# Construction Engineering B.S.Con.E.

## Degree Requirements: 130 Credit Hours

See Core Curriculum for required courses in Area A1 through Area E.

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### General Requirements (Core Areas A - E)
- CENG 1133 Engineering Graphics for Civil and Construction Engineers
- CHEM 1310 Comprehensive General Chemistry
- MATH 2242 Calculus II
- STAT 1401 Elementary Statistics
- Carryover from Area A2

### Additional Requirements
- CENG 1731 Civil Engineering Computations

### Area F - Courses Appropriate to Major
- CENG 1133 Engineering Graphics for Civil and Construction Engineers
- CENG 1731 Civil Engineering Computations
- CHEM 1310 Comprehensive General Chemistry
- MATH 2242 Calculus II
- STAT 1401 Elementary Statistics
- Carryover from Area A2

### Specific Requirements
- Carryover from Area D
- ENGR 2231 Engineering Mechanics I
- ENGR 3233 Mechanics of Materials

### Major Requirements
- CENG 2131 Civil Engineering Fluid Mechanics
- CENG 2231 Surveying
- CENG 3131 Introduction to Environmental Engineering
- CENG 3135 Construction Cost Control and Finance
- CENG 3232 Soil Mechanics
- CENG 3233 Civil Engineering Materials
- CENG 3331 Structural Analysis
- CENG 3333 Reinforced Concrete Design
- CENG 4135 Highway Design
- CENG 4331 Structural Steel Design
- CENG 4518 Introduction to Senior Project
- CENG 4539 Senior Project
- TCM 2430 Construction Safety
- TCM 3330 Quantity Estimating
- TCM 3332 Construction Equipment Management
- TCM 4710 Construction Internship
- TCM 5431 Construction Cost Estimating
- TCM 5433 Proj Planning/Scheduling
- LSTD 3230 Building Construction Law
- TCM 3333 Building Codes
- TCM 4090 Selected Topics in Construction
- TCM 4432 Construction Administration
- TCM 5330 Green Building and Sustainable Construction
- TCM 5333 Building Information Modeling
- TCM 5431 Construction Cost Estimating
- TCM 5433 Proj Planning/Scheduling
- or other appropriate topics as otherwise approved by the Department Chair

### Construction Electives
- Select 6 credit hours from the below listing of Construction Electives:
  - CENG 4133 Transportation Systems
  - CENG 4730 Experiential Learning in Civil and Construction Engineering - COOP
  - CENG 4890 Special Problems in Civil Engineering
  - CENG 5090 Selected Topics in Civil Engineering
  - CENG 5133 Water Supply and Wastewater Collection Systems
  - CENG 5136 Watershed Management
  - CENG 5137 Engineering Hydrology and Hydraulics
  - CENG 5138 Water and Sanitation for International Development
  - CENG 5139 Advanced Water and Wastewater Treatment
  - CENG 5231 Pavement Analysis and Design
  - CENG 5232 Foundation Design
  - CENG 5234 Asphalt Mix Design
  - CENG 5331 Advanced Structural Analysis
  - CENG 5332 Prestressed Concrete Design
  - CENG 5333 Advanced Reinforced Concrete Design
  - CENG 5334 Advanced Structural Steel Design
  - CENG 5335 Structural Dynamics
  - CENG 5336 Introduction to Finite Elements
  - CENG 5337 Advanced Strength
  - CENG 5338 Theory of Elasticity
  - CENG 5339 Theory of Elastic Stability
  - CENG 5431 Advanced Surveying
  - CENG 5432 Introduction to GIS in Surveying-Geomatics and Transportation
  - CENG 5433 Drainage & Erosion Control
  - CENG 5434 Surveying History & Law
  - CENG 5435 Introduction to Terrestrial LiDAR
  - CENG 5436 Introduction to Close-Range Photogrammetry
  - LSTD 3230 Building Construction Law
  - TCM 3333 Building Codes
  - TCM 4090 Selected Topics in Construction
  - TCM 4432 Construction Administration
  - TCM 5330 Green Building and Sustainable Construction
  - TCM 5333 Building Information Modeling
  - TCM 5431 Construction Cost Estimating
  - TCM 5433 Proj Planning/Scheduling
  - or other appropriate topics as otherwise approved by the Department Chair

### Free Elective
- Select 3 credit hours of Free Electives
- Total Credit Hours: 130

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1. While Calculus I (MATH 1441) is a 4 credit hour course, only 3 credit hours will count toward fulfilling Area A2. The remaining credit hour will be applied toward Specific Requirements.

### Other Program Requirements
- A minimum grade of "C" is required for all CENG courses.
- A minimum grade of "C" is required for all TCM courses.
- At least 33 credit hours of approved upper division Engineering credit hours must be earned at Georgia Southern.
- At least 100 hours of Departmental pre-approved community service must be completed prior to graduation clearance.
- Students must take the Fundamentals of Engineering (FE) Exam prior to Graduation.
Honors in Civil Engineering

To graduate with Honors in Civil Engineering a student must:

• Be admitted in the University Honors Program

• Complete a Honors thesis (in a minimum of two regular semesters) for a total of 3-credit hours in Honors Research (UHON 4999 (http://catalog.georgiasouthern.edu/search/?P=UHON%204999))

• Maintain a 3.3 institution grade point average, including a 3.5 minimum GPA in all major courses applied towards graduation.

Advisement

Statesboro: CoEC Student Services Center, IT Building 1208, PO Box 7996, 912-478-4877