours

Prerequisite: As determined by instructor

An independent research project resulting in a formal paper, this study must be approved by the department head in consultation with an appropriate member of the faculty who will supervise the project. Virtually any aspect of criminal justice may be investigated. Especially recommended for those considering graduate or professional study.

Prerequisite: CRMJ-201

### **CRMJ-499—Internship**

Three Credit Hours

Prerequisite: Permission of director of internships

Internships with government and other agencies are offered to combine academic training with professional experience.

Prerequisite: CRMJ-201

## **Political Science Course Descriptions**

### **PSCI-302—Urban Politics**

Three Credit Hours

A study of mass participation in urban political affairs, political parties on local level, the municipal reform movement, and the alternative approaches to the study of local political systems. Emphasis placed on the problems of local government in metropolitan areas.

### **PSCI-310—Domestic Terrorism**

Three Credit Hours

A survey of the domestic terrorism landscape in the United States by examining groups involving local nationals that use or attempt to use extreme violence against purely domestic targets. The course explores how nationalistic, religio-political, ideological, and single-issue terrorist groups attempt to influence or coerce others into action they would not otherwise take. The course also explores law-enforcement measures aimed at countering the threat of domestic terrorism.

### **PSCI-342—International Terrorism**

Three Credit Hours

A study of international and transnational political violence, with some attention to the phenomenon of “state terrorism” (international repression) and its potential impact on the conduct of American foreign policy. 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.

### **PSCI-361—Law and Legal Process**

Three Credit Hours

This course serves as a general introduction to law, lawyers, judges, and the civil legal process. Through lectures, assigned reading, and class seminars, the course will broadly survey the

American legal process, including the nature of law, judicial organization and the instruments of judicial power, civil proceedings and civil law, the work and training of lawyers, the recruitment of judges, and the nature of judicial decision-making. (Note: The criminal justice system is surveyed in CRMJ 201, Introduction to Criminal Justice.)

### **PSCI-392—Political Theory**

Three Credit Hours

Major theoretical writing from the ancient Greeks to the present day; emphasis on a comparison of ideas and on the relationships between theories and contemporary problems.

### **PSCI-401—Political Issues and Public Policy**

Three Credit Hours

An introduction to political analysis through consideration of important contemporary American political issues as they relate to public policy; attention given to specific issues as well as the policy process (formulation, implementation, and evaluation of policy).

### **PSCI-461—Issues in Contemporary Constitutional Law**

Three Credit Hours.

A study of selected cases and issues in U.S. constitutional law relating to contemporary controversies in American law and politics. The specific issues and cases studied may vary from semester to semester.

## **Sociology Course Descriptions**

### **SOCI-201—Introduction to Sociology**

Three Credit Hours

The scientific study of principles and comparisons in society and culture as these relate to population and communities, behavior systems, group collectivity and structure, social change, and institutions.

### **SOCI-202—Social Problems**

Three Credit Hours

The study of the social construction of social problems as well as their impact on society. Also included the analysis of deviant behavior and those factors affecting the disorganization of small groups, complex organizations, and societies.

### **SOCI-301—Cults**

Three Credit Hours

An examination and analysis of alternative religious ideologies and groups. Attention will be given to defining and explaining cults, and a historical analysis of the phenomenon will be undertaken. A sociological examination of their impact on social norms and ideologies will be discussed; government reactions to cults and cult activities will also be addressed.

### **SOCI-304—Minority Group Relations**

Three Credit Hours

An examination of the substantive issues in the study of majority-minority group relations and social processes, and the cultural orientations which are associated with these issues.

**SOCI-433—Special Topics in Sociology**

Three Credit Hours

Selected special topics or problems in the general area of sociology and social problems; offered periodically as the special interests of faculty and students permit.

**SOCI-498—Independent Study**

Three Credit Hours

An independent study project resulting in a formal paper; this study must be approved by the department head in consultation with an appropriate member of the Sociology faculty who will supervise the project. Especially recommended for those considering graduate or professional study.

## Bachelor of Science in Business Administration

School of Business, 843-953-5056  
Ms. Duvall Herlocker, 843-953-6450  
duvall.herlocker@citadel.edu  
Dr. Lester Pittman, 843-574-6420  
lester.pittman@tridenttech.edu

### Mission:

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

### 2 + 2 Program:

The Citadel's Bachelor of Science in Business Administration is a "2 +2" program provided in cooperation with Trident Technical College. Students take freshman and sophomore level courses at Trident (or an equivalent college), and they come to The Citadel for their junior and senior level courses.

Students who wish to earn a B.S. in Business Administration through The Citadel can begin their coursework at TTC and earn an Associate in Arts degree along the way.

### The Steps:

- Apply to TTC ([www.tridenttech.edu](http://www.tridenttech.edu)). List AA as your major and Citadel-Business as your career path.
- Submit SAT/ACT scores OR take TTC's placement test.
- Visit TTC's Orientation Center to be assigned to the right TTC advisor
- Submit official transcripts of all colleges attended
- Meet with your advisor and fill out a 2+2 Enrollment Form
- Complete specified courses at TTC with a minimum cumulative GPA of 2.0
- Apply to The Citadel
- Sign transfer request form

### Admission Requirements:

To be admitted into The Citadel's portion of the program, students must:

1. Complete the designated courses with Trident Technical College or equivalent with a grade of C or higher. (Students may begin taking Citadel courses at any time as long as prerequisites have been met and official TTC and all other college transcripts have been sent.)
2. Complete and return an undergraduate application to the The Citadel Graduate College (CGC), Bond Hall Room 101.
3. Maintain a minimum 2.0 GPA.

Persons interested in the Master of Business Administration program, which is offered only through evening classes, should consult the Graduate portion of this catalog for further information.

### Program of Study

The 2+2 program in Business Administration consists of 62 hours of general education and lower division courses at TTC, 40 credit hours of upper division courses at The Citadel, and 12 credit hours of elective courses taken at TTC, The Citadel or another institution. 6 hours of upper level general electives are also required and can be taken at The Citadel or another institution.

If you have credits from another institution, they will be evaluated according to The Citadel's policy.

### Courses Taken at Trident Technical College (or equivalent)

#### Writing/English Composition (6 hours)

ENG 101 English Composition I - 3  
ENG 102 English Composition II - 3

#### Humanities/Foreign Language (6 hours)

MUS 105 Music Appreciation - 3  
ART 101 Art History and Appreciation - 3  
ART 107 History of Early Western Art - 3  
ART 108 History of Western Art - 3  
PHI 101 Introduction to Philosophy - 3  
PHI 110 Ethics - 3  
REL 101 Introduction to Religion - 3  
FRE/SPA/GER 101 and/or 102 - 6  
(Need not be in the same language)

#### Mathematics (6 hours)

MAT 109 College Algebra w/ Modeling - 3  
MAT 130 Elementary Calculus - 3

#### History (6 hours)

HIS 101 History of Western Civ. I. - 3  
HIS 102 History of Western Civ. II - 3  
HIS 104 History of World Civ. I - 3  
HIS 105 History of World Civ. II - 3  
HIS 201 American History I - 3  
HIS 202 American History II - 3

#### Science (8 hours)

Courses must have lab and need not be sequential  
BIO 101 Biological Science I - 4  
BIO 102 Biological Science II - 4  
CHM 110 College Chemistry I - 4  
CHM 111 College Chemistry II - 4  
PHY 201 Physics I - 4  
PHY 202 Physics II - 4  
AST 101 Solar System Astronomy - 4  
AST 102 Stellar Astronomy - 4

### Social Science (6 hours)

ECO 210 Macroeconomics - 3

ECO 211 Microeconomics - 3

### Business Major Courses (12 hours)

MAT 120 Probability & Statistics - 3

ACC 101 Accounting Principles I - 3

ACC 102 Accounting Principles II - 3

CPT 101 Introduction to Computers - 3

### Lower Division Electives (15 hours)

Any courses apply

*Recommended for AA students:*

Oral Communication - 3

(SPC 205, 209, 210, THE 101, or ENG 260)

Literature - 3

(ENG 201, 202, 203, 205, 206, 208, 209, 236)

Other - 6

(Select from Humanities/Social Sciences/Communication)

**Total Credit Hours at TTC: 62**

### Courses Taken at The Citadel

EUGS 101 Citadel Orientation - 1

Must be taken in first semester enrolled at The Citadel.

### Business Major Requirements (27 Hours)

BADM 216 Communication in Business - 3

BADM 305 Legal & Ethical Env. of Business - 3

BADM 309 Marketing Principles - 3

BADM 317 Computer Applications in Bus. - 3

BADM 321 Business Finance - 3

BADM 338 Management & Org. Behavior - 3

BADM 371 Leadership in Organizations - 3

BADM 410 Production & Operations Mgt - 3

BADM 422 Strategic Management - 3

### Business Electives (12 Hours)

6 hours must be at 300 level or higher.

**Total Credit Hours at The Citadel: 40**

### Courses Taken at TTC, The Citadel, or Another Institution - 18 hours

Electives (12 hours)

Must be 300-400 level courses - 6 hours

## Courses Descriptions:

### BADM-216—Communications in Business

Three Credit Hours

Required of business administration sophomores.

A study of written and oral communication in organizations.

Emphasis is given to communication theory including communication flows and barriers, as well as the psychology of communicating good, neutral, negative, and persuasive messages. The course also covers career planning, delivering professional presentations, electronic communications and writing formal reports.

*Prerequisites:* ENG-101 & 102

### BADM-305—Legal and Ethical Environment of Business

Three Credit Hours

Required of all business administration juniors.

