

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*.

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 for minimum grade):

| | | |
|---|-------------------------------------|-------|
| Introduction to Programming in C | COP 2220 | 3 |
| Calculus with Analytic Geometry 1 and 2 | MAC 2311, 2312 or | 8-10* |
| Calculus for Engineers 1 and 2 | MAC 2281, 2282 | 8-10* |
| Physics for Engineers with Labs | PHY 2043, 2048L, PHY 2044, 2049L or | 8* |
| General Physics (with Calculus) 1 and 2 with Labs | PHY 2048, 2048L, PHY 2049, 2049L | 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 24 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.

General Degree Requirements

The Bachelor of Science with major in Computer Science degree will be awarded to students who:

1. Meet all University general degree requirements;
2. Satisfy the following specific degree requirements of the Computer Science program.

| | |
|---|-----------|
| Specific Degree Requirements | |
| General Education (1) | |
| Foundations of Written Communication | 6 |
| Foundations of Society and Human Behavior | 6 |
| Foundations of Global Citizenship | 6 |
| Foundations of Creative Expressions | 6 |
| Subtotal | 24 |

| | | |
|---|----------|---|
| Mathematics and Science (2) (Lower Division) | | |
| Calculus with Analytic Geometry 1 (4) | MAC 2311 | 4 |
| Calculus with Analytic Geometry 2 (4) | MAC 2312 | 4 |
| General Physics for Engineers 1 (4) | PHY 2048 | 3 |

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| General Physics Lab 1 (4) | PHY 2048L | 1 |
| Physics for Engineers 2 (4) | PHY 2044 | 3 |
| General Physics Lab 2 (4) | PHY 2049L | 1 |
| Discrete Mathematics | MAD 2104 | 3 |
| Science # | | 3 |
| Science or Elective # | | 3 |
| Additional Math Elective | | 3-4 |
| Subtotal | | 28-29 |

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| Other Lower Division Requirements (2) (Lower Division) | | |
| Foreign Language 1 | | 4 |
| Foreign Language 2 | | 4 |
| Public Speaking | SPC 2601 | 3 |
| Subtotal | | 11 |

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| Computer Science Core (5) | | |
| Introduction to Programming in C** | COP 2200 | 3 |
| Foundations of Computer Science | COP 3014 | 3 |
| Foundations/Computer Science Lab | COP 3014L | 1 |
| Introduction to Logic Design | CDA 3201C | 4 |
| Data Structures and Algorithm Analysis | COP 3530 | 3 |
| Introduction to Internet Computing | COP 3813 | 3 |
| Introduction to Microprocessor Systems | CDA 3331C | 4 |
| Formal Languages and Automata Theory | COT 4420 | 3 |
| Stochastic Models/Comp. Science | STA 4821 | 3 |
| Principles of Software Engineering | CEN 4010 | 3 |
| Introduction to Database Structures | COP 3540 | 3 |
| Design and Analysis of Algorithms | COT 4400 | 3 |
| Computer Operating Systems | COP 4610 | 3 |
| Senior Seminar | COT 4935 | 1 |
| Subtotal | | 40 |

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| Computer Science Electives (6) | | 9 |
| Free Electives (6) (7) | | 8 |
| Total | | 120 |

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

| First Year, Fall (13 credits) | | |
|--|----------|---|
| College Writing 1** | ENC 1101 | 3 |
| Calculus with Analytical Geometry 1** | MAC 2311 | 4 |
| FAU Core*Foundations of Society and Human Behavior | | 3 |
| FAU Core*Foundations of Global Citizenship | | 3 |

| First Year, Spring (13 credits) | | |
|--|----------|---|
| College Writing 2** | | 3 |
| Calculus with Analytical Geometry 2** | MAC 2312 | 4 |
| FAU Core*Foundations of Creative Expressions | | 3 |
| FAU Core*Foundations of Society and Human Behavior | | 3 |
| Foundations of Written Communication | | 3 |

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

| 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 |

| 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 |

| Third Year, Summer (9 credits) | | |
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| CS Elective @ | | 3 |
| Formal Languages and Automata Theory | COT 4420 | 3 |
| FAU Core Foundations of Global Citizenship | | 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 |

| | | |
|---|----------|------------|
| 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 Consult an advisor for a 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.

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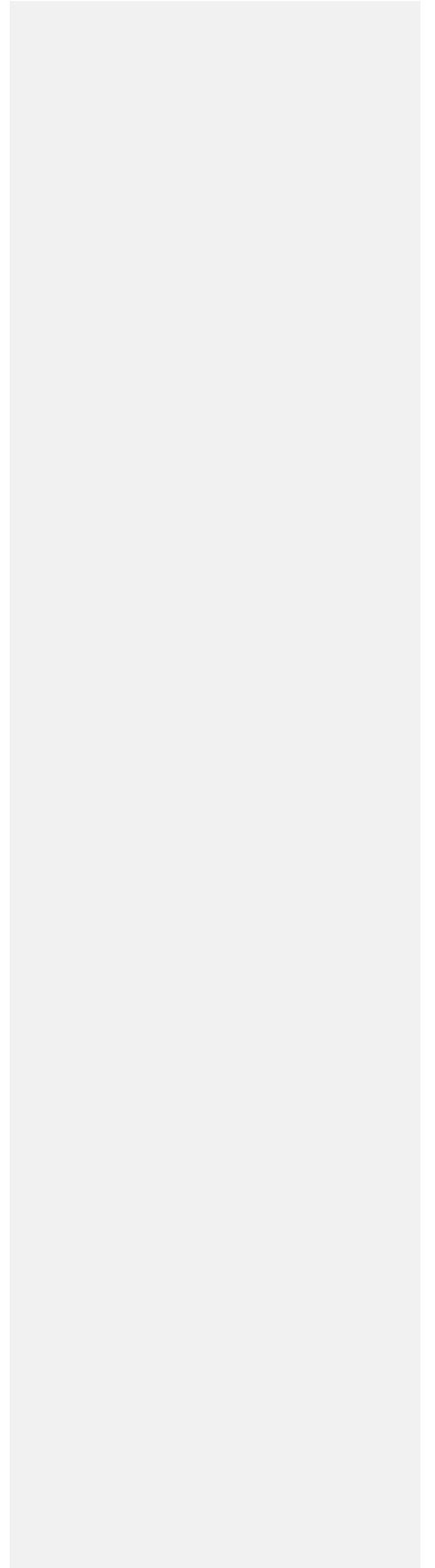
Computer Science Minor

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 engineering credits 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



Approved by:

Department Chair: Nancy Endot

College Curriculum Chair: [Signature]

College Dean: [Signature]

UUPC Chair: [Signature]

Undergraduate Studies Dean: [Signature]

UFS President: _____

Provost: _____

Date:

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