TATI	NEW/CHANGE PROGR	RAM REQUEST	UUPC Approval <u>3-29-21</u>		
HAU	Undergraduate Programs		UFS Approval		
2 4(10.			Banner Posted		
FLORIDA ATLANTIC	<b>Department</b> Computer & Elec Eng and 0	Comp Science	Catalog		
UNIVERSITY	College Engineering and Comp Science				
Program Name		New Program	Effective Date (TERM & YEAR)		
bacrietor of Scien	nce in Computer Science	Change Program	Fall 2021		
Please explain	the requested change(s) and offer r	ationale 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/	Email/Phone	Consult and list departn	nents that may be affected by		
HARI KALVA, hkalva@fau.edu, 561-297-0511		the change(s) and attach documentation			
Approved by		ally signed by Hanqi Zhuang	Date		
Department Chair	partment Chair				
College Curriculum Chair Dan Mesroff College Dean Frederick Bloetscher			3-18-21		
College Dean Frederick Bloetscher			3-18-21		

Email this form and attachments to  $\underline{mjenning@fau.edu}$  one week before the UUPC meeting so that materials may be viewed on the UUPC website prior to the meeting.

**UFS President** 

Provost

UUPC Chair Jerry Haky
Undergraduate Studies Dean Edward Pratt

## **Catalog changes**

#### **Bachelor of Science in Computer Science**

#### Core

All students must take the following core courses, which total 46 credits:

Computer Science Core (2)					
Introduction to Programming in C	COP 2220	3			
Foundations of Computer Science	COP 3014	3			
Introduction to Logic Design	CDA 3201C	4			
Data Structures and Algorithm Analysis	COP 3530	3			
Introduction to Internet Computing	COP 3813	3			
Computer Operating Systems	COP 4610	3			
Stochastic Models for Computer Science	STA 4821 OR	3			
Stochastic Processes and Random Signals	EEE 4541	3			
Introduction to Database Structures	COP 3540	3			
Introduction to Microprocessor Systems	CDA 3331C	3			
Formal Languages and Automata Theory	COT 4420	3			
Design and Analysis of Algorithms	COT 4400	3			
Principles of Software Engineering	CEN 4010	3			
Programming Languages	COP 4020	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			
Subtotal		46			
Computer Science Electives (4)					
Free Electives (4)					
Total					

#### **Second Bachelor's Degree**

This program is for those individuals with a degree in another discipline who are seeking a Bachelor of Science with major in Computer Science degree at FAU.

### **Admission Requirements**

Students seeking a bachelor's degree or graduate degree in another discipline must satisfy all admission requirements of the first bachelor's degree in Computer Science at FAU.

# **Degree Requirements**

The minimum number of FAU credits needed to earn a second bachelor's degree in Computer Science is 30 credits at the 3000 level or higher.

1. Students must have completed at least 15 credits in mathematics including discrete mathematics with mathematical rigor at least equivalent to introductory calculus. Each course must be completed with a minimum grade of "C."

- 2. Students must have completed at least 6 credits (or equivalent) in natural science coursework intended for science and engineering majors. Each course must be completed with a minimum grade of "C."
- 3. Students must complete 36 credits in computer science core and 6 credits in computer science electives. Each course must be completed with a minimum grade of "C."

Mathematics (15 Credits)**				
Discrete Mathematics (required)	MAD 2104	3		
12 credits from the following courses or equivalent				
Methods of Calculus	MAC 2233	3		
Calculus with Analytic Geometry 1	MAC 2311	4		
Calculus with Analytic Geometry 2	MAC 2312	4		
Discrete Mathematics (3)	MAD 2104	3		
Numerical Methods	MAD 3400	3		
Differential Equations 1	MAP 2302	3		
Engineering Math 1	MAP 3305	3		
Introduction to Queueing Theory	MAP 4260	3		
Matrix Theory	MAS 2103	3		
Modern Algebra	MAS 4301	3		
Experimental Design and Statistical Inference	PSY 3234	3		
Introductory Statistics	STA 2023	3		
Probability and Statistics for Engineers	STA 4032	3		
Probability and Statistics 1	STA 4442	3		
Stochastic Models for Computer Science	STA 4821 OR	3		
Stochastic Processes and Random Signals	EEE 4541	3		
Subtotal				