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|  FLORIDA ATLANTIC UNIVERSITY | NEW/CHANGE PROGRAM REQUEST Undergraduate Programs | | UUPC Approval <u>3-29-21</u> UFS Approval _____ Banner Posted _____ Catalog _____ |
| | Department CEECS College Engineering and Comp Science | | |
| Program Name Computer Science Minor | | <input type="checkbox"/> New Program <input checked="" type="checkbox"/> Change Program | Effective Date (TERM & YEAR) Fall 2021 |
| Please explain the requested change(s) and offer rationale below or on an attachment The Computer Science Minor has been revised to reduce required credits from 25-26 to 15. Two tracks have been added, a C/C++ track and a Python track. Students need 6 credits of required courses and 9 credits of elective courses. | | | |
| Faculty Contact/Email/Phone Hari Kalva, hkalva@fau.edu, 561-297-0511 | | Consult and list departments that may be affected by the change(s) and attach documentation | |
| Approved by Hanqi Zhuang <small>Digitally signed by Hanqi Zhuang Date: 2021.02.09 13:06:25 -05'00'</small> | | Date | |
| Department Chair _____ | | _____ | |
| College Curriculum Chair _____ | | <u>3-10-21</u> | |
| College Dean _____ | | <u>3/11/21</u> | |
| UUPC Chair _____ | | <u>3-29-21</u> | |
| Undergraduate Studies Dean _____ | | <u>3-29-21</u> | |
| UFS President _____ | | _____ | |
| Provost _____ | | _____ | |

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

Computer Science Minor

The minor in Computer Science is available to all FAU undergraduates who are not majoring in Computer Science or Computer Engineering. This minor requires completion of five courses (15 credits) with a minimum grade of "C". ~~can be attained by successfully completing the following requirements and earning a grade of "C" or better in Computer Science core courses listed below.~~ Students must ensure that they have the prerequisites for the selected courses.

| | | |
|---|----------------------|------------------|
| Calculus with Analytical Geometry 1 | MAC 2314 | 4 or |
| Methods of Calculus | MAC 2233 | 3 |
| Discrete Mathematics | | 3 |
| Introduction to Programming in C | COP 2220 | 3 |
| Foundations of Computer Science | COP 3014 | 3 |
| Foundations/Computer Science Lab | COP 3014L | 1 |
| Data Structures and Algorithm Analysis | COP 3530 | 3 |
| Minimum upper-division computer science and engineering credits in addition to above courses | | 9 |
| Total* | | 25-26 |

C/C++ Track

| | | |
|---|----------|-----------|
| Foundations of Computer Science (a) | COP 3014 | 3 |
| Data Structures and Algorithm Analysis | COP 3530 | 3 |
| Select three upper-division courses from the electives table below. | | 9 |
| Total* | | 15 |

(a) Requires Prerequisite: COP 2220 with a "C" or better

Python Track

| | | |
|---|----------|-----------|
| Introduction to Programming in Python | COP 2034 | 3 |
| Data Structures and Algorithm Analysis with Python | COP 3410 | 3 |
| Select three upper-division courses from the electives table below. | | 9 |
| Total* | | 15 |

Select three courses from the following list of elective courses (speak with an academic advisor for a list of additional elective courses):

Elective Courses

| | | |
|--|----------|---|
| Introduction to Database Structures | COP 3540 | 3 |
| Applied Database Systems | COP 4703 | 3 |
| Design and Analysis of Algorithms | COT 4400 | 3 |
| Principles of Software Engineering | CEN 4010 | 3 |
| Computer Operating Systems | COP 4610 | 3 |
| Introduction to Internet Computing | COP 3813 | 3 |
| Object-Oriented Design and Programming | COP 4331 | 3 |
| Python Programming | COP 4045 | 3 |

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|--|----------|---|
| Introduction to Data Mining and Machine Learning | CAP 4770 | 3 |
| Applied Machine Learning and Data Mining | CAP 4612 | 3 |
| Introduction to Deep Learning | CAP 4613 | 3 |
| Introduction to Artificial Intelligence | CAP 4630 | 3 |
| Introduction to Data Science and Analytics | CAP 4773 | 3 |

* At least 75 percent of credits earned must be from FAU.

Acknowledgment of a minor in Computer Science is official upon successful completion of an FAU degree program.