**Allen E. Paulson College of Engineering and Computing Major: B.S. Construction Engineering**

**Student Services Center Program Map Catalog Year:**

Student Name: Eagle ID:

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| **Fall** | |  | **Sem** | **Grade** | **Hrs** | **Milestones** | |
| **Freshman** | ENGL 1101 | Composition I |  |  | 3 | Complete an Area A Math with a C or better. |  |
| HIST 2110/2111/2112 | US–A Comp Survey or US History |  |  | 3 |  | |
| MATH 1441 | Calculus I |  |  | 4 | Complete ENGL 1101 with a C or better. |  |
| CENG 1133 | Civil Eng. Graphics |  |  | 3 |  | |
| FYE 1220 | First Year Seminar |  |  | 2 | Complete CENG 1133 with a C or better. |  |
| Total | | | | 15 | Meet your advisor. | |
| Tips: Do not drop FYE 1220. Visit the Office of Career and Professional Development. Invest in a planner and maintain its use. Explore campus activities and organizations. Take advantage of academic success workshops and  tutoring opportunities | | | | | | |

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| **Spring** |  | **Sem** | **Grade** | **Hrs** | **Milestones** | |
| ENGL 1102 | Composition II |  |  | 3 | Complete MATH 2242 with a C or better.  Complete ENGL 1102 with a C or better.  Complete PHYS 2211 with a C or better. |  |
| PHYS 2211K | Principles of Physics I |  |  | 4 |  |
| MATH 2242 | Calculus II |  |  | 4 |  |
| POLS 1101 | American Government |  |  | 3 |  | |
| KINS 1525 | Concepts of Health & PE |  |  | 2 | Complete Area A within first year. |  |
| Total | | | | 16 | Complete 30 or more hours-min. 2.0 GPA. | |
| Tips: Get involved in campus activities/organizations if not already. Consider taking MATH 2242 over the summer if not completed by end of spring (avoid taking it during a short term if possible). Complete 25 hours of  Community Service. | | | | | | |

Target credit hours: 31/130 Total credit hours earned:

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| **Fall Sem Grade Hrs** | | | | | | **Milestones** | | |  |
| **Sophomore** | ENGR 2231 | Engineering Mechanics I |  |  | 3 | Complete ENGR 2231/TCM 2233 w/a C+ |  | |
| PHYS 2212K | Principles of Physics II |  |  | 4 |  | | |
| TCM 2430 | Construction Safety |  |  | 3 | Pass Physics II. |  | |
| CENG 1731 | Civil Engineering Computations |  |  | 3 |  | |  |
| CENG 2231  or TCM 2233 | Surveying or Construction Surveying |  |  | 3 | Complete CENG/TCM courses with a C or better.  Begin attending career fair events each semester. | | |  |
| Total | | | | 16 |
| Tips: Create Resume and start exploring internship options. Look into research opportunities. | | | | | | | |

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| **Spring** |  | **Sem** | **Grade** | **Hrs** | **Milestones** | |
| ENGR 3233 | Mechanics of Materials |  |  | 3 |  |  |
| CHEM 1310 | Compreh. Gen’l Chem |  |  | 4 | Complete Legislative Requirements within first  60 hrs.  Complete CENG/TCM courses with a C or  better. | |
| TCM 3330 | Quantity Estimating |  |  | 3 |
| CENG 2131 | CE Fluid Mechanics |  |  | 3 |
| STAT 2231 | Intro to Statistics I |  |  | 3 |
| CORE 2000 | CORE Capstone Course |  |  | 1 |
| Total | | | | 17 |
| Tips: Check into internships/co-ops. Contact the Office of Career and Prof. Development to register for the audit -credit co-op/internship course. If you want Technical Elective credit for the course also register for CENG 4730. Complete 25 hours of Community Service. | | | | | | |

Target credithours: 64/130 Total credit hours earned:

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| **Fall Sem Grade Hrs** | | | | | | **Milestones** | |
| **Junior** | ECON 2105 | Econ in Global Society |  |  | 3 | Complete CENG courses with a C or better. |  |
| CENG 3131 | Intro to Env. Engineering |  |  | 3 |  | |
| CENG 3331 | Structural Analysis |  |  | 3 | Attend the Career Fair. |  |
| CENG 3232 | Soil Mechanics |  |  | 3 |  | |
| CENG 4135 | Highway Design |  |  | 3 |
| TCM 5433 | Planning & Scheduling |  |  | 3 |
| Total | | | | 18 |
| Tips: Consider taking on a leadership role in a campus organization. | | | | | | |