An introduction to the legal system, with special emphasis on its relation to business. Students will contend with federal and state regulations as well as the common law to arrive at an understanding of the legality, ethics, and social responsibility of business decisions. Topics include an introduction to the judicial system, torts and product liability, administrative law and consumer protection, agency and partnership, contracts, the Constitution, criminal law, ethics, and fiduciary trust.

### BADM-309—Marketing Principles

Three Credit Hours

Required of all business administration juniors.

Introduction to basic concepts and terminology in marketing: the process of developing marketing strategy, the role of marketing activities within the firm, external influences that affect the development of marketing strategy, and basic analytical tools appropriate to marketing decision-making. International and ethical issues in marketing are examined.

*Prerequisite:* Principles of Microeconomics (BADM-202).

### BADM-317—Computer Applications in Business

Three Credit Hours

Required of business administration juniors.

The application of computer software to assist in analyzing common business decisions, with an emphasis on advanced techniques in spreadsheet and database development and design. Includes a major business project utilizing presentation software and the Internet.

### BADM-320—International Business

Three Credit Hours

This course focuses on decisions in international business operations for small and large firms. Of particular interest are international business climate/culture, foreign exchange rates, international trade, overseas direct investment, and operations management. Students will incorporate case studies dealing with aspects of international business.

### BADM-321—Business Finance

Three Credit Hours

Required of all business administration juniors.

An introductory course combining both a description of the structure of business financing and a study of financial principles and practices, with special emphasis on their relation to managerial



planning and control.

*Prerequisite:* Introduction to Managerial Accounting (BADM-211)

### **BADM-326—Principles of Real Estate**

Three Credit Hours

This course provides a personal and professional perspective of the legal, financial, and ethical rights and obligations of all parties in a real estate transaction. Topics include organizing, functioning, financing, marketing, brokering, appraising, and managing of real estate transactions.

### **BADM-338—Management and Organizational Behavior**

Three Credit Hours

Required of business administration juniors.

A study of the fundamental concepts of management and organizational behavior. Emphasis is placed on the study of human behavior, attitudes, and performance in organizations, and on the development of positive interpersonal relations. A major focus is on the managerial role of leader and decision-maker necessary for effective planning, organizing, influencing, and control of the organization. The dynamics and links among individuals, groups, and the national and international environment are analyzed to highlight the determinants of organizational effectiveness.

### **BADM-371—Leadership in Organizations**

Three Credit Hours

Using a case approach as well as a significant experiential component, this course involves the application of leadership theory and practice covered in this class and in other classes in the interdisciplinary minor in Leadership Studies. The course draws from cases in business and other organizations to focus the student's learning in both individual and team projects. Issues of motivation, persuasion, ethics, power, diversity, teams, etc. will all be explored. Guest speakers/leaders will also be an important component of the course.

*Prerequisites:* Psychology of Leadership (PSYC-371) or Management and Organizational Behavior (BADM-338).

### **BADM-404—Investments**

Three Credit Hours

A survey course that introduces different types of securities, markets, transaction costs, security regulations, and taxes. The basic techniques for analyzing the potential returns and risks of individual securities and for combining them efficiently into portfolios are also studied.

*Prerequisite:* Business Finance (BADM-321).

### **BADM-405—Marketing Management**

Three Credit Hours

A study of marketing planning and decision-making from the point of view of the marketing manager in a changing economic, social, and legal environment. Basic concepts and methods of analysis used in formulating product, distribution, promotion, and pricing strategy are studied.

*Prerequisite:* Marketing Management (BADM-309).

### **BADM-407—Money and Banking**

Three Credit Hours

The nature and functions of money, the various monetary standards, the development of our monetary system, the factors affecting the value of money, methods and objectives of money

and credit control, international exchange, and analysis of recent developments in money and credit.

*Prerequisite:* Principles of Macroeconomics (BADM-201).

### **BADM-409—Human Resource Management**

Three Credit Hours

A contemporary course in the management of personnel as a resource concentrating on the historical, legal, social, economic, and ethical framework of labor relations with a focus on forecasting, planning, staffing, compensating, developing a career, labor relations, performance management, and control and evaluation of human resources.

### **BADM-410—Operations Management**

Three Credit Hours

Required of all business administration seniors.

Operations management focuses on the systematic direction of the processes involved in the sourcing, production, and delivery of products and services. This course addresses managerial issues such as facility location and layout, service design, demand forecasting, production scheduling, project management, quality management (for example, lean, JIT, Six Sigma, TQM, etc.), inventory management, supply chain management, maintenance and reliability, and capacity management. Included are applications of decision models, statistical methods, or optimization techniques such as linear programming, queuing theory, simulation, or others.

*Prerequisites:* Principles of Microeconomics (BADM-202), Business Statistics (BADM-205), Introduction to Managerial Accounting (BADM-212), and Management and Organizational Behavior (BADM-338).

### **BADM-413—International Marketing**

Three Credit Hours

Introduction to global problems, cultural and ethical issues, and decision areas facing the marketing manager. Primary emphasis rests on the value of cross-cultural understanding and the need for careful adaptation of marketing efforts.

*Prerequisite:* Marketing Principles (BADM-309).

### **BADM-414—Consumer Behavior**

Three Credit Hours

The study of behavioral science theories and related marketing models useful to managers in understanding consumers in the domestic and global marketplace.

*Prerequisite:* Marketing Principles (BADM-309).

### **BADM-417—Management Information Systems**

Three Credit Hours

Information systems (IS) support the overall strategy of an organization in many ways. This course reviews the issues associated with managing and improving the IS function within an organization, including using IS to support decision making, manage the firm's assets, and develop and support customers. Additional topics include the critical role of IS in an organization's strategic plan, security issues, and the harnessing of technological advances for organizational growth.

### **BADM-420—Management of Change**

Three Credit Hours

This course uses knowledge and skills from the social sciences to develop strategies for achieving effective change within organizations. Implementation of these strategies to achieve more effective organizations is the core of this course. Topics include team building, process consultation, confrontation and the management of conflict, and technostructural change.

*Prerequisite:* Senior standing in business administration

the faculty member who directs the study. The project should culminate in a formal student research paper.

*Prerequisite:* Senior Standing

### **BADM-422—Strategic Management**

Three Credit Hours

Required of all business administration seniors.

A capstone course designed to give the student practice in integrating the numerous theory courses in all phases of business management. The student develops problem-solving and decision-making skills by assuming the role of top management in a simulated company and through the study of actual business cases.

*Prerequisites:* Principles of Macroeconomics (BADM-201), Principles Microeconomics (BADM-202), Introduction to Financial Accounting (BADM-211), Introduction to Managerial Accounting (BADM-212), Marketing Principles (BADM-309), Business Finance (BADM-321), Management and Organizational Behavior (BADM-338).

### **BADM-425—Small Business Management/Entrepreneurship**

Three Credit Hours

This course covers the environment of small business, factors of success or failure, small business management tools, and sources of financing. Student teams prepare business plans for the start-up of a business. In some instances, the teams will work with local entrepreneurs in developing business plans. The course is supported by a multimedia business planning system.

*Prerequisite:* Senior standing in business administration.

### **BADM-430–435—Seminar in Business Administration**

Three Credit Hours

*Prerequisite:* approval of course instructor and department head.

These courses are designed to provide students of exceptional ability and background with the opportunity to explore a variety of advanced, business-oriented, analytical techniques. Specified topics covered within these courses will be offered at the discretion of the instructor and under the supervision of the department head.

### **BADM-450—Internship**

Three Credit Hours

This course gives senior students real-world work experience to complement the classroom education they have already received. Interns will learn about the variety of issues faced by today's firms and their managers, the kinds of information firms collect and use, and the development of solutions for business problems. Interns will spend ten to twelve hours each week working alongside a senior-level manager in a Charleston-area business.

*Prerequisite:* Senior or Junior Standing

### **BADM-490—Independent Study**

Three Credit Hours

Approvals for enrollment during pre registration from sponsoring professor and department head are required.

This course may be taken by seniors desiring to engage in a scholarly research project of mutual interest to the student and

## Bachelor of Science in Civil Engineering

### Department of Civil and Environmental Engineering

Dr. Kenneth Brannan, Department Head  
843.953.5083, ken.brannan@citadel.edu

#### Department's Mission Statement:

The mission of the Department of Civil and Environmental Engineering (CEE) is to provide a nationally recognized student-centered learning environment for the development of principled leaders in the civil and environmental engineering community through a broad-based, rigorous curriculum, emphasizing theoretical and practical engineering concepts, strong professional values, and a disciplined work ethic.

The Department of Civil and Environmental Engineering recognizes the civil engineer as a people-serving professional who manages resources as well as technology. The civil engineer plans, designs, constructs, and maintains facilities essential to modern life in both the public and private sectors. Accordingly, the department strives to develop the skills of its engineering students in the management of resources—time, materials, money, and people. Consistent with the high aims of the civil engineering profession, the department seeks to ensure its academic program is underpinned by a broad base of ethical knowledge and behavior as well as modern leading-edge technology. The department accomplishes its mission by connecting students, faculty, and staff in a unique academic environment, achieving the intended development of the student through the enriched personal, professional, and educational growth of each individual.

#### Admission Requirements:

1. Complete the designated courses with Trident Technical College or equivalent with a grade of C or higher.
2. Complete and return an undergraduate application to The Citadel Graduate College (CGC), Bond Hall Room 101.
3. Maintain a minimum 2.0 GPA.
4. Submit all official transcripts directly from the source to the The Citadel Graduate College (CGC) office.

