BS in Civil Engineering to Master of Science/ Engineering Civil Engineering Fast Track

About This Program

The Fast Track Program enables outstanding senior undergraduate Civil Engineering students to receive undergraduate and graduate credit for up to six hours of coursework. Technical electives which are dual-listed as graduate courses will satisfy both bachelor's and master's degree requirements. Students pursuing a Master of Science or Master of Engineering in Civil Engineering may take up to two courses for dual credit.

ASSOCIATED PROGRAMS

For detailed information about the programs associated with this Fast Track, refer to their individual degree pages.

Civil Engineering BS (https://catalog.uta.edu/engineering/civil/undergraduate/civil-engr-bs/)

Civil Engineering ME (Construction) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-construction-me/)

Civil Engineering MS (Construction) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-construction-ms/)

Civil Engineering ME (Environmental) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-environmental-me/)

Civil Engineering MS (Environmental) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-environmental-ms/)

Civil Engineering ME (Geotechnical) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-geotechnical-me/)

Civil Engineering MS (Geotechnical) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-geotechnical-ms/)

Civil Engineering ME (Infrastructure) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-infrastructure-me/)

Civil Engineering MS (Infrastructure) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-infrastructure-ms/)

Civil Engineering ME (SSWEM) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-sswem-me/)

Civil Engineering MS (SSWEM) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-sswem-ms/)

Civil Engineering ME (Smart) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-smart-me/)

Civil Engineering MS (Smart) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-smart-ms/)

Civil Engineering ME (Transportation) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-transportation-me/)

Civil Engineering MS (Transportation) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-transportation-ms/)

Civil Engineering ME (Water) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-water-me/)

Civil Engineering MS (Water) (https://catalog.uta.edu/engineering/civil/graduate/civil-engr-water-ms/)

Admissions Criteria

Interested undergraduate Civil Engineering students should apply for admission to the fast track program when they are within 30 hours of completing their bachelor's degree (and before graduation). For admission consideration, they must have completed at least 30 hours at UT Arlington and have an overall and College of Engineering GPA of at least 3.00 (in both) for the MECE and MSCE option. Additionally, they must have completed a set of specified, basic undergraduate foundation courses with a grade of B or higher in each course and a GPA of at least 3.30 in these foundation courses.

The specific foundation courses vary according to the student's desired specialty area for the master's degree, as follows.

- Construction Engineering Management
  - CE 2313
  - CE 3301
  - CE 3311
- Environmental
  - CE 3131
  - CE 3305

    - CE 3342
    - CE 3334
- Geotechnical
    - CE 2313
    - CE 3143
    - CE 3343
    - CE 3361
- Infrastructure
    - CE 3361
    - CE 3301
    - CE 3311
- Structures
    - CE 2311
    - CE 2313
    - CE 3341
- Transportation
    - CE 3301
    - CE 3302
    - CE 3311
- Water Resources
    - CE 2311
    - CE 3305
    - CE 3342

In their final semester as an undergraduate, fast track students in good standing will be automatically admitted to graduate school with consent of the Graduate Advisor. No fees, transcripts, or test scores will be required. Students must start their master's program the long semester or summer semester immediately following their graduation or the next long semester. For further information about this program, contact an undergraduate advisor or the Graduate Advisor in Civil Engineering.

Curriculum

Civil Engingeering Foundations		
Complete the UTA Core curriculum and Civil Engineering BS pre-professional program per catalog.		69
Civil Engineering Professional Program (Specialization)		
GEOL 3340	GEOLOGY FOR ENGINEERS	3
CE 3131	ENVIRONMENTAL ANALYSIS	1
CE 3142	APPLIED FLUID MECHANICS LAB	1
CE 3143	PROPERTIES AND BEHAVIOR OF SOILS	1
CE 3210	CIVIL ENGINEERING COMMUNICATIONS	2
CE 3253	APPLICATIONS OF COMPUTER-BASED DESIGN PROGRAMS IN CIVIL ENGINEERING	2
CE 3301	STOCHASTIC MODELS FOR CIVIL ENGINEERING	3
CE 3302	TRANSPORTATION ENGINEERING	3
CE 3305	BASIC FLUID MECHANICS	3
CE 3311	CONSTRUCTION ENGINEERING	3
CE 3334	PRINCIPLES OF ENVIRONMENTAL ENGINEERING	3
CE 3341	STRUCTURAL ANALYSIS	3
CE 3342	WATER RESOURCES ENGINEERING	3
CE 3343	SOIL MECHANICS	3
CE 3361	PROPERTIES & BEHAVIOR OF CIVIL ENGINEERING MATERIALS	3
CE 4328	WATER SYSTEM DESIGN	3
CE 4347	REINFORCED CONCRETE DESIGN	3
CE 4352	PROFESSIONAL PRACTICE	3
CE 4383	SENIOR PROJECT	3
Senior Technical Electives		

