

FLORIDA ATLANTIC UNIVERSITY

Proposal for For-Credit Self-Supporting Program

This form must be completed and submitted to Continuing Education/Office of the Provost. New degrees, or an existing degree with a different curriculum tied to Self-Supporting delivery, must be approved through the normal faculty governance process.

College or Academic Unit: College of Engineering and Computer Science

Department/School of Academic Unit: Computer & Electrical Engineering & Computer Science

Name of Degree: Bachelor of Arts in Computer Science with Major in Computer Science

Specialized track (if applicable): Professional

CIP Code: 11.0101

Proposed Implementation Date: Spring 2022

1. Describe the operation and delivery format of the program. Include information of the uniqueness of the program, the target audience, and enrollment projections. Please provide information on data for enrollment projection.

The Department of Electrical Engineering and Computer Science (CEECS) in the College of Engineering and Computer Science (COECS) at FAU is proposing a Professional Bachelor of **Science Arts** in Computer Science track. The course offering format includes evenings, weekends, and online material. The Professional **BSCS BACS** in Computer Science requires 45 credits of Computer Science courses, in addition to other degree requirements. The curriculum structure is the same as the second bachelors in computer science. Each course duration is typically 8 weeks and students are expected to take two courses simultaneously. The expected completion time is 2 years. Students will participate in the track in cohort. Students will start the track at the beginning of Fall. The targeted audience includes, but is not limited to, working professionals in South Florida. They will be able to advance their career with an accelerated bachelors track and obtain a second bachelors in computer science while continuing their professional career. This two-year track should enroll approximately 20 students per year with an ongoing enrollment of 30 students in year three and thereafter.

Implementation Timeframe	Projected Enrollment		
Year	Head Count	Credit Hours	FTE*
Year 1	20	600	20
Year 2	45	1050	35
Year 3	55	1275	42.5
Year 4	60	1350	45
Year 5	60	1350	45

*FTE calculation is based on the standard national definition, which divides undergraduate credit hours by 30.

2. State the tuition for the program and explain the process used to determine the proposed self-supporting tuition rate. Include information on similar programs being offered elsewhere and their self-supporting tuition rates. Attach market analysis for proposed program, include assessment of need and projected workforce demand.

The tuition for the proposed Professional BS BA in Computer Science is the same for in-state and out-of-state students. This cost is based on competitive offerings across peer institutions and current SUS and FAU policies. The proposed cost per credit hour is \$575; thus students will complete 45 credit hours for a total tuition of \$25,875.

Current tuition for comparable programs, include:

University	Program	Tuition
Florida Atlantic University	Part-Time BSN Track for Working Professionals (60 credits)	\$43,190
Boston University	Accelerated CS Computer Science (64 credits)	\$31,080

3. Provide a listing of the curriculum for the present E&G program and the curriculum for the proposed self-supporting program. Is the curriculum for both programs the same?

Current Program:

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 2311	3
Intro to Statistics	STA 2033	3
Subtotal		6

BACS Courses		
Foundations of Computing	COT 2000	3
Computer Logic Design	CDA 3203	3
Introduction to Programming in Python	COP 2034	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
Principles of Software Engineering	CEN 4010	3
Python Programming	COP 4045	3

Object-Oriented Design and Programming	COP 4331	3
Computer Operating Systems	COP 4610	3
Applied Database Systems	COP 4703	3
Introduction to Data Science and Analytics	CAP 4773	3
Software Engineering Project Mobile App Project	CEN 4910 or COP 4655	3
Subtotal		39

Computer Science Electives	18
Free Electives (4)	27
Total	120

Assume that students take this program as a second bachelors degree program. Then the second the Bachelor program in BACS has the following curriculum:

BACS Courses		
Foundations of Computing	COT 2000	3
Computer Logic Design	CDA 3203	3
Introduction to Programming in Python	COP 2034	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
Principles of Software Engineering	CEN 4010	3
Python Programming	COP 4045	3
Object-Oriented Design and Programming	COP 4331	3
Computer Operating Systems	COP 4610	3
Applied Database Systems	COP 4703	3
Introduction to Data Science and Analytics	CAP 4773	3
Software Engineering Project Mobile App Project	CEN 4910 or COP 4655	3
Subtotal		39

Computer Science Electives	6
Total	45

Proposed Program:

Curricula the for the proposed program and the second BACS are identical. In the proposed program, students are expected to have completed Math and Science requirement as a part of their first bachelors. Students who do not have a bachelor degree will need to take additional courses to fulfil the Bachelor of Arts degree requirement.