#### Program Educational Objectives:

The Civil and Environmental Engineering program educational objectives are designated in the following three areas:

##### Design:

Graduating students who are successful in engineering based on a course of study focused on design, including a solid theoretical and practical foundation that leads to successful employment in the private and public sectors.

##### Sustainable Success:

Graduating students who have sustainable career success and participate in leadership roles through demonstration of lifelong

learning, effective communication, contributions on multidisciplinary teams, and broad based perspective of engineering and societal needs.

##### Broad Based Education:

Graduating students who have a broad educational background that leads to good citizenship through leadership, management, decision making and problem solving abilities.

#### Departmental Core Values:

The Department of Civil and Environmental Engineering has adopted the following core values:

Students are our Focus: We believe the education, development, empowerment, and welfare of our students are the primary focus of our efforts.

Civil Engineers as Principled Leaders: We believe the engineering profession requires the highest professional and ethical standards, which we seek to model, teach and prepare our students to embrace.

Collaborative Teaching and Learning Environment: We believe a collaborative collegial environment among our faculty, staff and students is critical in sustaining advancement in educational excellence.

Growth through Assessment: We believe data-driven inquiry and improvement will lead us to sustained advancement in educational excellence.

#### Program Requirements: Two-Plus-Two Evening Mode

The Citadel through the CGC offers an undergraduate Bachelor of Science degree in Civil Engineering. This program is offered in cooperation with Trident Technical College where the student completes the first two years of study. The junior and senior years of study are completed at The Citadel by attending evening classes.

#### Program Outcomes:

At the time of graduation from the civil engineering program a student should have achieved an acceptable level of skills and knowledge in the following areas:

- |  |   |
|--|---|
| 1. Mathematics                                 | 10. Communication                         |
| 2. Natural Sciences                            | 11a. Public Policy/Public Administration  |
| 3. Mechanics                                   |   |
| 4. Experiments                                 | 11b. Business                             |
| 5. Problem Solving                             | 12. Leadership                            |
| 6. Design in four Areas*                       | 13. Multi-disciplinary Team Work          |
| 7. Contemporary Issues                         |   |
| 8. Project Management                          | 14. Lifelong Learning                     |
| 9. Breadth in Civil Engineering in four Areas* | 15. Professional & Ethical Responsibility |

\*Environmental, Structural, Transportation, Land Development

## Program of Study:

The Civil and Environmental Engineering Department's four-year program begins with courses which provide a foundation of knowledge and skill in the basic arts and sciences. Limited specialization in engineering starts during the sophomore year. In the junior and senior years, the time is devoted essentially to basic professional subjects. Throughout the four years, the program emphasizes the development of habits of orderly study, investigation, sound reasoning, problem-solving, and design, rather than the mere acquisition of factual information. It is stressed that an engineer is a professional, thoroughly grounded in engineering science and technology, but also aware of the social, economic, ethical, and ecological implications of professional activities. The civil engineering curriculum is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). Each year the curriculum is augmented by off-campus educators and engineers who lecture and moderate seminars in engineering specialties. Students' sources of knowledge are broadened by participation in these seminars and the student chapters of the American Society of Civil Engineers, Tau Beta Pi (honorary engineering society), the Society of American Military Engineers, and the Society of Women Engineers (SWE).

### CIVIL & ENVIRONMENTAL ENGINEERING MAJOR

HOURS REQUIRED FOR GRADUATION: 133

#### CIVIL ENGINEERING:

##### TTC First Year

ENG-101/102  
MAT-140/141/240  
CHM-110/111  
PHY-221/PSY-201  
EGR -270/275/282

##### TTC Second Year

MAT-242  
PHY-222  
HIS-101/102  
ENG-205/2XX  
EGR-260/285/295/286/296

##### Citadel Third Year

CIVL-301/302  
CIVL-304/327  
CIVL-305/309  
CIVL-307/320  
CIVL-321/322  
CIVL-314/317  
ELEC-308  
CIVL-330

##### Citadel Fourth Year

CIVL-404/402  
CIVL-408/410  
CIVL-409/406  
CIVL-418/419  
Technical Elective\*\*\*\*  
Hum/Soc Sci Elective\*\*\*  
CIVL 42X

\*\*\* To be selected from an approved list of courses in the humanities or social sciences

\*\*\*\*Elective to be an approved Engineering or Science course

All freshman and sophomore level engineering and science courses must be successfully completed prior to enrolling in senior level classes

LeTellier Hall was designed for the needs of civil and environmental engineering education and contains, in addition to laboratories, six multimedia classrooms and one multimedia assembly room that contains additional audio-visual aids. There are three computer facilities located in LeTellier Hall. To help ensure the best use of these facilities, priority access goes to students using software or capabilities specific to the LeTellier sites. LeTellier 203 is a general purpose lab maintained by ITS. LeTellier 206 and 308 are on the CEE departmental network and require a departmental user account.

#### The Main Computer Lab - LeTellier 203

LeTellier 203 is the primary teaching and student-use computer facility in the Civil Engineering Department. The twenty-three student stations and one projection-capable instructor station and laser printer located in this lab are connected to the campus wide network, CITnet, and provide direct Internet access via Ethernet. The campus-wide network includes: an ALPHA cluster which handles student email and information systems and the library information systems; a network for printer access; and the UNIX systems administered by the Department of Mathematics and Computer Science. The software in the labs is Windows based. All machines in the lab have graphics-capable www browsers. The department's standard general purpose software includes: Microsoft Office, Mathcad, and ArcGIS. In addition, there are a number of course specific software packages. Faculty also post: classroom presentations, handouts, programming examples, class notes, and solutions to tests, and homework on the CEE Department's Web server. These postings are in a mixture of formats including PDF files, Mathcad documents, spreadsheet files, executable programs, and multimedia presentation files that students may review as needed before and after class.

#### The Special Applications Lab - LeTellier 206

LeTellier 206 is the home of the Civil Engineering Department Special Applications Lab. The fifteen student computers serve primarily as AutoCad, GIS (ArcView) and structural design workstations. Other uses involve construction management, Global Positioning System (GPS) data analysis/adjustment, and traffic engineering studies. Occasionally, small sections of courses may be scheduled in the lab utilizing the instructors-only workstation and projection system. Each of these computers has a CDRW drive to accommodate large student files. This laboratory is equipped with a network A-B size laser printer and E-size plotter. There is also a 8-1/2x14 fixed-bed color scanner in this lab for student use.

#### The Graphics Lab - LeTellier 308

LeTellier 308 is the home of the Civil Engineering Department Graphics Instruction Lab. The instructor's station is equipped with a projection system for both the computer and document camera. The twenty student computers serve primarily as AutoCAD and ArcGIS workstations. This laboratory is equipped with a networked A/B size laser printer.

Materials Testing Laboratory: Major items of equipment include a 400,000-pound universal hydraulic testing machine with a clearance of 8 feet for column testing and with a 36-inch-wide working platform; a 250,000 pound and an additional 300,000 pound concrete cylinder testing machine; a 60,000-pound hydraulic universal testing machine; a 10,000-inch-pound torsion machine; and equipment for making tension, compression,

shearing, and most other accepted and significant tests on metals, concrete, wood, and other structural materials. A transmission Polariscopes and related equipment are available to investigate in a wide variety of two dimensional photo-elastic models.

**Construction Materials Laboratory: Bituminous Materials Testing.** This laboratory contains equipment for making the significant quality control and identification tests on asphalt cements, cutback asphalts, and asphalt emulsions. Equipment for the design, mixing, compaction by both hammer and gyratory means, and testing of asphalt concrete paving mixtures by the Marshall and other methods is included.

**Concrete Materials Testing:** A curing room, mixing equipment, air entraining measuring apparatus, scales, and other minor equipment are provided in this laboratory. Testing is accomplished using the Materials Laboratory testing equipment.

**Geotechnical Laboratories:** The two soils laboratories are equipped with consolidometers, triaxial and direct shear machines, unconfined compression machines, permeameters, Atterberg limit equipment, Proctor and modified AASHTO compaction apparatus, standard sieves, soil hydrometers, C.B.R. apparatus, and other equipment needed for tests and experiments with soils.

**Fluid Mechanics Laboratory:** Equipment is provided for a wide variety of experiments and tests involving the flow of water over weirs or through pipes, meters, orifices, or a Parshall flume. Other major items of equipment include a head loss and flow measurement fluid circuit apparatus, a Reynolds number device, two (2) hydraulic demonstration units permitting experiments involving many phenomena of open channel flow, and a centrifugal pump equipped to measure input and output of energy. In addition, a parallel-series pumping unit is available for students to study parallel-series pumping under a variety of system conditions.

**Environmental Engineering Laboratory:** Equipment is provided for water analysis determination (primarily according to "Standard Methods") pH, alkalinity, turbidity, conductivity, D.O., and color. Bacteriological examinations may also be made for wastewater analysis, biochemical oxygen demand, solids content, and coliform testing. The equipment includes incubators, a muffle furnace, pH meters, dissolved oxygen probes, electrophotometric devices, an autoclave, a constant temperature refrigerator, spectrophotometer, a drying oven, a water still, a type I generator, a fume hood, a microscope, and essential minor tools and equipment.

**Other engineering equipment:** Adequate equipment is available for the courses in engineering graphics, surveying, geospatial representation, as well as for the junior and senior courses. This equipment includes levels, theodolites, level rods, tapes, six total stations, data collectors, and nine Geographic Positioning System (GPS) receivers.

