Bachelor of Science in Civil Engineering

The civil engineering course curriculum focuses on practical issues related to engineering design and professional practice. Courses prepare students for challenging careers in civil engineering and include four discipline specific concentrations:

- Structural Engineering
- Environmental Engineering
- Geotechnical Engineering
- Transportation Engineering

The curriculum culminates with a comprehensive capstone design course focusing on land development, environmental, structural, or transportation engineering. Students prepare design documents and engineering drawings within a context of professional practice.

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:

- At Trident, 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.
- Complete specified courses at TTC with a minimum cumulative GPA of 2.0.
- At The Citadel, submit an online undergraduate application to The Citadel Graduate College.
- 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 Civil 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 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.
Students are our Focus
We believe that 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 in data-driven inquiry and improvement will lead us to sustained advancement in educational excellence.

Courses Taken at Trident Technical College

**Civil Engineering (16 hours)**
- EGR 260 Engineering Statics - 3
- EGR 270 Introduction to Engineering - 3
- EGR 282 Introduction to Civil Engineering - 2
- EGR 285 Engineering Surveying I - 3
- EGR 286 Engineering Surveying II - 3
- EGR 295 Engineering Surveying Lab I - 1
- EGR 296 Engineering Surveying Lab II - 1

**Humanities/Social Sciences Courses (24 hours)**
- ENG 101 English Composition I - 3
- ENG 102 English Composition II - 3
- ENG 205 English Literature I - 3
- ENG 260 Technical Writing - 3
- HIS 101 Western Civilization to 1689 - 3
- HIS 102 Western Civilization Post 1689 - 3
- PSY 201 General Psychology - 3
- Hum/Soc Sci Elective * - 3

**Math/Science Requirements (31 hours)**
- CHM 110 College Chemistry I - 4
- CHM 111 College Chemistry II - 4
- EGR 275 Introduction to Engineering/Computer Graphics - 3
- 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

**Total Credit Hours at TTC:** 71

Courses Taken at The Citadel

**Third Year (32 hours)**
- CIVL 203 Dynamics - 3
- CIVL 302 Highway Engineering - 3
- CIVL 304 Mechanics of Materials - 3
- CIVL 305 Transportation Engineering - 3
- CIVL 307 Materials Laboratory - 1
- CIVL 309 Structural Analysis - 4
- CIVL 314 Engineering Economy - 2
- CIVL 320 Fluid Mechanics - 3
- CIVL 321 Hydrology and Hydraulics - 3
- CIVL 322 Introduction to Environmental Engineering - 3
- CIVL 327 Asphalt and Concrete Laboratory - 1
- CIVL 330 Measurements, Analysis and Modeling for CEE Systems - 3
- CIVL 411 Engineering Management - 3

**Fourth Year (25 hours)**
- CIVL 402 Geotechnical Engineering Laboratory - 1
- CIVL 404 Reinforced Concrete Design - 3
- CIVL 406 Steel Design - 3
- CIVL 408 Water and Wastewater Systems - 3
- CIVL 409 Introduction to Geotechnical Engineering - 3
- CIVL 410 Geotechnical Engineering II - 3
- CIVL 412 Eng. Practices & Prof. Licensures - 1
- CIVL 418 Fluid Mechanics Laboratory - 1
- CIVL 419 Environmental Engineering Laboratory - 1
- CIVL 432 Capstone I - 3
- CIVL 433 Capstone II - 3

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

**Total Credit Hours at The Citadel:** 57

Why the 2+2 program is right for you:
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The evening undergraduate program has allowed me to earn my degree while still being able to work. It has excelled in preparing me for my future within the engineering field, as well as improved my time-management, discipline, and organizational skills. I have had the opportunity to build lasting relationships with peers, who came from a variety of different backgrounds. Although the program is demanding, it is feasible to complete.

The diverse faculty truly cares about the success of their students, where they utilize their professional backgrounds in engineering to teach their subjects content. The professors get involved in extracurricular activities outside of the classroom, and go to great lengths to show their support.

-Jaclyn Busching