4. Discuss the impact of the program on existing FAU programs.

- a. Explain how the unit will ensure that sufficient courses, paid through auxiliary funds are available to meet student demand and facilitate completion of each program submitted for consideration. (Provide flight plan, if available)**
- b. Will any similar E&G courses be eliminated or scaled back if this program is implemented.**

The Professional **BS BA** in Computer Science track will be managed in a cohort format, which will ensure that sufficient courses are available to meet student demand and facilitate completion of the track in a timely manner. The current **BS BA** in Computer Science program is non-cohort and it will not be impacted by the Professional **BS BA** in Computer Science. The two programs will run side-by-side.

Flight plan:

Course Name	Number	Credits	Y1Fall	Y1Spr	Y1Sum	Y2Fall	Y2Spr
Computer Logic Design	CDA 3203	3	x				
Introduction to Programming in Python	COP 2034	3	x				
Foundations of Computing	COT 2000	3	x				
Data Struct and Algo Analysis with Python	COT 3410	3		x			
Introduction to Internet Computing	COP 3810	3		x			
Introduction to Database Structures	COP 3540	3		x			
Computer Operating Systems	COP 4610	3			x		
Intro to Data Science and Analytics	CAP 4773	3			x		
Python Programming	COP 4045	3			x		
Object-Oriented Design and Programming	COP 4331	3				x	
Principles of Software Engineering	CEN 4010	3				x	
Applied Database Systems	COP 4730	3				x	
Software Engineering Project	CEN 4910	3					x
CS Elective		3					x
CS Elective		3					x

5. Will this program increase the state’s fiscal liability or obligation? Will the self-supporting program cohort supplant or diminishing productivity of an existing E&G funded degree program in the same discipline?

This self-supporting program will not increase the state’s fiscal liability or obligation. The Self-supporting program track cohort will not supplant or diminish the productivity an existing E&G funded degree program in the same discipline.

6. How will offering the proposed Self-Supporting program aligns with the mission of FAU (Race to Excellence 2015-2025). Outline how this program assists the University in achieving its performance metrics. Include information on assessment of need and projected workforce demand.

The Professional **BS BA** in Computer Science track aligns well with the Mission Statement of Florida Atlantic University as "a multi-campus public research university that pursues excellence in its missions

of research, scholarship, creative activity, teaching, and active engagement with its communities" as we pursue excellence in teaching and engagement with the technology community. The proposed track is aligned with the strategic plan of the University to grow research activities and education in engineering and computer science. The Professional BS BA in Computer Science contributes to the strategic goal of enriching the educational experience by strengthening and expanding STEM undergraduate programs at FAU, as well as meeting professional and workforce needs. The program track will be directly contributing to the increase of the number of BS BA degrees awarded in areas of strategic emphasis (STEM).

7. Identify any prerequisites or restrictions for acceptance into this program.

An Associate degree or a Bachelors degree and must satisfy all admission requirements of the bachelor's degree in BACS at FAU.

**8. How will the unit monitor the quality and success of the self-supporting program?
Provide specific metrics, evaluation methods, and frequency of evaluation.**

The Professional BS BA in Computer Science will use a cohort structure, which will promote timely graduation. In the cohort structure, the same group of students is expected to take the same sequence of courses in the track.

- Time to complete the track. The cohort structure reinforces timely graduation rates. In the cohort arrangement the same group of students takes the same courses throughout the duration of their time in the program. This arrangement is different from an alternative flexible structure, in which students self-select the course(s) they take in any given semester. In the proposed Professional BS BA in Computer Science, students are expected to complete the track in 2 years.
- Number of students enrolled. The number of students enrolled in each semester will vary. Students typically start the track at the beginning of Fall semester. Enrollment is a function of economic conditions in the state, as well as a prospective student's self-assessment of their time and availability to commit to a program. An appropriate range of students in each semester is important to sustain a high level of student interaction and ensure sufficient contributions from each student.
- Student satisfaction. An overall satisfaction score will be reported for each course and the program track. The score will be a composite of items intended to measure student assessment of the program content, pedagogical effectiveness of the professor, and administrative services provided to the student.



9/28/2021

Department Chair/School Director

Date



College Curriculum Committee

Date



Dean *Stella Batalama*

9/29/21

Date 09/29/2021

Julie J. Botti

Executive Director, Center for Online
and Continuing Education

9/30/2021

Date

Daniel Mesroff

University Curriculum Committee

10-11-21

Date

Senior Associate Provost

Date

University Faculty Senate

Date

Chief Financial Officer (CFO)

Date

Provost or Designee

Date