FLORIDA ATLANTIC UNIVERSITY	NEW/CHANGE PROGR Undergraduate P Department Computer & Elec Eng and C College Engineering and Comp Scien	UUPC Approval <u>3-29-21</u> UFS Approval Banner Posted Catalog		
<b>Program Name</b> Bachelor of Scier	nce in Computer Engineering	New Program ✓ Change Program	Effective Date (TERM & YEAR) Fall 2021	
Please explain the requested change(s) and offer rationale below or on an attachment EEE 4541 is added as an alternative to STA 4821. With this change students can take either EEE 4541 or STA 4821 to meet program requirements.				
Faculty Contact/ HARI KALVA, hkal	va@fau.edu, 561-297-0511	the change(s) and attach	nents that may be affected by n documentation	
UUPC Chair		ally signed by Hanqi Zhuang 2021.03.05 18:29:17 -05'00'	Date <u>3-18-21</u> <u>3-18-21</u> <u>3-29-21</u> <u>3-29-21</u> 	

Email this form and attachments to <u>mjenning@fau.edu</u> one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

# **Bachelor of Science in Computer Engineering**

(Requires 124 credits.)

# Admission Requirements

All students must meet the minimum admission requirements of the University. Please refer to the <u>Admissions</u> section of this catalog.

All students must meet the preprofessional requirements listed <u>above</u> in order to be accepted into the Computer 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* and below.

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 Bachelor of Science in Computer Engineering degree will be awarded to students who meet all admission and degree requirements of the department and the University. Notes below are referred to in the tables following the list.

# Notes:

(1) Students entering FAU with fewer than 30 credits must satisfy the course requirements specified in the catalog section, <u>Degree Requirements</u>. 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.

(2) Grade of "C" or better is required.

(3) A "C" or better is in all Computer Engineering core courses.

(4) 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.

(5) See advisor for approved courses.

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

Mathematics and Science (Lower Division)			
Calculus with Analytic Geometry 1 (2)	MAC 2311	4	
Calculus with Analytic Geometry 2 (2)	MAC 2312	4	
Calculus with Analytic Geometry 3 (2)	MAC 2313	4	
Engineering Mathematics 1	MAP 3305	3	

General Physics for Engineers 1 (2) PHY 2048		
General Physics Lab 1 (2) PHY 2048L		
Physics for Engineers 2 (2)	PHY 2044	3
General Physics Lab 2 (2)	PHY 2049L	1
Science (5)		
Subtotal		27

Computer Engineering Core Courses (3)			
Foundations of Computer Science	COP 3014	3	
Introduction to Logic Design CDA 3201C		4	
Introduction to Microprocessor Systems	CDA 3331C	3	
Introduction to Programming in C COP 2220		3	
Data Structures and Algorithm Analysis	COP 3530	3	
Computer Operating Systems	COP 4610	3	
Principles of Software Engineering	CEN 4010	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	
Discrete Mathematics	MAD 2104	3	
Stochastic Models for Computer Science	STA 4821 OR	3	
Stochastic Processes and Random Signals	EEE 4541	3	
Subtotal			

<b>Computer Engineering Electives (3)</b> (select four of the following)				
Structured Computer Architecture	CDA	4102	3	
Introduction to Computer Systems Performance Evaluation			3	
Introduction to Embedded System Design		A 4630	3	
ntroduction to VLSI CDA 4210		A 4210	3	
Introduction to Data Communications		NT 4104 3		
Computer Network Projects C		NT 4713 3		
Mobile App Projects C		OP 4655 3		
CAD-Based Computer Design C		DA 4204 3		
Subtotal			12	2
Other Engineering (3)				
Fundamentals of Engineering (2)	E	EGN 1002		3
Circuits 1	EI	EL 3111		3
Electronics 1	EI	EE 3300		4
Electronics Laboratory 1		EL 3118L		2
Subtotal				12

Technical Electives (as approved by advisor) (4), (5)

15

Total	124

Sample Four-Year Program of Study For the sample four-year program of study for the Bachelor of Science in Computer Engineering, refer to the <u>Curriculum Sheets and Flight Plans</u> by major.