**Fundamentals in Engineering Examination:** Each graduating student is required to sit the Fundamentals in Engineering (FE) Examination and provide documentation to the department head.

**Degree:** The degree of Bachelor of Science in Civil Engineering (B.S. in C.E.) is awarded to those who successfully complete the program of studies outlined in the course offerings section of this catalog.

Two humanities or social science electives, one technical elective, and one civil engineering design elective are required. These are selected from a list of approved electives maintained by the Civil and Environmental Engineering Department. In completing the two humanities or social science electives, the student will take one from the core curriculum. The other shall be a departmentally approved course. The civil and environmental engineering design elective allows the students to specialize in a technical area of civil engineering by completing a design course at the senior level that integrates principles and practices of earlier courses into the design of the engineering system. Students who are on academic probation will not be permitted to enroll in upper level courses offered by the civil and environmental engineering department (i.e., junior and senior level classes).

**All scheduled freshman and sophomore level engineering, science, and mathematics courses must be completed before a student will be permitted to enroll in senior level courses offered by the Civil and Environmental Engineering Department, excepting CIVL-418. Students are required to be advised for each semester of enrollment at The Citadel.**

## Course Descriptions:

### **CIVL-103—Introduction to Civil Engineering**

One Credit Hour

Required of all Civil and Environmental Engineering freshmen

The engineering design process is demonstrated through use of practical problem-solving methods for public infrastructure and built environment projects. Course subjects include civil engineering career paths, ethical canons of the engineering profession, and requirements for professional licensure. Course assignments, conducted within a collaborative learning environment, focus on creative engineering solutions through technical analysis, teamwork, communication skills and professionalism. As a foundation for sustained success in civil engineering, additional course topics include: lifelong learning, time management, community and professional service, and career development.

Laboratory: Two hours.

### **CIVL-101—Engineering Drawing**

Two Credit Hours

Required of all Civil and Environmental Engineering freshmen.

Use and care of drawing instruments; proper weights and types of lines for clear-cut and complete graphical representation; auxiliary and sectional views; pictorial representation with emphasis on isometric drawing, dimensioning, true lengths, and shapes; problems on points, lines, and planes; development of a reasonable skill in lettering. A substantial portion of the course is taught using CAD software.

Laboratory: Four hours

### **CIVL-202—Statics**

Three Credit Hours

Required of all Civil and Environmental Engineering sophomores.

Scalar and vector solutions of problems in statics; resultants, reactions, and equilibrium of forces; analysis of simple trusses, friction; centroids and centers of gravity; and moments of inertia.

Lecture: Three hours.

*Corequisites:* Analytic Geometry and Calculus I (MATH-131) and Physics with Calculus I and Lab (PHYS-221/271)

**CIVL-205—Surveying**

Three Credit Hours

Required of all Civil and Environmental Engineering sophomores. Linear measurements, leveling, compass and transit/theodolite, total stations theory of errors, latitudes and departures, areas, stadia, coordinate geometry, construction field control, legal aspects of land surveying, and public land surveys.

Lecture: Three hours.

*Corequisites:* Engineering Drawing (CIVL-101) or Introduction to Civil Engineering (CIVL-103), and Surveying Laboratory (CIVL-235).

**CIVL-208—Geospatial Representation**

Three Credit Hours

Required of all Civil and Environmental Engineering sophomores. A course in geospatial representation that includes topographic mapping, advanced adjustments using least squares procedures, map projections, state plan coordinate systems, astronomic control for mapping, Geographic Positioning Systems (GPS), Geographic Information Systems (GIS), and remote sensing.

Lecture: Three hours.

*Prerequisites:* Surveying (CIVL-205), Surveying Laboratory (CIVL-235), and Analytic Geometry and Calculus I (MATH-131) or Honors Mathematics I (HONR-131).

**CIVL-210—Computer Application for Civil and Environmental Engineering**

Three Credit Hours

Required of all Civil and Environmental Engineering sophomores. Instruction in computer applications to problems chosen from civil engineering fields. Development of computer-based methods for analyzing civil engineering systems. The class will address a range of related topics including algorithm development and implementation, professional and ethical aspects of computer applications, development of self-directed learning skills appropriate for civil engineering.

Lecture: Three hours.

**CIVL-235—Surveying Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering sophomores. Application of principles obtained in CIVL-205 through actual field work. Horizontal control activities include distance measurements by tape and EDM, angular measurements by theodolite and total station; traversing; traverse closure computations; balancing computations; and preparation of boundary plat and detailed survey. Computer applications and computer drafting are utilized.

Laboratory: Two hours.

*Corequisite:* Surveying (CIVL-205).

**CIVL-239—Geomatics Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering sophomores. Preparation of topographic map, Geographic Positioning Systems mapping controls, Geographic Information System applications, and understanding the geometry and nomenclature of horizontal and vertical curves.

Laboratory: Two hours.

*Prerequisite:* Surveying (CIVL-205) and Surveying Laboratory (CIVL-235)

*Corequisite:* Geospatial Representation (CIVL-208), and Engineering Drawing (CIVL-101).

**CIVL-301—Dynamics**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. Kinematics and Kinetics of particles or rigid bodies in plane motion with emphasis on the special cases of translation and rotation. The techniques of vector mathematics are employed.

Lecture: Three hours.

*Prerequisites:* Statics (CIVL-202) with a grade of “C” or better.

**CIVL-302—Highway Engineering**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. Highway alignment, right-of-way and easements; earthwork and grading; road user benefits, traffic operations and capacity; design of intersections and interchanges; construction surveys; drainage design; highway materials, design of asphalt mixtures; pavement thickness design; and construction management, contracts, estimates and specifications. Preparation of plans and design documentation for a highway project including; horizontal alignment, vertical alignment, roadway cross-sections, storm water drainage, earthwork and mass diagram calculations, and construction materials.

Lecture: Three hours.

*Prerequisites:* Transportation Engineering (CIVL-305); corequisite: Asphalt and Concrete Laboratory (CIVL-327).

**CIVL-304—Mechanics of Materials**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. Elastic properties of structural materials; internal stresses and strains; principal stresses and strains including Mohr’s Circle; axial; torsion; flexure; shear; riveted and bolted joints; combined stresses; shear and moment diagrams; beam deflections. Supplemented by CIVL 307.

Lecture: Three hours.

*Prerequisite:* Statics (CIVL-202) with a grade of “C” or better.

**CIVL-305—Transportation Engineering**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. A study of technical, multimodal, and organizational interrelationships of United States transportation mobility systems focusing on policy, planning, capacity, operation, and design of land transportation, airport and seaport facilities. Topics include highway design, roadway safety, traffic engineering, travel forecasting, railroad alignment, public mass transit, airport layout, and harbor/ports.

Lecture: Three hours.

*Prerequisites:* Introduction to Civil Engineering (CIVL-103), Engineering Drawing (CIVL-101), Geospatial Representation (CIVL-208), Geomatics Laboratory (CIVL-239).

**CIVL-307—Materials Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering juniors. Laboratory supplement to CIVL-304. Introduction to the use of testing machines and equipment; strength and deformation measurements of ferrous and nonferrous metals, concrete, and

wood; properties of materials as determined by results of tests in compression, tension, bending, torsion; behavior of columns; use of electric resistance strain gages; use of ASTM specifications and test procedures.

Taken concurrently with or subsequent to CIVL-304.

Laboratory: Two hours.

*Prerequisite:* English Composition (ENGL-102); prerequisites or corequisites: Computer Application for Civil and Environmental Engineering (CIVL-210), Mechanics of Material (CIVL-304).

### **CIVL-309—Structural Analysis**

Four Credit Hours

Required of all Civil and Environmental Engineering juniors. Structural analysis of determinate and indeterminate beams and frames using classical, approximate, and computer-based methods.

Lecture: Four hours.

*Prerequisites:* Mechanics of Materials (CIVL-304) with a grade of “C” or better and Analytic Geometry and Calculus II (MATH-132).

### **CIVL-310—Statics and Mechanics of Materials for Non-Civil Engineers**

Three Credit Hours

Vector solutions of problems in statics, resultants, reactions and equilibrium of forces. In addition, the brief study of mechanics of materials including stress and strain relationships and various types of loading on structural members.

Lecture: Three hours.

*Prerequisites:* Analytic Geometry and Calculus II (MATH-132) and Physics with Calculus Lab (PHYS-221/271).

### **CIVL-314—Engineering Economy**

Two Credit Hours

Required of all Civil and Environmental Engineering juniors. Topics include the time value of money, equivalence, simple and compound interest, nominal and effective interest rates, present worth and capitalized cost evaluation, equivalent uniform annual worth evaluation, rate of return evaluation, benefit/cost ratio evaluation, depreciation, corporate and individual income tax, after-tax economic analysis, and engineering ethics as applied by practicing engineers.

Lecture: Two hours.

### **CIVL-317—Professional Sustainability**

One Credit Hour

Required of all Civil and Environmental Engineering juniors. The ethical canons of the engineering profession require civil engineering graduates be well-rounded effective leaders in planning, design, and construction of public infrastructure and the built-environment required to establish safe, healthy, equitable and vibrant communities. Course topics focus on preparing students to serve with distinction as technical leaders in addressing the needs of society and include: teamwork, public administration, communication, public policy, ethics, life long learning, attitudes, and leadership.