Select 6 hours of CE core electives to be selected from two of the following four areas: Construction, Environmental, Geotechnical, and Transportation.		6
Select 3 hours of CE technical or core electives from any CE technical elective area.		3
Select 3 hours of CE technical or core elective from any CE technical elective area or substitute either CE 4393 (Industrial Internship) or CE 4394 (Research Internship) as a technical elective. See Civil Engineering Department for course classifications.		3
Within any Senior Technical Elective category select 2 of the folllowing graudate courses for credit in the designated MS track.		
Construction Engineering Management		
CE 5342	CONSTRUCTION PROJECT ADMINISTRATION (for CE 4303)	
CE 5344	CONSTRUCTION METHODS: FIELD OPERATIONS (for CE 4332)	
CE 5378	CONSTRUCTION CONTRACTS, SPECIFICATIONS, & ADMINISTRATION (for CE 4304)	
CE 5382	CONSTRUCTION SUSTAINABILITY (for CE 4307)	
CE 5388	PIPELINE CONSTRUCTION AND TRENCHLESS TECHNOLOGY (for CE 4305)	
CE 5389	PIPELINE SYSTEMS ASSET MANAGEMENT (for CE 4306)	
Environmental		
CE 5318	PHYSICAL-CHEMICAL PROCESSES I (for CE 4351)	
CE 5319	PHYSICAL-CHEMICAL PROCESSES II (for CE 4353)	
CE 5326	WATER AND WASTEWATER TREATMENT FACILITIES DESIGN (for CE 4355)	
CE 5328	FUNDAMENTALS OF AIR POLLUTION (for CE 4350)	
CE 5358	SOLID WASTE ENGINEERING (for CE 4354)	
CE 5375	GEOTECHNICAL ASPECTS OF LANDFILLS (for CE 4323)	
Geotechnical		
CE 5361	DESIGN AND CONSTRUCTION OF ASPHALT CONCRETE (for CE 4336)	
CE 5362	RIGID PAVEMENTS (for CE 4337)	
CE 5364	FOUNDATION ANALYSIS AND DESIGN (for CE 4321)	
CE 5367	DESIGN OF EARTH STRUCTURES (for CE 4320)	
CE 5372	GEOSYNTHETICS (for CE 4322)	
CE 5375	GEOTECHNICAL ASPECTS OF LANDFILLS (for CE 4323)	
Infrastructure		
CE 5338	SYSTEM EVALUATION (for CE 4310)	
CE 5361	DESIGN AND CONSTRUCTION OF ASPHALT CONCRETE (for CE 4336)	
CE 5362	RIGID PAVEMENTS (for CE 4337)	
CE 5372	GEOSYNTHETICS (for CE 4322)	
Structures		
CE 5303	INTRODUCTION TO FINITE ELEMENT (for CE 4325)	
CE 5305	FIBER REINFORCED COMPOSITE DESIGN (for CE 4366)	
CE 5306	STRUCTURAL STEEL DESIGN (for CE 4348)	
CE 5307	STRUCTURAL TIMBER DESIGN (for CE 4365)	
CE 5308	STRUCTURAL MASONRY DESIGN (for CE 4360)	
CE 5309	PRESTRESSED CONCRETE (for CE 4363)	
CE 5312	ADVANCED CONCRETE DESIGN I (for CE 4361)	
CE 5315	ADVANCED MECHANICS OF MATERIALS (for CE 4324)	
CE 5351	ADVANCED STRUCTURAL ANALYSIS I (for CE 4368)	
CE 5364	FOUNDATION ANALYSIS AND DESIGN (for CE 4321 or CE 4320)	
or CE 5367	DESIGN OF EARTH STRUCTURES	
Transportation		
CE 5331	TRAFFIC ENGINEERING OPERATIONS (for CE 4313)	
CE 5332	HIGHWAY DESIGN (for CE 4312)	
CE 5334	INTRODUCTION TO RAILROAD ENGINEERING (for CE 4314)	
CE 5337	URBAN TRANSPORTATION PLANNING (for CE 4311)	
CE 5338	SYSTEM EVALUATION (for CE 4310)	
CE 5361	DESIGN AND CONSTRUCTION OF ASPHALT CONCRETE (for CE 4336)	
CE 5362	RIGID PAVEMENTS (for CE 4337)	

Water Resources		
CE 5326	WATER AND WASTEWATER TREATMENT FACILITIES DESIGN (for CE 4355)	
CE 5346	OPEN CHANNEL FLOW (for CE 4358)	
CE 5349	ADVANCED GIS AND HYDROLOGIC AND HYDRAULIC MODELING (for CE 4326)	
CE 5353	ADVANCED HYDRAULICS (for CE 4330)	
Masters programs in Civil Engineering		
Complete requirements for Master of Science or Master of Engineering in Cvil Engineering per catalog.		24
Total Hours		**154**

[1] For admission to the fast track, students must complete these with a minimum cumulative GPA of 3.3 and a grade of B or better in each course.

Program Completion

- Complete 6 hours of graduate coursework.
- Earn B or better in all graduate courses intended for both undergraduate and graduate credit.
- Maintain UTA undergraduate cumulative GPA of 3.0 or above.

CONTINUATION

If at any time an undergraduate fast track student falls below the 3.000 GPA requirements or earns a grade below B in a graduate course intended for both undergraduate and graduate credit, the student will be obliged to leave the program immediately and will not be allowed to take additional graduate courses as an undergraduate. If a student does not complete at least two graduate courses with B or better, any graduate credits earned with a grade of C or better will be applied only to the undergraduate degree. Graduate courses used for credit in the undergraduate program cannot be applied towards a graduate degree.

BENEFITS

A student who successfully completes the BS fast track will be automatically admitted to graduate study. The student will not be required to take the Graduate Record Examination, complete an application for graduate admission, or pay an application fee. For more details about the specifics of the fast track program, contact the undergraduate advisor or graduate advisor.

COURSE ENROLLMENT CLEARANCE

Students must obtain clearance each semester from the Graduate Advisor and Undergraduate Advisor for all graduate courses that will be used to satisfy undergraduate degree requirements.

TIME LIMIT TO BEGIN GRADUATE STUDIES

A student may take off one long semester plus a summer after receiving the undergraduate degree before starting as a graduate student. An application for graduate admission must be completed and approved before post-baccalaureate studies can begin. A student returning after a longer delay will have to apply as a regular student, completing a full application, paying all fees and meeting all admission requirements.

Advising Resources

Location:

Nedderman Hall 425

Email:

ceugadvising@uta.edu

Phone:

817-272-0279

Web:

Advisor Information & Scheduling an Appointment