Computer Science – Applied Option

Computer science is the study of algorithms and problem solving. These problems apply to every scientific, engineering, and mathematical field, making computer scientists relevant in every professional field today. A computer science degree at Oregon State can give you the skills to program a custom low-level sensor board all the way up to coordinating cloud datacenters full of servers.

Applied Plan Areas of Interest (depending on campus):
- Simulation & Game Programming
- Human Computer Interaction
- Cybersecurity
- Artificial Intelligence
- Data Science
- Web and Mobile Application Development
- Robot Intelligence
- Business

Your Bachelor’s Degree (BS) in the College of Engineering

A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).

A maximum of 135 credits earned at a community college may be applied toward a bachelor’s degree at OSU.

Some courses can count towards your major and the Baccalaureate Core. Advisors can assist in selection.

More info at eecs.oregonstate.edu/undergraduate-programs/computer-science

Courses Required for Computer Science Major, Applied option

This list is comprehensive. Speak with OSU advisor for more information

<table>
<thead>
<tr>
<th>Computer Science - Applied Core Requirements</th>
<th>CCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Orientation</td>
<td>GE 101</td>
<td>CS 160</td>
<td></td>
</tr>
<tr>
<td>Intro to Computer Science I</td>
<td>CS 161</td>
<td>CS 161</td>
<td></td>
</tr>
<tr>
<td>Intro to Computer Science II</td>
<td>CS 162</td>
<td>CS 162</td>
<td></td>
</tr>
<tr>
<td>Data Structures</td>
<td>CS 260</td>
<td>CS 261</td>
<td></td>
</tr>
<tr>
<td>Comp. Architecture &amp; Assembly Language</td>
<td>CS 271</td>
<td>CS 271</td>
<td></td>
</tr>
<tr>
<td>Web Development</td>
<td>CS 290</td>
<td>CS 290</td>
<td></td>
</tr>
<tr>
<td>Differential Calculus</td>
<td>MTH 251</td>
<td>MTH 251</td>
<td></td>
</tr>
<tr>
<td>Integral Calculus</td>
<td>MTH 252</td>
<td>MTH 252</td>
<td></td>
</tr>
<tr>
<td>Elements of Discrete Math</td>
<td>MTH 231</td>
<td>MTH 231</td>
<td></td>
</tr>
<tr>
<td>Intro to Statistics for Engineers</td>
<td>EGR 214</td>
<td>ST 314</td>
<td></td>
</tr>
<tr>
<td>Public Speaking</td>
<td>COMM 111</td>
<td>COMM 111</td>
<td></td>
</tr>
<tr>
<td>Argument &amp; Critical Discourse</td>
<td>COMM 112</td>
<td>COMM 114</td>
<td></td>
</tr>
<tr>
<td>Writing in Business</td>
<td>BA 214</td>
<td>WR 214</td>
<td>Complete 1(one) course</td>
</tr>
<tr>
<td>English Composition</td>
<td>WR 122</td>
<td>WR 222</td>
<td></td>
</tr>
<tr>
<td>Technical Writing</td>
<td>WR 227</td>
<td>WR 327</td>
<td></td>
</tr>
</tbody>
</table>
Important Notes & Resources

Important Notes for the College of Engineering and Computer Science Major, Applied option:

- Grade requirements: Grade of C or better in all major coursework. See catalog.oregonstate.edu/college-departments/engineering for more information.
- See a sample degree plan by searching “Computer Science” at admissions.oregonstate.edu/find-your-major
- Other similar majors to explore: Electrical and Computer Engineering
- CS students: the best time to transfer is fall term, particularly due to MECOP. Talk with an OSU advisor about your specific timeline.
- CS majors can participate in two six-month paid internships with MECOP: mecopinc.org

Resources and OSU Information:

- Students do not have to complete a transfer degree in order to transfer to OSU.
  - If you’ve completed the Oregon AAOT, all requirements of the Baccalaureate Core are complete except for Synthesis Courses and Writing Intensive Courses.
- Preparing to apply to OSU? See admissions info: transfer.oregonstate.edu
- Want to take classes at both OSU and an Oregon community college? Check out the Degree Partnership Program: partnerships.oregonstate.edu/students

General Education Courses (called the Baccalaureate Core)

- Complete one course in each Perspective category with no more than two in the same department.
- Full listing of CCC courses that fulfill Bacc Core requirements: admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-chemeketa-community-college

<table>
<thead>
<tr>
<th>SKILLS COURSES</th>
<th>Math</th>
<th>WR 121. Required to transfer.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Writing I</td>
<td>Completed as part of the major</td>
</tr>
<tr>
<td></td>
<td>Writing II</td>
<td>Completed as part of the major</td>
</tr>
<tr>
<td></td>
<td>Speech (Writing III)</td>
<td>Completed as part of the major</td>
</tr>
<tr>
<td></td>
<td>Fitness (Only HHS 231)</td>
<td>HE 295</td>
</tr>
</tbody>
</table>

| PERSPECTIVE COURSES | Biological Science | Choose one course from BaccCore link above |
|                     | Physical Science | Choose one course from BaccCore link above |
|                     | Additional Biological or Physical Science | Choose one course from BaccCore link above |
|                     | Cultural Diversity | Choose one course from BaccCore link above |
|                     | Literature and the Arts | Choose one course from BaccCore link above |
|                     | Social Processes and Institutions | Choose one course from BaccCore link above |
|                     | Western Culture | Choose one course from BaccCore link above |

<table>
<thead>
<tr>
<th>DPD COURSE</th>
<th>Difference, Power, &amp; Discrimination</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SYNTHESIS COURSES</th>
<th>Contemporary Global Issues</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Science, Technology, &amp; Society</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>UPPER DIVISION COURSE</th>
<th>Upper division course, take through OSU</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Completed as part of the major</td>
</tr>
</tbody>
</table>

Advising Contacts

Academic advisors at your community college and OSU are available to answer your questions and assist you in creating a transfer plan. See your community college advisor first and use this Transfer Guide to help you plan. It is important to speak with your OSU academic advisor early on, and often, to ensure correct course selection and sequencing. See visitosu.oregonstate.edu/visit-campus to schedule your personalized visit.

<table>
<thead>
<tr>
<th>Chemeketa Community College</th>
<th><a href="http://www.chemeketa.edu/students/advising">http://www.chemeketa.edu/students/advising</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>OSU Electrical Engr. &amp; Comp. Sci.</td>
<td><a href="mailto:Eecsundergrad.info@enr.oregonstate.edu">Eecsundergrad.info@enr.oregonstate.edu</a></td>
</tr>
<tr>
<td>OSU College of Engineering Main Office</td>
<td><a href="mailto:askengineering@oregonstate.edu">askengineering@oregonstate.edu</a></td>
</tr>
</tbody>
</table>

Revised as of October 2020