# Computer Science Degree Requirements

<table>
<thead>
<tr>
<th>Category</th>
<th>Hours</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>GenEd Requirements</td>
<td>27</td>
<td>ENGL 160 &amp; 161 = 6 hrs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EWC + UCA + UP + UIS + UUSS = 15 hrs</td>
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<tr>
<td></td>
<td></td>
<td>HSSA electives = 6 hrs</td>
</tr>
<tr>
<td>Math</td>
<td>11</td>
<td>MATH 180, 181 &amp; 210</td>
</tr>
<tr>
<td>Additional Required Math</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Science Electives</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Core CS Major Requirements</td>
<td>39</td>
<td></td>
</tr>
<tr>
<td>CS Technical Electives</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Free Electives</td>
<td>14</td>
<td>Any technical or non-technical (remedial or duplicative courses not allowed). Maximum 2 hours of Kinesiology allowed.</td>
</tr>
<tr>
<td>Total</td>
<td>128</td>
<td></td>
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</tbody>
</table>

### GenEd Requirements: 27 hours
- ENGL 160 & ENGL 161 = 6 hours
- EWC + UCA + UP + UIS + UUSS – 3 hours/category x 5 categories = 15 hours
  - Find General Education approved list in undergrad catalog or DARS report
- HSSA – Humanities, Social Sciences & Art Electives = 6 hours
  - Any EWC + UCA + UP + UIS + UUSS classes; or
  - Any class with ENGL 161 as pre-requisite
  - Any foreign language classes
  - All classes in College of Architecture and Art (with some exceptions)

### Additional Required Math: 9 hours
Choose 1 from:
- IE 342 or STAT 381 (credit for only one - NOT both)

Choose 2 from:
- MATH: 215; 220; 310 or 320; 430; 435; or 436
- MCS: 421; 423; or 471*
- STAT: 401 or 473

*MCS 471 can be used as CS Tech. Elective or Math requirement – NOT Both

### Science Electives: 10 hours
Mix and match from the following for total 10 hours:
- BIOS 100 (5)
- BIOS 101 (5)
- CHEM (122 & 123) or 116* – (4+1) or 5*
  - *Honors level class
- CHEM (124 & 125) or 118* – (4+1) or 5*
- PHYS 141 (4); recommend taking PHYS 144 concurrently for additional 1 hour
- PHYS 142 (4); recommend taking PHYS 145 concurrently for additional 1 hour
- EAES 101 (4)
- EAES 111 (4)

If total hours < 10, choose any science elective higher than classes above or from supplemental list.
If total hours >10, extra hours added to ‘Free Electives’
Computer Science Degree Requirements

Core CS Major Requirements: 39 hours

All required:
- ENGR 100
- CS 111
- CS 141
- CS 151
- CS 211
- CS 251
- CS 261
- CS 301
- CS 341
- CS 342
- CS 361
- CS 362
- CS 377
- CS 401
- CS 499

CS Technical Electives – 18 hours

Choose 6 from:
- CS 398
- CS 411
- CS 412
- CS 415
- CS 418
- CS 421
- CS 422
- CS 424
- CS 425
- CS 426
- CS 440
- CS 441
- CS 442
- MCS 320
- MCS 425
- MCS 471
- MCS 481
- STAT 471

Concentration Requirements change from CS Major

<table>
<thead>
<tr>
<th>Concentration</th>
<th>Requirements change from CS Major</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Systems Option (CSO)</td>
<td>CS Tech Electives:</td>
</tr>
<tr>
<td></td>
<td>- 4 required from: CS 450, 466, 469, 473, 486, 487 &amp; ECE 367</td>
</tr>
<tr>
<td>Human-Centered Computing (HCC)</td>
<td>Additional Required Math:</td>
</tr>
<tr>
<td></td>
<td>MATH 220 - Required</td>
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<tr>
<td></td>
<td>Science Electives:</td>
</tr>
<tr>
<td></td>
<td>PHYS 141 &amp; 142 – Required</td>
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<tr>
<td></td>
<td>CS Tech Electives:</td>
</tr>
<tr>
<td></td>
<td>- 1 required: CS 422; and</td>
</tr>
<tr>
<td></td>
<td>- 3 required from: CS 411, 415, 421, 424, 425 &amp; 426</td>
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<tr>
<td>Software Engineering (SE)</td>
<td>Additional Required Math:</td>
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<tr>
<td></td>
<td>IE 342 - Required</td>
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<tr>
<td></td>
<td>CS Tech Electives:</td>
</tr>
<tr>
<td></td>
<td>- 2 required: CS 440, CS 442; and</td>
</tr>
<tr>
<td></td>
<td>- 2 required from: CS 422, CS 441, CS 474 &amp; CS 480</td>
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</tbody>
</table>