Electrical Engineering
B.S.E.E.

Degree Requirements: 130 Credit Hours

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

<table>
<thead>
<tr>
<th>Credit Hours</th>
<th>General Requirements (Core Areas A-E)</th>
<th>42</th>
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<td>Additional Requirements</td>
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<tr>
<td>Area F - Courses Appropriate to Major</td>
<td>CHEM 1310 Comprehensive General Chemistry</td>
<td>4</td>
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<td>ENGR 1731 Computing for Engineers</td>
<td>3</td>
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<td>ENGR 1732 Program Design for Engineers</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MATH 2243 Calculus III</td>
<td>4</td>
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<tr>
<td></td>
<td>PHYS 2212K Principles of Physics II</td>
<td>4</td>
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Specific Requirements

Carryover from Area A2 | 1
Carryover from Area D | 1
ENGR 2341 Introduction to Signal Processing w/Lab | 4
MATH 3230 Ordinary Differential Equations | 3
WRIT 2130 Technical Communication | 3

Major Requirements

EENG 3230 Electromagnetic Fields | 3
EENG 3241 Electric Machines w/Lab | 4
EENG 3337 Power Systems Fundamentals | 3
EENG 3345 Circuit Analysis II w/Lab | 4
EENG 3340 Microcontrollers with Lab | 4
EENG 3341 Microelectronics with Lab | 4
EENG 3420 Linear Systems | 2
EENG 3421 Advanced Engineering Analysis | 2
EENG 4620 Senior Project I | 2
EENG 4621 Senior Project II | 2
EENG 5431 Control Systems with Lab | 3
EENG 5540 Communication Systems with Lab | 4
ENGR 2323 Digital Design Lab | 2
ENGR 2332 Introduction to Computer Engineering | 3
ENGR 2334 Circuit Analysis | 3

Select at least 6 credit hours from the following Electrical Engineering courses:

EENG 4890 Directed Study in Electrical and Computer Engineering
EENG 5090 Selected Topics in Electrical and Computer Engineering
EENG 5234 Nuclear Power System Fundamentals
EENG 5235 Converters Control Techniques
EENG 5242 Power Systems Protection with Lab
EENG 5243 Power Electronics with Lab
EENG 5244 Smart Grids Technology Fundamentals with Lab
EENG 5330 Network Science
EENG 5341 Robotic Systems Design with Lab
EENG 5342 Computer Systems Design with Lab
EENG 5432 Programmable Logic Controllers with Lab
EENG 5433 Machine Learning and Adaptive Control

Free Elective

Select 3 credit hours of Free Electives | 3

1 While Calculus I (MATH 1441) is 4 credit hours, only 3 credit hours will count toward fulfilling Area A2. The remaining credit hour will be applied toward Specific Requirements.
2 While Calculus II (MATH 2242) is 4 credit hours, only 3 credit hours will count toward fulfilling Area D. The remaining credit hour will be applied toward Specific Requirements.
3 The listed courses are recommended in Area D

Other Program Requirements

- At least 33 credit hours of approved upper division Engineering credits must be earned at Georgia Southern.
- A grade of “C” or better is required for all ENGR and EENG courses and their corresponding co-requisites and pre-requisites.

Honors in Electrical Engineering

To graduate with Honors in Electrical Engineering a student must:

- Be admitted to the University Honors Program
- Complete a capstone project in Senior Project I (EENG 4620) and Senior Project II (EENG 4621)
- Maintain a 3.3 institution grade point average, including a 3.5 minimum GPA in all major courses applied towards graduation

Advisement

CEC Office of Student Services, Room 1208, Allen E. Paulson College of Engineering and Computing, Telephone: (912) 478-4877.