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| **Spring** |  | **Sem** | **Grade** | **Hrs** | **Milestones** | |
| CENG 3135/ | Const. Cost Control & |  |  | 3 | Complete CENG/TCM courses with a C or |  |
| TCM 3331 | Finance/Construction Finance |  | better. Complete graduation plan. |
| GEOL 1340 | Area ”D” Science **1** |  |  | 4 |  | |
| CENG 3333 | Reinforced Concrete Design |  |  | 3 |
| CENG 3233 | Civil Engr’g Materials |  |  | 3 | Work with Advisor to complete grad. plan. |  |
| TCM 3332 | Construction Equipment |  |  | 3 |  | |
| TCM 4710 | Construction internship |  |  | 1 |
| Total | | | | 17 | Apply for graduation. |  |
| Tips: Consider a specialization in Construction Engineering. If considering graduate school, identify possible schools and obtain admissions info. Research potential employers. Complete 25 hours of Community Service. Prepare for the Fund. of Engr. Exam.  1. GEOL 1340 (Required to Graduate with BSConE) | | | | | | |

Target credit hours: 99/130 Total credit hours earned:

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| **Fall Sem Grade Hrs** | | | | | | **Milestones** | |
| **Senior** |  | Construction Elective 2 |  |  | 3 | Complete CENG/TCM courses with a C+. |  |
| CENG 4331 | Structural Steel Design |  |  | 3 |  | |
| TCM 5431 | Const. Cost Estimating |  |  | 3 | Review grad.requirements w/your advisor. |  |
| CENG 4518 | Intro to Senior Project |  |  | 1 |  | |
|  | Area “C” Elective 13 |  |  | 3 | Register-courses for degree completion. |  |
|  | Area “C” Elective II 4 |  |  | 3 |  |
| Total | | | | 16 |  | |
| Tips: Begin the job search process. Complete Volunteer Hours. 2. See back of Program Map for a list of approved Technical Electives  3. ENGL 2100, ENGL 2111, ENGL 2112, PHIL 2010, or PHIL 2030. 4COMM 1110 (Required to Graduate with BSConE). | | | | | | |

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| **Spring** |  | **Sem** | **Grade** | **Hrs** | **Milestones** | |
|  | Construction Elective 2 |  |  | 3 | Accum. at least 130 hours of acad. Credit. |  |
| HIST 111\_ | Survey of World History I or II |  |  | 3 | Attempt the Fundamentals of Engineering Exam.  Complete 100 hours of Community Service and turn in your Student Engagement Transcript.  Graduate! | |
|  | GEOG 1130 Recommended |  |  | 3 |
| CENG 4539 | Senior Project |  |  | 3 |
|  | Free Elective (SACS) |  |  | 3 |
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| Total | | | | 15 |
| Tips: If interested in graduate school, take the necessary entrance exams. Apply for jobs. Develop contacts and relationships with potential employers. 2. See back of Program Map for a list of approved Technical Electives 5 See Curriculum Sheet or Core Curriculum for Options | | | | | | |

Target credithours: 130/130 Total credit hours earned:

Georgia Southern University accepts the premise that ultimately a student's program is his or her own responsibility.

Taking any coursework that does not fit within your chosen program of study may impact your financial aid. 2018 - 2019 Catalog

# Civil Engineering Electives

**Course # & Title Credits Prerequisites**

**CENG 4133** - Transportation Systems (3 Cr.) (CENG 2231 w/C & MATH 3337 w/C) **CENG 4730** - Experimental Learning – COOP (3 Cr.) (Completion of CENG 2231 or TCM 2233) **CENG 4890/S** – Special Problems in CE (3 Cr.) (Permission of the Instructor)

**CENG 5090** - Selected Topics in CE (3 Cr.) (Permission of instructor)

**CENG 5133** - Water Supply & Wastewater Coll. Syst. (3 Cr.) (CENG 3132 w/C or permission of instructor) **CENG 5136** - Watershed Management (3 Cr.) (CENG 3131 w/C or permission of instructor) **CENG 5137** - Engineering Hydrology & Hydraulics (3 Cr.) (CENG 2131 w/C or permission of instructor) **CENG 5138** - Water & Sanitation for Int’l Development (3 Cr.) (CENG 2131 w/C)

**CENG 5139** - Adv. Water & Wastewater Treatment (3 Cr.) (CENG 3132 w/C or permission of instructor)

**CENG 5231** - Pavement Analysis and Design (3 Cr.) (CENG 3232 w/C & CENG 3233 w/C or permission of instructor)

**CENG 5232** - Foundation Design (3 Cr.) (CENG 3232 w/C or permission of instructor)

**CENG 5234** - Asphalt Mix Design (3 Cr.) (CENG 3233 w/C or permission of instructor)

**CENG 5331** - Advanced Structural Analysis (3 Cr.) (CENG 1731 w/C, CENG 3331 w/C & MATH 2331 w/C or permission of Instructor.)

