

 <b>FLORIDA ATLANTIC UNIVERSITY</b>	<b>NEW/CHANGE PROGRAM REQUEST</b> <b>Undergraduate Programs</b>		UUPC Approval <u>2-1-21</u> UFS Approval _____ Banner Posted _____ Catalog _____
	<b>Department</b> CEECS  <b>College</b> CoE&CS		
<b>Program Name</b> BSEE Electrical Engineering		<input type="checkbox"/> <b>New Program</b>  <input checked="" type="checkbox"/> <b>Change Program</b>	<b>Effective Date</b> <small>(TERM &amp; YEAR)</small>  Fall 2021
<b>Please explain the requested change(s) and offer rationale below or on an attachment</b>  Minor catalog changes required by ABET 2020 review. 1. All courses that count toward the degree must be completed with grade of "C" or better. 2. Math minors can substitute STA4032 for STA4821 3. Beyond 30 credits, students may substitute a computer engineering technical elective for EGN1002-Fundamentals of Engineering 4. Cleaned up the subscripts in the curriculum tables to match			
<b>Faculty Contact/Email/Phone</b> Hanqi Zhuang/zhuang@fau.edu/7-3413		<b>Consult and list departments that may be affected by the change(s) and attach documentation</b>	
<b>Approved by</b> Department Chair <u>Hanqi Zhuang</u> College Curriculum Chair <u>Dan Meeroff</u> College Dean <u>Frederick Bloetscher</u> UUPC Chair <u>Jerry Haky</u> Undergraduate Studies Dean <u>Edward Pratt</u> UFS President _____ Provost _____		<b>Date</b> <u>1-15-21</u> <u>1-19-21</u> <u>1-20-21</u> <u>2-2-21</u> <u>2-2-21</u> _____ _____	

Email this form and attachments to [mjenning@fau.edu](mailto:mjenning@fau.edu) one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

# Electrical Engineering

## Bachelor of Science in Electrical Engineering

(Requires 125 credits.)

### Admission Requirements

All students must meet the minimum admission requirements of the University. Please refer to the [Admissions section](#) of this catalog.

All students must meet the preprofessional requirements listed [above](#) in order to be accepted into the Electrical Engineering program.

### Prerequisite Coursework for Transfer Students

Students transferring to Florida Atlantic University must complete both lower-division requirements (including the requirements of the Intellectual Foundations Program) and requirements for the college and major. Lower-division requirements may be completed through the A.A. degree from any Florida public college, university or community college or through equivalent coursework at another regionally accredited institution. Before transferring and to ensure timely progress toward the baccalaureate degree, students must also complete the prerequisite courses for their major as outlined in the [Transition Guides](#).

All courses not approved by the Florida Statewide Course Numbering System that will be used to satisfy requirements will be evaluated individually on the basis of content and will require a catalog course description and a copy of the syllabus for assessment.

### General Degree Requirements

The minimum number of credits required for the Bachelor of Science in Electrical Engineering degree is 125 credits. All courses that count toward the degree must be completed with a grade of "C" or better. The Bachelor of Science in Electrical Engineering degree will be awarded to students who meet all admission and degree requirements of the department and the University. Notes below are referenced in the tables following the list.

#### Notes:

(1) Students entering FAU with less than 30 credits must satisfy the course requirements specified in the catalog section, [Degree Requirements](#). Students entering FAU with more than 30 credits (transfer students) must see the undergraduate advisor for an evaluation of courses taken at another school. The general education requirements are normally satisfied if a student has an Associate of Arts (A.A.) degree from a Florida community or state college. **Note:** Once students earn beyond 30 credits, they may take an electrical engineering elective to substitute for EGN 1002, Fundamentals of Engineering.

(2) Fundamentals of Engineering is the preferred course; however, this course may not be available at all institutions. In certain instances, substitutions for this course may be allowed provided that the credits are a part of an approved pre-engineering A.A. degree program.

(3) Complete physics, calculus, mathematics and math elective courses with a grade of "C" or better in each course.

(4) Receive a "C" or better in all EE core courses.

(5) All EE electives must be approved by the undergraduate advisor.

(6)(2) All Technical electives must be approved by the undergraduate advisor. In general, a technical elective is defined as an upper-division course with significant technical disciplinary content. See advisor for approved courses.

(3) For those students who are also pursuing a math minor, STA4032, Probability and Statistics for Engineers, can be substituted for STA 4821, Stochastic Models for Computer Science.

(6) See advisor for approved courses.

<b>Specific Degree Requirements</b>	
<b>General Education (1)</b>	
Foundations of Written Communication	6
Foundations of Society and Human Behavior	6
Foundations of Global Citizenship	6
Foundations of Humanities	6
<b>Subtotal</b>	<b>24</b>

<b>Mathematics and Science (2) (Lower Division)</b>		
Fundamentals of Engineering <del>(2)</del> (1)	EGN 1002	3
Calculus with Analytic Geometry 1 (3)	MAC 2311	4
Calculus with Analytic Geometry 2 (3)	MAC 2312	4
Calculus with Analytic Geometry 3 (3)	MAC 2313	4
Introduction to Programming in C	COP 2220	3
General Physics for Engineers 1 (3)	PHY 2048	3
General Physics Lab 1 (3)	PHY 2048L	1
Physics for Engineers 2 (3)	PHY 2044	3
General Physics Lab 2 (3)	PHY 2049L	1
Science (7)		4
<b>Subtotal</b>		<b>30</b>

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<b>Electrical Engineering Core (4)</b>		
Circuits 1	EEL 3111	3
Introduction to Logic Design	CDA 3201C	4
Electronics 1	EEE 3300	4
Analysis of Linear Systems	EEL 4656	3
Stochastic Models for Computer Science (3)	STA 4821	3
Electronics Laboratory 1	EEL 3118L	2
Electronics 2	EEE 4361	3
Electromagnetic Fields and Waves	EEL 3470	3
Introduction to Microprocessor Systems	CDA 3331C	3
Electronics Laboratory 2	EEL 4119L	3
RI: Engineering Design 1 (Course research intensive eff. spring 2021)	EGN 4950C	3
RI: Engineering Design 2 (Course research intensive eff. spring 2021)	EGN 4952C	3
Communication Systems 1	EEL 4512	3
Control Systems 1	EEL 4652	3
Control Systems Lab	EEL 4652L	1 or
Communication Systems Lab	EEL 4512L	1
Introduction to Digital Signal Processing	EEE 4510	3
Electric Power Systems	EEL 4216	3 or

Electrical Machines	EEL 4220	3
<b>Subtotal</b>		<b>50</b>

<i>Electrical Engineering Electives</i> (5)-(3)		12
<i>Electrical Engineering or Technical Electives</i> (5,6)-(3)		6
<i>Mathematics Elective</i> (5)-(3)		3
<b>Subtotal</b>		<b>21</b>
<b>Total</b>		<b>125</b>

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