Bachelor of Science with Major in Computer Science

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 [*Transfer Student Manual*.](http://www.fau.edu/registrar/registration/transfer.php)

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.

Students transferring from a Florida community or state college should have completed 60 lower-division credits, including the following (see [Degree Requirements section](http://www.fau.edu/academic/registrar/PREcatalog/degreerequirements.php) for minimum grade):

|  |  |  |
| --- | --- | --- |
| Introduction to Programming in C | COP 2220 | 3 |
| Calculus with Analytic Geometry 1 and 2 | MAC 2311,2312  | 8-10\*  |
|  |  |  |
|  |  |  |
| General Physics (with Calculus) 1 and 2 with Labs | PHY 2048, 2048LPHY 2049, 2049L | 8-10\* |
| Additional science course(s)designed for science majors+ |   | 4-8\* |

\* The number of credits varies among lower-division institutions.

+ One or two science courses to bring the total credits in calculus, physics and other sciences to at least 21 credits. These additional science courses must come from biology, chemistry or geology, and be equivalent to courses taken by science majors at FAU. Florida community or state college students: note that CHM 1040 does not satisfy this requirement.

Sample Four-Year Program of Study for Bachelor of Science in Computer Science

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| **First Year, Fall (13 credits)** |
| College Writing 1\*\* | ENC 1101 | 3 |
| Calculus with Analytical Geometry 1\*\* | MAC 2311 | 4 |
| FAU Core\* | 3 |
| FAU Core\* | 3 |

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| **First Year, Spring (13 credits)** |
| College Writing 2\*\* | ENC 1102 | 3 |
| Calculus with Analytical Geometry 2\*\* | MAC 2312 | 4 |
| FAU Core\* | 3 |
| FAU Core\* | 3 |

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| **Second Year, Fall (14 credits)** |
| Physics for Engineers 1 with Lab\*\* | PHY 2048 & L | 4 |
| Foreign Language 1 | 4 |
| Science # | 3 |
| FAU Core\* | 3 |

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| **Second Year, Spring (14 credits)** |
| Physics for Engineers 2 with Lab\*\* | PHY 2044 & PHY2049L | 4 |
| Foreign Language 2 | 4 |
| Introduction to Programming in C\*\* | COP 2200 | 3 |
| Public Speaking | SPC 2601 | 3 |

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| **Third Year, Fall (14 credits)** |
| Foundations of Computer Science | COP 3014 | 3 |
| Foundations/Computer Science Lab | COP 3014L | 1 |
| Introduction to Logic Design | CDA 3201C | 4 |
| Discrete Mathematics | MAD 2104 | 3 |
| Science or Elective # | 3 |



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| **Third Year, Spring (16 credits)** |
| Data Structures and Algorithm Analysis | COP 3530 | 3 |
| Introduction to Internet Computing | COP 3813 | 3 |
| Stochastic Models/Comp. Science | STA 4821 | 3 |
| Introduction to Microprocessor Systems | CDA 3331C | 4 |
| Free Elective (one course) | 3 |

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| **Third Year, Summer (9 credits)**  |
| CS Elective @ | 3 |
| Formal Languages and Automata Theory | COT 4420 | 3 |
| FAU Core\* | 3 |

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| **Fourth Year, Fall (15 credits)** |
| Principles of Software Engineering | CEN 4010 | 3 |
| Introduction to Database Structures | COP 3540 | 3 |
| CS Elective @ | 3 |
| Free Elective (one course) | 3 |
| Additional Math Elective | 3-4 |

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| **Fourth Year, Spring (12 credits)** |
| Design and Analysis of Algorithms | COT 4400 | 3 |
| Computer Operating Systems | COP 4610 | 3 |
| Computer Science Elective @ | 3 |
| Senior Seminar | COT 4935 | 1 |
| Free Elective | 2 |
| **Total** | **120** |

\* FAU Core: One of the humanities or social science courses listed elsewhere in the catalog that satisfies the FAU Core Curriculum requirements for all four-year students. These include courses that satisfy the writing component for the Writing Across Curriculum (Gordon Rule) requirement; these must be passed with a grade of "C" or better.

\*\* Must be passed with a grade of "C" or better.

# Science: Students must take one or two additional science courses that are designed for science majors to bring physics and science to at least 12 credits total. Consult an advisor to check a specific course. These must be passed with a grade of "C" or better.

@ Computer Science Elective: see list previously shown in this section.

Second Bachelor's Degree
Individuals seeking a second bachelor's degree must satisfy all admission and degree requirements of a first bachelor's degree, except for free electives, general education and foreign language. 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, but for most students the number of credits required to meet the degree requirements will be considerably larger.

[](http://www.fau.edu/academic/registrar/PREcatalog/engineering.php#topofpage)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 can be earned by successfully completing the following requirements with a minimum 2.5 grade point average:

|  |  |  |
| --- | --- | --- |
| Calculus with Analytical Geometry 1 | MAC 2311 or | 4 |
| Methods of Calculus | MAC 2233 | 3 |
| Discrete Mathematics | MAD 2104 | 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 engineeringcredits in addition to above courses | 9 |
| **Total**\* | **25-26** |

\* 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.