**CENG 5332** - Prestressed Concrete Design (3 Cr.) (CENG 3333 w/C or permission of instructor)

**CENG 5333** - Adv. Reinforced Concrete Design (3 Cr.) (CENG 3333 w/C)

**CENG 5334** - Adv. Structural Steel Design (3 Cr.) (CENG 4331 w/C)

**CENG 5335** - Structural Dynamics (3 Cr.) (ENGR 2232 w/C and CENG 5331 w/C or 5331 G w/C, or permission of Instructor)

**CENG 5336** - Intro to Finite Elements (3 Cr.) (CENG 3331 w/C & MATH 2331 w/C or permission of instructor)

**CENG 5337** - Adv. Strength (3 Cr.) (CENG 5331 w/C or permission of instructor)

**CENG 5338** - Theory of Elasticity (3 Cr.) (CENG 5331 w/C or permission of instructor)

**CENG 5339** - Theory of Elastic Stability (3 Cr.) (CENG 5331 w/C or permission of instructor)

**CENG 5431** - Advanced Surveying (3 Cr.) (CENG 2231 w/C or TCM 2233 w/C or Dept. Consent) **CENG 5432** - GIS in Geomatics/Transportation (3 Cr.) (CENG 2231 w/C or TCM 2233 w/C or Dept. Consent) **CENG 5433** - Drainage & Erosion Control (3 Cr.) (CENG 5137 w/C or 5137G w/C or Dept. Consent) **CENG 5434** - Surveying History & Law (3 Cr.) (CENG 2231 w/C or TCM 2233 w/C or Dept. Consent) **CENG 5435** - Intro to Terrestrial LiDAR (3 Cr.) (Approval of Instructor)

**CENG 5436 -** Intro to Close-Range Photogrammetry (3 Cr.) (Approval of instructor)

**LSTD 3230** – Construction Law (3 Cr.) (None)

**TCM 3333** – Building Codes (3 Cr.) (None)

**TCM 4090/S** – Selected Topics in Construction (3 Cr.) (Permission of the Instructor)

**TCM 5330** - Green Building & Sustainable Con. (3 Cr.) (TCM 1131 w/C & TCM 2234 w/C or permission of instructor)

**TCM 5333** - Building Information Modeling (3 Cr.) (TCM 1232 w/C or ENGR 1133 w/C or CENG 1133 w/C or permission of Instructor)

**\*Technical Electives are subject to change every semester. Please see advisor for updated list of approved Technical Electives.**

# Advisement

In the College of Engineering and Computing, you are **required** to meet with your advisor for a **face-to-face** advisement appointment at least once each semester before you can register forclasses.

You will be contacted through your Georgia Southern University student email account with details regarding how to set up an advisement appointment. Georgia Southern University email is the **only** official means of communication from the university. It is **your responsibility** to check your Georgia Southern University email address regularly and respond to all emails in a professional and respectful manner.

# Important Policies

Withdrawal Policy

* As an undergraduate at Georgia Southern University, you may withdraw from a maximum of **six (6)** courses for your **entire**

enrollment at the University.

* Students who have reached their maximum number of withdrawals may elect to receive a “withdraw-failing” (WF) grade in the course, which is calculated as an “F” for GPApurposes.

First Day AttendancePolicy

* University policy requires that you attend the first class meeting of all classes for which you are registered.
* If you do not attend the first class meeting of a course for which you are registered, you will be dropped from the course.
* It is your responsibility to verify course drops and check that fees are adjusted. Graduation Requirements
* You must complete the online graduation application in your WINGS account as soon as you complete 90 semester hours.
* See Georgia Southern University Catalog for additional graduation requirements.

**Campus Resources**

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| Academic Success Center Cone Hall 478-5371 | Career & Professional Development Williams Center 478-5197 | Financial Aid Rosenwald Building 478-5413 |
| Dean of Students Russell Union 478-3326 | Student Accessibility Resource Center Cone Hall 478-1566 | Counseling Center Forrest Drive 478-5541 |