Electrical Engineering B.S.E.E.

Degree Requirements: 130 Credit Hours

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

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<th>General Requirements (Core Areas A-E)</th>
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Area F - Courses Appropriate to Major

- CHEM 1310 Comprehensive General Chemistry 4
- ENGR 1731 Computing for Engineers 3
- ENGR 1732 Program Design for Engineers 3
- MATH 2243 Calculus III 4
- PHYS 2212K Principles of Physics II 4

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.