FAU FLORIDA ATLANTIC UNIVERSITY	**NEW/CHANGE PROGRAM REQUEST** **Undergraduate Programs**	UUPC Approval _____ UFS Approval _____ Banner _____ Catalog _____
	Department **College**	

Program Name	**New Program*** **Change Program***	**Effective Date** *(TERM & YEAR)*

Please explain the requested change(s) and offer rationale below or on an attachment.

*All new programs and changes to existing programs must be accompanied by a catalog entry showing the new or proposed changes.

Faculty Contact/Email/Phone	**Consult and list departments that may be affected by the change(s) and attach documentation**

Approved by		*Date*
Department Chair	*Hai Kd Va*	2/12/2023
College Curriculum Chair	Hongbo Su	2/13/2024
College Dean		2/14/24
UUPC Chair		
Undergraduate Studies Dean		
UFS President		
Provost		

Email this form and attachments to mjenning@fau.edu seven business days before the UUPC meeting.

FAUprogramchangeUG, revised Fall 2019

COMPUTER SCIENCE
BACHELOR OF ARTS IN COMPUTER SCIENCE (B.A.C.S.)

(Minimum of 120 credits required)

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

The Bachelor of Arts in Computer Science (B.A.C.S.) with Major in Computer Science is intended for students interested in software development. The program prepares students for a career in the field of Computer Science with focus on software development. The B.A. in Computer Science is accredited by the Southern Association of Colleges and Schools Commission on Colleges, but unlike FAU's B.S. in Computer Science, it is not accredited by the Engineering Accreditation Commission of ABET.

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 an Associate in Arts (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 listed with 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.

Degree Requirements
The minimum number of credits required for the Bachelor of Arts in Computer Science (B.A.C.S.) degree is 120 credits. This degree will be awarded to students who satisfy all admission and degree requirements for the department.

Students entering FAU with fewer 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 satisfied normally if a student has an Associate in Arts (A.A.) degree from a Florida community or state college.

Students must complete 36 credits of *B.A.C.S.* courses and 21 credits of *Computer Science Electives* with a grade of "C" or better.

Pass/Fail Grades: Courses taken as pass/fail are not accepted for Computer Science students.

Specific Degree Requirements

General Education

Foundations of Written Communication	6
Foundations of Society and Human Behavior	6
Foundations of Global Citizenship	6
Foundations of Humanities	6
Foundations of Science and the Natural World	6
Subtotal	**30**

Mathematics

Methods of Calculus	MAC 2233
Introductory Statistics	STA 2033
Subtotal	

B.A.C.S. Courses

Introduction to Data Science and Analytics	CAP 4773	3
Computer Logic Design	CDA 3203	3
Principles of Software Engineering	CEN 4010	3
Introduction to Programming in Python	COP 3035	3
Data Structures and Algorithm Analysis with Python	COP 3410	3

Introduction to Database Structures	COP 3540	3
~~Introduction to Internet Computing~~	~~COP 3813~~	3
Introduction to Web Programming	COP 3862	3
~~Python Programming~~	~~COP 4045~~	3
~~Object-Oriented Design and Programming~~	~~COP 4331~~	3
~~Computer Operating Systems~~	~~COP 4610~~	3
~~Advanced Database Systems~~	~~COP 4703~~	3
Foundations of Computing	COT 2000	3
Introduction to Software Design	CEN 3062	3
Design and Analysis of Algorithms	COT 4400	3
Introduction to AI	CAP 4630	3
Network and Data Security	CNT 4411	3
Subtotal		**36**

Computer Science Electives	**21**
Free Electives	27
Total	**120**

Computer Science Electives

All students must take 21 credits of approved elective courses. Certain 3000- and 4000-level courses offered by the Electrical Engineering and Computer Science Department may be used as Computer Science electives. Certain 5000- or 6000-level courses offered by the Electrical Engineering and Computer Science Department may be taken as Computer Science electives. Students must see an advisor for a current list of elective courses. Students seeking a specialty may consider taking electives in an area of study. A few suggested areas of concentration follow.

Internet Technology		
~~Introduction to Data Communication~~	~~CNT 4104~~	3
~~Foundations of Cybersecurity~~	~~CNT 4403~~	3
Full-Stack Web Development	COP 4808	
Mobile App Projects	COP 4655	3
Advanced Database Systems	COP 4703	3
Cybersecurity		
Cyber Physical System Security	CIS 4213	3
~~Operating Systems Security~~	~~CIS 4367~~	3
Foundations of Cybersecurity	CNT 4403	3
Network and Data Security	CNT 4411	3

Machine Learning and Data Science		
Introduction to Deep Learning	CAP 4613	3
~~Introduction to Artificial Intelligence~~	~~CAP 4630~~	3
Introduction to Data Mining and Machine Learning	CAP 4770	3
One of the ~~The~~ following courses may be taken as Computer Science electives		
Directed Independent Study	COT 4900	1-3
Topics in Computer Science and Engineering	COT 4930	1-3
Topics in Computer Science	COT 5930	1-3
Professional Internship	IDS 3949	0-3

Professional Internship
Students must have completed COP 3410, Data Structures and Algorithm Analysis with Python, with a minimum grade of "C" before being eligible to register for a professional internship. Approval through the Career Center is required prior to enrollment. Students are permitted to take no more than the equivalent of one course (3 credits) to satisfy degree requirements.

SECOND BACHELOR'S B.A.C.S. DEGREE

This program is for those individuals with a degree in another discipline who are seeking a Bachelor of Arts 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 B.A.C.S. at FAU.

Degree Requirements
The minimum number of FAU credits needed to earn a second bachelor's degree (B.A.C.S.) is 30 credits at the 3000 level or higher.

1. Students must have completed 36 credits of core courses in the B.A.C.S. program. Each course must be completed with a minimum grade of "C."

2. Students must have completed 6 credits of Computer Science electives. Each course must be completed with a minimum grade of "C."

3. Students must have completed the math prerequisites necessary to take the core and elective courses in the program.

~~COMPUTER SCIENCE~~
~~BACHELOR OF ARTS IN COMPUTER SCIENCE (B.A.C.S.) PROFESSIONAL PROGRAM~~

~~The Bachelor of Arts in Computer Science (B.A.C.S.) Professional Program is designed specifically for working professionals who may advance their careers with an accelerated undergraduate program and obtain a bachelor's degree in Computer Science while continuing to work in their professional careers. The Professional program includes evenings, weekends and online materials using Canvas. This degree program requires 36 core computer science credits and 6 credits of computer science electives. The duration of each course may be four, eight or sixteen weeks depending on the course format. Students are normally expected to complete the program in two years.~~

~~Admission/Degree Requirements~~
~~Applicants are required to meet the same admission and degree requirements as for the Second Bachelor's Degree in B.A.C.S.~~

~~Program Fees~~
~~The B.A.C.S. Professional Program is a full-service, all-inclusive program. The fees cover all program costs including tuition, course materials and graduation activities. To view our full cost of attendance information page, visit https://www.fau.edu/finaid/other/cost-of-attendance/.~~

~~Application Process and More Information~~
~~To apply or receive more information about this program, visit the Electrical Engineering and Computer Science website or call 561-297-3855.~~

~~Sample Four-Year Program of Study~~
~~For the sample four-year program of study for the Bachelor of Arts with Major in Computer Science, refer to the Curriculum Sheets and Flight Plans by major.~~