Lecture: one hour

*Prerequisite:* Junior standing in Civil and Environmental Engineering

### **CIVL-320—Fluid Mechanics**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. An

introduction to fluid characteristics, properties, and the fundamentals of fluid statics, fluid dynamics, fluid flow, and fluid measurements. Hydraulic principles including pressurized pipe flow, and open channels are also covered. Classroom assignments include design problems and problem solving using computers.

Lecture: Three hours.

*Prerequisite:* Statics (CIVL-202) with a grade of “C” or better; *Prerequisites or Corequisites:* Either Analytic Geometry & Calculus (MATH-231) or Applied Engineering Mathematics (MATH-234)

### **CIVL-321—Hydrology and Hydraulics**

Three Credit Hours

Required of all Civil and Environmental Engineering juniors. This course focuses on presentation and application of fundamental hydraulic and hydrology principles including hydrologic cycle; hydrograph development; flood routing; design of storm water systems and water distribution systems, pipe networks, pumping systems, flow through orifices, flumes & weirs, and design of hydraulic structures.

Lecture: Three hours

*Prerequisite:* Fluid Mechanics (CIVL-320)

### **CIVL-322—Introduction to Environmental Engineering**

Three Credit Hours

Introduction to water, air, solid and hazardous waste. Included are social and ethical considerations, legal and regulatory principles, risk analysis, the effect of pollutants in the environment, groundwater flow theory and application, and the engineering principles governing the generation and control of these pollutants.

Lecture: Three hours

*Prerequisites:* General Chemistry I (CHEM-151), General Chemistry I Laboratory (CHEM-161), Fluid Mechanics (CIVL-320), and either Analytic Geometry & Calculus (MATH-231) or Applied Engineering Mathematics (MATH-234).

### **CIVL-327—Asphalt and Concrete Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering juniors. Laboratory applications involving design, preparation, curing and testing of asphalt and Portland cement concrete. Includes testing for component properties, component selection and grading, material handling, mix design, blending, applicable standards and specifications, construction practices, quality control, specimen testing and safety. Marshall and Superpave mix design procedures and testing methods are used to conduct laboratory data collection and analysis. Emphasis is placed on professional laboratory report preparation.

Lecture: Two hours.

*Prerequisite:* Materials Laboratory (CIVL-307);

*Corequisite:* Highway Engineering (CIVL-302).

### **CIVL-330—Measurements, Analysis and Modeling for CEE Systems**

Three Credit Hours

In this course, students are introduced to several concepts and techniques essential to the modern civil engineer: Uncertainty and variability of physical systems; analysis of measurement systems; physical modeling and scaling techniques; mathematical and numerical modeling; and the impact of uncertainty on project economics. Both theory and application are presented with a very strong emphasis placed on hands-on exploration. The course requires students to employ their computer skills acquired in CIVL

210 for many assignments.

Lecture: Three hours.

*Prerequisite:* Computer Application for Civil and Environmental Engineering (CIVL-210).

### **CIVL-402—Geotechnical Engineering Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering seniors. Field and laboratory applications of typical methods for determining engineering properties of cohesive and granular soils. Experimental topics include specific gravity, particle size distribution, clay soil consistency, engineering classification, permeability, compaction, consolidation, *in situ* soil properties, soil boring and sampling techniques, and shear strength parameter determination using unconfined direct, triaxial, vane shear, and penetration apparatus.

Laboratory: Two hours.

*Prerequisite:* Introduction to Geotechnical Engineering I (CIVL-409); *Corequisite:* Geotechnical Engineering I (CIVL-410).

### **CIVL-404—Reinforced Concrete Design**

Three Credit Hours

Required of all Civil and Environmental Engineering seniors. Design of reinforced concrete structures using strength design theory. Design of beams, columns, combined stress members, footings, and retaining walls. Comprehensive analysis and design of a building frame and foundation system. Special attention is given to the use of current specifications for design and construction. The use of computer programs to facilitate analysis and design during the comprehensive problem is encouraged.

Lecture: Three hours.

*Prerequisites:* Structural Analysis (CIVL-309), Analytic Geometry & Calculus (MATH-231), and Applied Engineering Mathematics (MATH-234).

### **CIVL-406—Steel Design**

Three Credit Hours

Required of all Civil and Environmental Engineering seniors. Theory and design of steel structures using the load and resistance factor design method. Design of tension and compression members, beams, and columns. Computer solutions are utilized for design shears, moments, and axial loads.

Lecture: Three hours.

*Prerequisite:* Structural Analysis (CIVL-309).

### **CIVL-408—Water and Wastewater Systems**

Three Credit Hours

Required of all Civil and Environmental Engineering seniors. Introduction to engineering design principles and practices including water use, quality standards for drinking water, water treatment systems, determining the quality of wastewater, design of sanitary sewers, quality criteria for surface waters, and wastewater treatment systems.

Lecture: Three hours.

*Prerequisites:* Introduction to Environmental Engineering (CIVL-322), General Chemistry II/General Chemistry Laboratory II (CHEM-152/162), Analytic Geometry & Calculus (MATH-231), and Applied Engineering Mathematics (MATH-234).

### **CIVL-409—Introduction to Geotechnical Engineering**

Three Credit Hours

Required of all Civil and Environmental Engineering Seniors.

Introduces the student to the rudiments of theoretical soil mechanics. Topics include engineering uses of soils, laboratory and field determination of soil properties, determination of phase relationships, engineering soil classification, soil-water interaction and seepage flow mechanics, stress effects of loading on soils at depth, and consolidation, compaction, shear strength, and bearing capacity theory.

Lecture: Three hours.

*Prerequisites:* Mechanics of Materials (CIVL-304) with a grade of "C" or better, Introduction to Environmental Engineering (CIVL-322), Analytic Geometry & Calculus III (MATH-231), and Applied Engineering Mathematics I (MATH-234).

### **CIVL-410—Geotechnical Engineering II**

Three Credit Hours

Required of all Civil and Environmental Engineering seniors. An introductory course in geotechnical analysis and design. Topics include shallow foundations, spread footings, deep foundations, piles and caissons, lateral earth pressure for cohesive and cohesionless soils, slope stability analyses, subsurface investigations, and special topics including such subjects as soil stabilization methods, geotextile applications, liquefaction, etc.

Lecture: Three hours.

*Prerequisite:* Introduction to Geotechnical Engineering (CIVL-409); *corequisite* Geotechnical Engineering Laboratory (CIVL-402)

### **CIVL-418—Fluid Mechanics Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering seniors. Accomplishments of laboratory exercises and experiments to illustrate basic concepts of fluid mechanics and to validate empirical formulas used in hydraulic computations. Principal emphasis is on the phenomena associated with closed conduit and open channel flow of water, measurement of velocities, and flow rates and operational characteristics of pumps. A minimum of one experiment will involve the use of the computers to evaluate laboratory data.

Laboratory: Two hours.

*Prerequisite:* Hydrology and Hydraulics (CIVL-321).

### **CIVL-419—Environmental Engineering Laboratory**

One Credit Hour

Required of all Civil and Environmental Engineering seniors. Accomplishment of chemical, physical, and microbiological determinations used in the examination of water and wastewater. Laboratory analysis to evaluate water quality will be performed, such as biochemical oxygen demand, suspended solids, pH, alkalinity, and others. A minimum of one laboratory experiment will involve the use of the computer to evaluate laboratory data.

Laboratory: Two hours.

*Prerequisite:* Water and Wastewater Systems (CIVL-408).

## **Approved Electives:**

The following courses are offered on demand. They constitute part of a list of courses (including courses offered by other departments) which are approved by the head of the Department of Civil and Environmental Engineering as satisfying the requirement that each Civil and Environmental Engineering major complete a three-credit-hour technical elective.



### **CIVL-411—Engineering Management**

Three Credit Hours

Technique of engineering planning and management using the critical path method (CPM) and program evaluation and review techniques (PERT). Both computer and noncomputer approaches are used. Relationships between owners, A-E's, and contractors are covered with emphasis on proper professional conduct by the engineer.

Lecture: Three hours.

*Prerequisite:* Completion of all freshman, sophomore, and junior courses or approval of the department head.

### **CIVL-416—Modeling Civil Engineering Systems**

Three Credit Hours

Modeling the behavior of a wide range of civil engineering systems using various analytical, computer-based, numerical, and experimental techniques. Introducing the concepts of probabilistic modeling using the Monte Carlo Analysis.

Lecture: Three hours

*Prerequisites:* Completion of required CIVL courses through the junior year or permission of the department head.

### **CIVL-421—Subdivision Planning and Design**

Three Credit Hours

The elements of planning a subdivision including an introduction to planning, zoning, subdivision requirements, and review procedures; site development including the integrated design of roadways, storm drainage collection/retention/detention systems, sanitary sewer collection and transportation systems (pumping stations and force mains), potable water systems, and construction cost estimates and specification; and economic analysis with individual student participation in preliminary development of single family, and multifamily projects on 20- to 25-acre tracts of land. Computer applications include use of spreadsheets and CAD.

Lecture: Two hours; Laboratory: Two hours.

*Prerequisites:* Hydrology and Hydraulics (CIVL-321), Highway Engineering (CIVL-302); corequisite: Water and Wastewater (CIVL-408).

### **Civil and Environmental Engineering Design Electives**

Each Civil and Environmental Engineering major must complete one of the following design courses in the spring of the senior year.

