

Bachelor of Science in Mechanical Engineering

About the Program

The Mechanical Engineering curriculum places emphasis on a broad liberal education base, a strong background in mathematics and basic sciences, and a logical sequence of Mechanical Engineering courses that provide the breadth and depth necessary for continuous professional growth in today's technological society.

The Mechanical Engineering Program of Study will offer focused tracks in Power and Energy, Manufacturing, Aeronautical Systems, Materials (Composites), and Mechatronics. Engineering design problems and concepts are included throughout the curriculum and the experience is capped by a mandatory two-semester senior design course which the students undertake significant design projects.

A Partnership in Education...

The cooperative 2+2 program formed by Trident Technical College (TTC) and The Citadel permits students to complete their associate degree at TTC and then take courses in the major at The Citadel, culminating in a bachelor's degree from The Citadel.

Getting Started

The following steps will get you on your way to earning your associate degree from TTC and bachelor's degree from The Citadel:

- Submit TTC's online application along with the nonrefundable application fee.
- Send a copy of your high school transcript, diploma or GED to TTC. If you want to transfer credits from other colleges, submit official transcripts.
- Provide qualifying scores on the SAT, ACT or TTC's placement test.
- Visit TTC's Orientation Center for assignment to a 2+2 academic advisor.
- Complete specified courses at TTC with a minimum cumulative GPA of 2.0.
- Complete and return an undergraduate application to The Citadel Graduate College (CGC) located in Bond Hall, Room 101.
- Submit an official transcript of all work completed directly from each accredited college or university.
- Students may begin taking courses at The Citadel at any time as long as prerequisites have been met and an official TTC transcript has been provided.

Frequently Asked Questions

How do I know what to sign up for while I'm at TTC?

You will work closely with your 2+2 advisor during your time at TTC to plan your schedule so that it fits your needs and meets the requirements at The Citadel.

Which college is on my diploma, TTC or The Citadel?

After completing the entire 2+2 curriculum, you will receive two diplomas: one from TTC showing your associate degree and one from The Citadel showing your Bachelor of Science degree in Mechanical Engineering.

When and where are classes at TTC held?

Most of the TTC classes in the program are offered day and evening at the Main Campus (Rivers Avenue). Some classes may be taken at TTC's Palmer Campus (Downtown). Many general education courses are available online or on videotape, and some are offered on the weekends. Visit www.tridenttech.edu for directions.

When and where are classes at The Citadel held?

Most of the classes at The Citadel are held two nights per week in a civilian environment. Visit www.citadel.edu for directions.



TRIDENT TECHNICAL COLLEGE

www.tridenttech.edu

Associate in Science /
Mechanical Engineering Transfer:
Mr. Tim Fulford
(843) 574-6116
tim.fulford@tridenttech.edu



www.citadel.edu/eveningundergraduestudies

B.S. in Mechanical Engineering:
(843) 953-6499
me@citadel.edu

A 2+2 program brought to you by:





Courses Taken at Trident Technical College

Mechanical Engineering (19 hours)

ECE 201 Electrical and Computer Engineering Seminar - 1
 ECE 205 Electrical and Computer Engineering Lab - 3
 ECE 221 Intro. to Electrical Engineering I - 3
 ECE 222 Intro. to Electrical Engineering II - 3
 EGR 260 Engineering Statics - 3
 EGR 270 Intro. to Engineering - 3
 EGR 275 Intro. to Engineering/Computer Graphics - 3
 EGR 262 Engineering Dynamics ^ - 3

Humanities/Social Science Courses (21 hours)

ENG 101 English Composition I - 3
 ENG 102 English Composition II - 3
 ENG 205 English Literature I - 3
 ENG 206 English Literature II - 3
 HIS 101 Western Civilization to 1689 - 3
 HIS 102 Western Civilization Post 1689 - 3
 PSY 201 General Psychology - 3

Math/Science Requirements (32 hours)

CHM 110 College Chemistry I - 4
 CHM 111 College Chemistry II - 4
 MAT 140 Analytic Geometry and Calculus I - 4
 MAT 141 Analytic Geometry and Calculus II - 4
 MAT 240 Analytic Geometry and Calculus III - 4
 MAT 242 Differential Equations - 4
 PHY 221 University Physics I - 4
 PHY 222 University Physics II - 4

^Students can elect to take this course at TTC or in the summer at The Citadel.

Total Credit Hours at TTC: 72

Courses Taken at The Citadel

Third Year (37 hours)

CIVL 301 Dynamics ^ - 3
 CIVL 304 Mechanics of Materials ^ - 3
 CIVL 307 Materials Laboratory ^ - 1
 MATH 335 Applied Mathematics II - 3
 MECH 304 Engineering Materials w/lab - 3
 MECH 310 Thermo-Fluid Systems I w/lab - 3
 MECH 311 Thermo-Fluid Systems II w/lab - 3
 MECH 325 Computer Applications w/lab ^ - 3
 MECH 330 Measurements & Instr. w/lab - 3
 MECH 340 Manufacturing Processes w/lab - 3
 MECH 345 Machine Design - 3
 MECH 350 Modeling/Analysis & Dyn.Sys w/lab - 3
 Technical Elective * - 3

Fourth Year (26 hours)

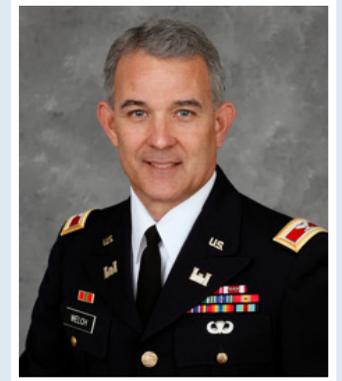
MECH 415 Heat Transfer - 3
 MECH 450 Mechatronics w/lab - 3
 MECH 460 Mechanical Engineering Sys Design - 3
 MECH 481 Senior Design I - 2
 MECH 482 Senior Design II - 3
 MECH ME Option I ** - 3
 MECH ME Option II ** - 3
 MECH Mechanical Elective ** - 3
 Adv. Humanities/Social Science Course *** - 3

**To be selected from an approved list of courses in engineering or science.*

*** To be selected from an approved list of courses in Mechanical Engineering.*

**** To be selected from an approved list of courses in humanities or social sciences.*

Total Credit Hours at The Citadel: 63



Ronald W. Welch, COL (Retired), PhD
 Dean of The Citadel School of Engineering

“This new program in Mechanical Engineering will further enhance the proud record of significant engineering contributions at The Citadel since its inception in 1842. The Mechanical Engineering Program of Study will offer focused tracks in Power and Energy, Manufacturing, Aeronautical Systems, Materials (Composites), and Mechatronics. The full-time evening Mechanical Engineering program will mirror current full-time evening 2+2 programs in Civil and Electrical Engineering.”

The **2+2 program** in Mechanical Engineering consists of 72 hours general education and engineering courses at TTC plus 63 credit hours of upper division courses at The Citadel.

If you have credits from another institution, they will be evaluated according to The Citadel policy.

Students who complete each 2+2 program course at TTC with a grade of C or higher and who maintain a cumulative GPA of a least a 2.0 are eligible to apply for admission to The Citadel’s Mechanical Engineering evening program. Formal application must be made through The Citadel Graduate College.

