**COMPUTER SCIENCE ELECTIVES:**

9 credits chosen from CS and CE upper division courses that are not in the CS core (CET and CTI courses are excluded, but students can take ENG 4040 and ISM 4133 for CS elective credit).

**One elective must be one of these second programming language/advanced content courses**

- COP 4703: Applied Database Systems
- COP 4593: Component Programming with .NET
- CAP 4630: Intro to Artificial Intelligence
- COP 4020: Programming Languages

**Suggested Groups of Concentration:**

**Information Technology**

- CNT 4104: Intro to Data Communications
- CNT 4403: Intro to Data and Network Security
- COP 4814: Web Services
- COP 4703: Applied Database Systems
- COP 4593: Component Programming with .NET
- CAP 4770: Intro to Artificial Intelligence
- COP 4854: Intro to Game Programming
- COP 4064: Graphical Application Development

**Applications**

- CAP 4034: Computer Animation
- COP 4750: Computer Graphics Methods
- CAP 4028: Intro to Game Programming
- COP 4804: Graphical Application Development

**Software Engineering**

- CEN 4910: SW Engineering Project
- ISM 4133: Adv. Systems Analysis & Design
- COP 4331: Object-Oriented Design & Programming

**System Performance**

- MAP 4260: Intro to Queuing Theory
- CEN 4400: Intro to Computer System Perform

**System Programming**

- COP 4604: UNIX System Programming
- COP 4020: Programming Languages

**Computer Architecture**

- CDA 4170/4204: CAD-Based Computer Design
- CDA 4210: Intro to VLSI
- CDA 4630: Intro to Embedded System Design

† Cannot use same course as for core
‡ Cannot be used as both additional math & elective

**OTHER REQUIREMENTS:**

**4 year & Transfer students © :**

At least 120 credits
- At least 45 credits at a senior institution
- Last 30 upper division credits from FAU
- Foreign Language: 2nd semester course (any language)

**Second Degree Students © :**

At least 30 new FAU credits
- At least 25 credits upper division CS and CE courses at FAU
- Foreign Language not required

**Course Requirements for admission to MSCS program**

- Shaded courses are dept. “prerequisites” – often taken as part of a student’s AA degree.

**LEGEND:**

- Required
- Recommended
- Co-Requisite

<table>
<thead>
<tr>
<th>Bachelor of Science in Computer Science Curriculum</th>
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<tbody>
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<td><img src="" alt="Diagram of course requirements" /></td>
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<table>
<thead>
<tr>
<th>Department</th>
<th>Courses</th>
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<tbody>
<tr>
<td>Computer Operating Systems</td>
<td>COP 4610</td>
</tr>
<tr>
<td>Intro to Database Structures</td>
<td>COP 3540</td>
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<tr>
<td>Principles of Software Engineering</td>
<td>CEN 4010</td>
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<td>Design &amp; Analysis of Algorithms</td>
<td>COP 4400</td>
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<tr>
<td>Formal Languages &amp; Automata Theory</td>
<td>COT 4420</td>
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<tr>
<td>Data Structures</td>
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<tr>
<td>Introduction to Logic Design</td>
<td>CDA 3201C</td>
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<tr>
<td>Foundations of Computer Science</td>
<td>COP 3014 &amp; COP 3014L</td>
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<tr>
<td>Discrete Mathematics</td>
<td>MAD 2104</td>
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<tr>
<td>Introduction to Programming in &quot;C&quot;</td>
<td>COP 2220</td>
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<tr>
<td>Calculus I &amp; II</td>
<td>PHY 2043 + PHY 2048L</td>
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<tr>
<td>Engineering Physics I &amp; II</td>
<td>PHY 2044 + PHY 2049L</td>
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</tbody>
</table>

**Advising Information:**

- Shaded courses are dept. “prerequisites” – often taken as part of a student’s AA degree.

**Recommended:**

- Shaded courses are dept. “prerequisites” – often taken as part of a student’s AA degree.

© Grade of C or better required

Revised: 05/07/2012