Each course provides students an opportunity to:

- Function with multi-disciplinary teams
- Identify, formulate, and solve realistic engineering problems where economic, environmental, sustainability, and manufacturability are considered
- Understand professional and ethical responsibilities
- Communicate effectively
- Understand the political, global, and social impacts of engineering solutions
- Understand the regulatory review process

### **CIVL-422—Comprehensive Project Design in Environmental Engineering**

Three Credit Hours

Application to civil engineering principles, through group studies and lecture, to develop a solution for a comprehensive engineering problem devoted to water resources/environmental engineering.

Lecture: Two hours; Laboratory: Two hours.

*Prerequisites:* Senior standing in Civil and Environmental

Engineering, Water and Wastewater Systems (CIVL-408).

### **CIVL-423—Comprehensive Project Design in Structural Engineering**

Three Credit Hours

Application of civil engineering principles, through group studies and lecture, to develop a solution for a comprehensive Structural Engineering problem involving other aspects of civil engineering.

Lecture: Two hours; Laboratory: Two hours.

*Prerequisite:* Senior standing in Civil and Environmental Engineering, Reinforced Concrete Design (CIVL-404);

*Corequisite:* Steel Design (CIVL-406).

### **CIVL-424—Comprehensive Project Design in Geotechnical Engineering**

Three Credit Hours

Application of civil engineering principles, through group studies and lecture, to develop a solution for a comprehensive Geotechnical engineering problem involving other aspects of civil engineering.

Lecture: Two hours; Laboratory: Two hours.

*Prerequisite:* Senior standing in Civil and Environmental Engineering

### **CIVL-425—Comprehensive Design Project in Civil Engineering**

Three Credit Hours

Application of civil engineering principles, through team initiatives and lecture directives to develop design solutions for a comprehensive problem using methods of professional engineering practice and involving multi-disciplinary aspects of civil engineering.

Lecture: Two hours; Laboratory: Two hours.

*Prerequisite:* Senior standing in Civil and Environmental Engineering. Site developmental projects require Subdivision Planning and Design (CIVL-421) as a prerequisite. Transportation project requires Highway Engineering (CIVL-302) as a prerequisite.

### **CIVL-450—Civil and Environmental Engineering Internship**

Three Credit Hours

This course gives Civil and Environmental Engineering students real-world experience to complement the classroom education that they have previously received. Interns will learn about the variety of issues facing today's practicing engineer. Interns will spend at least five hours each week working alongside senior-level managers in Charleston area engineering firms or engineering-related regulatory agencies coordinating these activities through the Department of Civil and Environmental Engineering.

*Prerequisite:* Permission of Department Head.

### **CIVL-453—Special Topics in Civil Engineering**

Three Credit Hours

Selected topics in civil engineering. The offering of this course will depend upon the interest of the student, the availability of an instructor, and the approval of the department Head. Since the content of the course may change, a student may repeat the course for credit with consent of the department head.

*Prerequisite:* Permission of the Department Head

## **Bachelor of Science in Electrical Engineering**

### **Department of Electrical and Computer Engineering**

**Dr. John Peeples:** 843.953.5057

john.peeples@citadel.edu

#### **General Information:**

In 1941 the Board of Visitors authorized the establishment of a Department of Electrical Engineering at The Citadel. Because World War II intervened, the first electrical engineering degrees were awarded to the class of 1948. The electrical engineering program is offered in two modes—day mode and the two-plus-two evening mode. The day mode is coeducational and open only to members of the South Carolina Corps of Cadets and enlisted active duty students assigned to one of The Citadel's ROTC Departments. The two-plus-two evening mode is coeducational, is open to transfer students and does not require ROTC or Health and Physical Education. Otherwise curricula, faculty, textbooks, laboratory equipment, course content, classrooms, and laboratories are the same for both modes.

The Electrical and Computer Engineering Department is located in Grimsley Hall, a first-tier engineering education facility that provides a great learning environment. Modern, fully equipped laboratories, classrooms, and faculty offices are logically arranged on the third floor. The related Departments of Mathematics and Computer Science, Physics, and Civil and Environmental Engineering are housed adjacent to the department, creating a "micro-campus" of science and technology.

The electrical engineering program is accredited by the Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and Technology (ABET), 111 Market Place, Suite 1050, Baltimore, MD 21202-4102 - Telephone: (410) 347-7700.

#### **Mission:**

The mission of the Department of Electrical and Computer Engineering is: To prepare the individual for professional work or for graduate study in the fields of electrical and computer engineering and to provide as many of the elements of a broad education as can be included in a program of professional study leading to the degree of Bachelor of Science in Electrical Engineering.

In addressing its mission, the department strives, through small classes, and hands-on experience in laboratories closely monitored by full-time faculty, to provide an environment highly conducive both to learning and to the development of close student-faculty relationships.

The electrical engineering curriculum places emphasis on a broad liberal education base, a strong background in mathematics and basic sciences, and a logical sequence of electrical and computer engineering courses that provide the breadth and depth necessary for continuous professional growth in today's technological society.

By the end of the junior year, the electrical engineering student normally selects an area of professional emphasis such as computer engineering, control systems, communication systems, electronics, or power systems. Integral to the program is the design component that develops the student's ability to address practical engineering problems. Engineering design problems and concepts are included throughout the curriculum and the experience is capped by a mandatory two-semester senior design course in which the students undertake significant design projects.

Convinced of the great value of practical experience, the department encourages its majors to obtain gainful employment in electrical engineering or a related field for at least one summer, preferably between the junior and senior years.

#### **Admission Requirements:**

1. Complete the designated courses with Trident Technical College or equivalent with a grade of C or higher.
2. Complete and return an undergraduate application to The Citadel Graduate College (CGC), Bond Hall Room 101.
3. Maintain a minimum 2.0 GPA.
4. Submit all official transcripts directly from the source to the CGC office.

#### **Program Requirements: Two-Plus-Two Evening Mode**

The Citadel through The Citadel Graduate College offers an undergraduate Bachelor of Science degree in Electrical Engineering (BSEE). This program is offered in cooperation with Trident Technical College where the student completes the first two years of study. The junior and senior years of study are completed at The Citadel by attending evening classes. The program is designed and offered to enable the full-time student to complete the upper two years of the program and receive a BSEE within two academic years and two summers. Students are required to be advised for each semester of enrollment at The Citadel.

#### **Program Objectives:**

The Citadel Department of Electrical and Computer Engineering program prepares graduates to:

- Succeed in the practice of electrical engineering, by ethically and judiciously applying knowledge of science, mathematics and engineering methods to solve problems facing a technologically complex society.
- Apply and operate current hardware and software tools, equipment and development environments to conduct and/or lead engineering analysis, design and research.
- Value and pursue lifelong learning, not only to keep current in electrical and computer engineering fields, but also to sustain awareness of engineering-related issues facing contemporary society.
- Pursue graduate education and/or professional registration as desired or required.
- Be principled leaders with strong communications and team building skills.

Methods used to evaluate the program's success in meeting these objectives include:

1. Periodic surveys of graduates and employers to gauge our graduates' success, advancement and technical contributions in the workplace, and to identify potential gaps or areas requiring improvement in the curriculum.
2. Annual evaluation by an ECE Advisory Board sub-committee of hardware and software tools, equipment, development environments and laboratory plans, to ensure currency and/or identify requirement gaps.
3. Periodic evaluation of our graduates' membership and roles in professional organizations, participation in formal continuing education opportunities and other activities relating to lifelong learning.
4. Monitoring of our graduates' involvement and success in graduate study of engineering and related disciplines.
5. Annual review of our graduate's success in efforts to become professionally licensed.

### Electrical Engineering Program:

The initial year of study includes engineering fundamental courses designed to develop the basic skills and good teaming habits through case studies requiring the communication of creative ideas. Electrical engineering topics studied in the sophomore year include 6 credit hours of electrical circuit analysis, 1 credit hour of electrical circuits laboratory, and 3 credit hours of computer applications pertinent to the field. Theory is combined with application, demonstration, and experimental verification. In addition, the first two years include 19 credit hours of mathematics, 8 credit hours of chemistry, 8 credit hours of physics, 18 credit hours of English and history and 3 credit hours of social science to provide the foundation necessary for an engineering education. Specific course requirements, using Trident Technical College course numbers, are outlined later under **Required Program for 2+2**.

The junior year requires a total 21 credit hours of electrical engineering course work. Breadth of coverage is provided by courses in linear system analysis, electronics, systems (automatic controls), digital systems, electromagnetics, and electromechanical energy conversion. Many of these courses include engineering design problems drawn from the experience of the faculty. First semester juniors complete their sixth mathematics course, MATH-335 (Applied Mathematics II), providing coverage of mathematical topics required in upper division electrical engineering courses. The junior year includes a single elective course that must be technical in nature but outside the mainstream of electrical engineering.

The senior year provides depth in electrical and computer engineering by requiring five out of a specified set of 400-level electrical engineering elective courses and at least one approved Computer Science elective. The elective courses are ELEC-401 (Electronics II), ELEC-403, (Electric Power Systems), ELEC-405 (Electrical Measurements) and ELEC-415 (Electrical Measurements Laboratory), ELEC-407 (Systems II), ELEC-413 (Advanced Topics in Electrical Engineering) ELEC-414 (System Simulation), ELEC-416 (Communications Engineering), ELEC-418 (Advanced Digital Systems), ELEC-419 (Computer Network Architecture), ELEC-423 (Digital Signal Processing), ELEC-424 (Solid-State Devices), ELEC-425, (Interference Control in Electronics), ELEC-426 (Antennas

and Propagation) and CSCI-420 (Software Engineering). These electives provide the student the opportunity to pursue an area of interest. While narrow specialization is neither possible nor desirable at the undergraduate level, these three-credit electives provide depth in both design and theory in their specialized areas. Below are several examples of possible areas of concentration available to the student.

#### Computer Engineering

CSCI-223 Data Structures (prereqs: MAT-206, CSCI 201/201)  
CSCI-420 Software Engineering  
ELEC-418 Advanced Digital Systems  
ELEC-419 Computer Network Architecture  
ELEC-423 Digital Signal Processing  
ELEC-416 Communications Engineering

#### Power Engineering

CIVL-310 Statics and Mechanics of Materials For Non-Civil Engineers  
ELEC-307 Nuclear Engineering  
ELEC-403 Electric Power Systems  
ELEC-407 Systems II  
ELEC-405 Electrical Measurements  
ELEC-415 Electrical Measurements Laboratory  
ELEC-426 Antennas and Propagation

#### Communications

PHYS-308 Optics  
ELEC-401 Electronics II  
ELEC-416 Communication Engineering  
ELEC-419 Computer Network Architecture  
ELEC-423 Digital Signal Processing  
ELEC-426 Antennas and Propagation

#### Electronics

PHYS-410 Thermodynamics  
ELEC-401 Electronics II  
ELEC-418 Advance Digital Systems  
ELEC-423 Digital Signal Processing  
ELEC-424 Solid State Devices  
ELEC-405 Electrical Measurements  
ELEC-415 Electrical Measurements Laboratory

### Electrical Engineering Design Experiences:

Engineering design is distributed throughout the electrical engineering curriculum. Introduction to the design process and the initial design experience occur in the freshman courses. The engineering profession and the ethical responsibilities of professional engineers are discussed. Design problems are posed that require little or no in-depth engineering knowledge. For example, a first design problem might ask the student to design a dormitory room workplace. Functionality, aesthetics, and cost of implementation are a few of the issues to be considered. Case studies are assigned that provide an opportunity for the students to work in teams. The emphasis is on the synthesis of a product that meets broad requirements. The students are introduced to the concept of design in which there is no single right answer and where there are relatively few limits placed on the creative process.

Techniques of analysis, synthesis, iteration, and approximations are studied in the sophomore and junior electrical engineering courses. Specialized design exercises are used to illustrate the use of these techniques in the areas of circuits, systems, electronics,

electric machines, and digital circuits and systems. The senior year provides the opportunity for the student to begin to focus on design techniques in a particular area of interest through the choice of at least five senior electrical engineering elective courses. Examples range from the use of a load flow program to determine operational conditions of a small power system in a contingency situation (ELEC-403), to the design of a state estimator (ELEC-407), to the design and implementation of digital filters (ELEC-423).

The design experience culminates in the required senior design courses, ELEC-421 and ELEC-422. This two-semester design sequence provides students the opportunity to work on a project of interest and provides the faculty the opportunity to guide students in their first major design experiences and emphasize once more the various constraints that may come into play in a design. The students are taught several different structured design approaches. Project definition and documentation are stressed. Design teams of three to four students are formed at the beginning of the first semester. Students are instructed on various practical aspects of design, such as layout considerations, safety, functionality, and documentation of design.

The student design teams select and propose a major design project to be completed by the end of second semester. They must enlist a faculty project advisor to guide their project. At the end of the first semester the design teams present their design proposals (written and oral) that include their preliminary design (block diagram level), a schedule for the following semester, and a cost estimate. In the second semester, the teams do the detailed design, and build, test, refine, demonstrate, and document their design projects. In addition to the technical aspects, project management and presentation techniques are taught and applied. A detailed project specification is developed and placed under tight change control. Financial and scheduling aspects of the project are tracked. A final presentation in both written and oral form is required at the end of the semester, along with a working demonstration.

### Required program for 2+2:

Lower two years of study offered at Trident Technical College.

#### TTC First Year

ENG-101/102  
HIS-101/102  
CHM-110/111  
MAT-140/141  
ECE-201  
EGR-273/275

#### Citadel Third Year

MATH-335  
ELEC-306/313  
ELEC-309/312/301  
ELEC-311/330  
ELEC-316/302  
ELEC-318  
CIVL-314/TECH ELEC

#### TTC Second Year

ENG-205/2XX  
PSY-201  
PHY-221/222  
MAT-240/242  
ECE-221/222/205  
EGR-270

#### Citadel Fourth Year

HUMANITIES ELECTIVE  
ELEC-421/422  
ELEC-412/4XX \*  
ELEC-4XX/4XX \*  
ELEC-4XX/4XX \*

Credit hours required for graduation: 128 for evening students  
Technical Electives: One of the following courses: Optics, PHYS-308; Thermodynamics, PHYS-410; Statics and Mechanics of

Materials For Non-Civil Engineers, CIVL-310; Data Structures, CSCI-223; Engineering Management, CIVL-411; Deterministic Methods of Operational Research, MATH-381; Mathematical Models and Applications, MATH-470

\*\*Advanced humanities or social science courses.

\*Approved Departmental Electives must be selected from among the following courses: Nuclear Engineering (ELEC-307), Electronics II (ELEC-401), Electric Power Systems (ELEC-403), Electrical Measurements (ELEC-405), Systems II (ELEC-407), Advanced Topics in Electrical Engineering (ELEC-413), System Simulation (ELEC-414), Electrical Measurements Laboratory (ELEC-415), Communication Engineering (ELEC-416), Advanced Digital Systems (ELEC-418), Computer Network Architecture (ELEC-419), Digital Signal Processing (ELEC-423), Solid-State Devices (ELEC-424), Interference Control in Electronics (ELEC-425), Antennas and Propagation (ELEC-426) and Software Engineering (CSCI-420) *Note: ELEC-405 and ELEC-415 must be taken together*

Note: Advanced Topics in Electrical Engineering (ELEC-413) is offered only occasionally. The Engineering science and engineering design credits are a function of the topics studied.

## Course Descriptions:

### ELEC-106—Fundamentals of Electrical Engineering

Three Credit Hour

Required of electrical engineering freshmen.

An introduction to the engineering profession, branches and functions of engineering, professional ethics, and the role of engineers in society. Fundamentals of engineering problem solving and the use of calculators and computers as tools to aid in problem solving. Includes subject areas common to most engineering disciplines such as the introduction to the engineering design process and teamwork through a design project, engineering laboratory skills, report writing, and engineering economics, but through the use of electrical engineering exemplars.

Lecture: three hours.

### ELEC-201—Electric Circuit Analysis I

Three Credit Hours

Required of electrical engineering sophomores.

Circuit elements; Kirchhoff's and Ohm's Law and their application through a variety of circuit analysis techniques; operational amplifiers; and the transient response of simple circuits. The circuit analysis program SPICE is introduced.

*Corequisites:* ELEC-106, MATH-131, PHYS-221/271

### ELEC-202—Electric Circuit Analysis II

Three Credit Hours

Required of electrical engineering sophomores.

Sinusoidal analysis and phasors; AC power; three-phase circuits; frequency response of simple circuits; the use of SPICE for ac circuit analysis.

Lecture: three hours

*Prerequisites:* ELEC-201 with a grade of C or better or the successful completion of both ELEC-308 and ELEC-204 with grades of C or better. *Corequisites:* MATH-132, PHYS-222/272

### **ELEC-204—Electrical Laboratory**

One Credit Hour

Required of electrical engineering sophomores.

An introduction to the experimental method in electrical engineering. Laboratory exercises are designed to supplement the material presented in ELEC-201 and ELEC-202.

Laboratory: Two hours.

*Prerequisites or co-requisite:* Electric Circuit Analysis II (ELEC-202) or Elements of Electrical Engineering (ELEC-308)

### **ELEC-206—Computer Applications for Electrical Engineers**

Three Credit Hours

Required of electrical engineering sophomores.

The computer is presented as a tool for the solution of engineering problems. High level programming of computers; data manipulation, data plotting, and equation solving using application programs such as MATLAB.

Lecture: Three hours.

*Prerequisites* Fundamentals of Electrical Engineering (ELEC-106)

### **ELEC-302—Electrical Machinery Laboratory**

One Credit Hour

Required of electrical engineering juniors.

A laboratory course to accompany ELEC-316.

Laboratory: Two hours.

*Prerequisite or corequisite:* Electromechanical Energy Conversion (ELEC-316)

### **ELEC-306—Electronics I**

Three Credit Hours

Required of all electrical engineering juniors.

Characteristics of solid-state devices, theory and design of low-frequency amplifiers, transistor biasing and stabilization, design of multistage and feedback amplifiers utilizing bipolar and MOS devices.

Lecture: Three hours.

*Prerequisites:* Electric Circuit Analysis II (ELEC-202), Electrical Analysis (ELEC-204); *Corequisite:* Electronics Laboratory (ELEC-313).

### **ELEC 307—Nuclear Engineering**

Three Credit Hours

An introduction to the theory and application of nuclear energy.

Topics include fission and the chain reaction; nuclear fuels; nuclear reactor principles, concepts, examples, construction, operation, and ecological impact; radiation hazards and shielding; and nuclear propulsion.

Lecture: Three hours.

*Prerequisites:* Physics with Calculus II/Laboratory for Physics with Calculus II (PHYS-222/272).

### **ELEC-308—Elements of Electrical Engineering**

Three Credit Hours

Required of civil engineering juniors.

Fundamental electrical concepts and units; basic laws of electrical circuits; equivalent circuits; DC and steady-state AC circuit analysis; and effective current, average power, and three-phase power.

Lecture: Three hours.

*Prerequisite:* Analytic Geometry and Calculus I (MATH-131).

### **ELEC-309—Signals and Systems**

Three Credit Hours

*prerequisites or co-requisites:* MATH-335 Required of electrical engineering juniors. The study of continuous and discrete systems utilizing Laplace, Fourier, and z-transform theory.

Lecture: Three hours.

*Prerequisites:* Electric Circuit Analysis (ELEC-202), Electrical Laboratory (ELEC-204), Computer Applications for Electrical Engineers (ELEC-206), Applied Engineering Mathematics (MATH-234).

### **ELEC-311—Digital Logic and Circuits**

Three Credit Hours

Introduction to Boolean algebra; topics such as digital data coding and digital arithmetic. Design of combinational and sequential circuits; design implementing and testing of digital circuits using Field Programmable Gate Arrays. Employs VHDL and other industry standard design tools.

Lecture: Three hours.

### **ELEC-312—Systems I**

Three Credit Hours

Required of electrical engineering juniors.

An introduction to feedback control systems, system representation, stability, root-locus and frequency response, and compensation.

Lecture: Three hours.

*Prerequisites:* Signals and Systems (ELEC-309)

### **ELEC-313—Electronics Laboratory**

One Credit Hour

Required of electrical engineering juniors.

Experimental studies coordinated with the subjects introduced in ELEC-306.

Laboratory: Two hours.

*Prerequisite:* Computer Applications for Electrical Engineers (ELEC-206).

*Corequisite:* Electronics I (ELEC-306).

### **ELEC-316—Electromechanical Energy Conversion**

Three Credit Hours

Required of electrical engineering juniors.

Analysis of transformers; fundamentals of electromechanical energy conversion; and study of DC, induction, and synchronous machines.

Lecture: Three hours.

*Prerequisite:* Signals and Systems (ELEC-309), or consent of the department head; *prerequisite or co-requisite:* Electrical Machinery Laboratory (ELEC-302).

### **ELEC-318—Electromagnetic Fields**

Three Credit Hours

Required of electrical engineering juniors.

Static electric and magnetic fields; Maxwell's equations and their applications; Laplace's equations; boundary value problems; time varying fields, and plane waves.

Lecture: Three hours.

*Prerequisites:* Electric Circuit Analysis (ELEC-202), Computer Applications for Electrical Engineers (ELEC-206), Physics with Calculus II/Laboratory for Physics with Calculus II (PHYS-222/272), Applied Engineering Mathematics II (MATH-335).

**ELEC-330—Digital Systems Engineering**

Three Credit Hours

Required of electrical engineering juniors. Microcontroller fundamentals including architecture, assembly language programming, and interfacing. Applications of industry-standard microcontrollers in embedded systems. Employs software design tools, simulators, and hardware trainers.

Lecture: Three hours.

*Prerequisite:* Digital Logic and Circuits (ELEC-311).

**ELEC-401—Electronics II**

Three Credit Hours

Characteristics and applications of analog and digital circuits. Topics may include differential amplifiers, multistage amplifiers, power amplifiers, oscillators, filter circuits, and CMOS digital logic.

*Prerequisite:* Electronics I (ELEC-306), and Electronics Laboratory (ELEC-313).

**ELEC-403—Electric Power Systems**

Three Credit Hours

A study of electrical power generation, transmission, and distribution; symmetrical components, per-unit analysis, calculation of transmission-line parameters, and load flow.

Lecture: Three hours.

*Prerequisites:* Electromechanical Energy Conversion (ELEC-316) and Electromagnetic Fields (ELEC-318).

**ELEC-405—Electrical Measurements**

Two Credit Hours

An introduction to modern electrical instrumentation and measurements. Topics include: measurement theory, analog and digital signal conditioning, noise, transducers, instrumentation system design, digital interfaces, and computer based instrumentation and measurements..

Lecture: Two hours.

*Prerequisite:* Electronics Laboratory (ELEC-313),

*Corequisite:* Electrical Measurements Laboratory (ELEC-415).

**ELEC-407—Systems II**

Three Credit Hours

A continuation of Systems I with primary emphasis on digital control systems. Topics include: state-variable analysis, simulation techniques, controllability, state-variable feedback, observability, and state estimator design.

Lecture: Three hours.

*Prerequisite:* Systems I (ELEC-312).

**ELEC-412—Applied Probability and Statistics for Engineers**

Three Credit Hours

Required for electrical engineering majors. Application of the theory of probability and statistics in modeling random phenomena and signals; in the calculation of system responses; and in making estimates, inferences and decisions in the presence of chance and uncertainty. Applications will be studied in areas such as communications, power systems, device modeling, measurements, reliability, and quality control.

Lecture: Three hours.

*Prerequisites:* Analytic Geometry and Calculus III (MATH-231),

Computer Applications for Electrical Engineers (ELEC-206).

**ELEC 413—Advanced Topics in Electrical Engineering**

Three Credit Hours

Advanced topics in electrical engineering. Offered occasionally when the special interests of students and faculty coincide. The syllabus must be approved by the Electrical Engineering Faculty. This course may be taken only once for credit.

Lecture: Three hours.

**ELEC-414—System Simulation**

Three Credit Hours

An introduction to system concepts, mathematical models of systems, and simulation methods applied to a broad range of systems. Design project required.

Lecture: Three hours.

*Prerequisite:* Systems (ELEC-312).

**ELEC-415—Electrical Measurements Laboratory**

One Credit Hour

A laboratory course to complement ELEC-405.

Laboratory: Two hours.

*Corequisite:* Electrical Measurements (ELEC-405).

**ELEC-416—Communications Engineering**

Three Credit Hours

Principles of amplitude, frequency, and pulse modulation; signal flow and processing in communications systems; and analog and digital communication systems.

Lecture: Three hours.

*Prerequisites:* Signals and Systems (ELEC-309), Digital Logic and Circuits (ELEC-311), Electromagnetic Fields (ELEC-318)

*Corequisite:* Electronics 1 (ELEC-306)

**ELEC-418—Advanced Digital Systems**

Three Credit Hours

Experience in advanced digital design techniques and exposure to the development tools used in the design of advanced digital systems. Topics include the design of digital systems using VHDL, industry standard FPGA devices and software, and microprocessor hardware components.

Lecture: Three hours.

*Prerequisite:* Digital Systems Engineering (ELEC-330) or Computer Organization and Programming (CSCI-305)

**ELEC-419—Computer Network Architecture**

Three Credit Hours

This course will cover network architecture and protocols. Included are transmission technologies, encoding/decoding schemes, packet switching, frame relay, ISDN, ATM and performance modeling techniques.

Lecture: Three hours.

**ELEC-421—Design I**

Three Credit Hours

Required of electrical engineering seniors.

Initiation, design, scheduling, documentation and reporting on a major design project. Normally accomplished by students working in small groups. All students will make written and oral presentations on their contribution to the project. Financial, legal, ethical, societal, regulatory, environmental, manufacturability, and quality issues will be discussed and will constrain the designs as appropriate.

Lecture: One hour; Laboratory: Four hours.

*Prerequisites:* Electrical Machinery Laboratory (ELEC-302), Electronics I (ELEC-306), Systems I (ELEC-312), Digital Logic and Circuits (ELEC-311), Electromechanical Energy Conversion (ELEC-316), Digital Systems Engineering (ELEC-330) and Electromagnetic Fields (ELEC-318) or consent of the department head.

### **ELEC-422—Design II**

Three Credit Hours

Continuation of the major design project begun in ELEC-421. Project implementation, documentation, and reporting. Normally to be accomplished by students working in the small groups formed in ELEC-421. The impact of the practical, societal, and governmental issues raised in ELEC-421 will be assessed. Each student will make written and oral presentations on their contributions to the project. A prototype demonstration and presentation of final results in a symposium format is required. Lecture: One hour; Laboratory: Four hours.  
*Prerequisite:* Design I (ELEC-421) taken the preceding semester. Required of all electrical engineering seniors.

### **ELEC-423—Digital Signal Processing**

Three Credit Hours

Introduction to the characteristics, design, and applications of discrete time systems using digital signal processors. Discrete time Fourier Transforms, FIR and IIR systems, and the design of FIR and IIR filters. Lecture: Three hours.  
*Prerequisite:* Signals and Systems (ELEC-309), and Digital Systems Engineering (ELEC-330).

### **ELEC-424—Solid-State Devices**

Three Credit Hours

Basic principles governing the operation of solid-state devices are developed from fundamental concepts. P-N junction theory is developed and applied to the analysis of devices such as bipolar transistors, solar cells, detectors, and photo devices. The theory of field-effect devices is developed. Lecture: Three hours.  
*Prerequisites:* Electronics I (ELEC-306), and Electromagnetic Fields (ELEC-318).

### **ELEC-425—Interference Control in Electronics**

Three Credit Hours

An introduction to the control and measurement of interference between electronic devices. Analysis methods and practical design techniques to minimize both radiated and conducted emissions and susceptibility. Enhancing signal integrity in high-speed circuits and reducing crosstalk. Laboratory exercises and demonstrations will be used to reinforce the material. Lecture: Three hours.  
*Prerequisites:* Signals and Systems (ELEC-309), Electromagnetic Fields (ELEC-318), Digital Systems Engineering (ELEC-330).

### **ELEC-426—Antennas and Propagation**

Three Credit Hours

Transmission, radiation, and propagation of electromagnetic waves by means of transmission lines, waveguides, optical fibers, and antennas. Design project required. Lecture: Three hours.  
*Prerequisites:* Electromagnetic Fields (ELEC-318).