Crop and Soil Science

Want to get your hands dirty while making a difference? Our students work on solving the most complex agricultural and natural resource problems faced in Oregon, our nation and across the globe.

Students who want to make a measurable difference in our communities are perfect candidates for a degree in either crop science or soil science. Graduates of our program are in demand across the United States.

Students must select from one option:
- Agronomy
- Plant Breeding and Genetics
- Soil Science (also available via Ecampus)

Your Bachelor’s Degree (BS) in Crop and Soil Science

- A minimum of 180 credits are required for graduation; 60 must be upper division (300 and 400-level courses).
- A maximum of 135 transfer credits may be applied toward a bachelor’s degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- More info for Corvallis Campus: agsci.oregonstate.edu/degree/crop-and-soil-science-bs-degree
- More info for LaGrande Campus: https://agsci.oregonstate.edu/agprogrameou/degree/crop-soil-sciences

Courses Required for Crop and Soil Science Major

<table>
<thead>
<tr>
<th>CSS Core Requirements</th>
<th>COCC Equivalent Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>BI 211, BI 212, BI 213</td>
<td>BI LD2, BI LD2, BI LD2</td>
<td>-Only select one full series (either all 211-213 or all of 221-223) -OSU now only offers BI 221-223. If taking BI 211-213, you must take entire series at COCC. Refer to <a href="https://admissions.oregonstate.edu/id1-and-id2-explained">https://admissions.oregonstate.edu/id1-and-id2-explained</a> to learn more about BI LD2 equivalency.</td>
</tr>
<tr>
<td>Intro to Crop &amp; Soil Science</td>
<td>--</td>
<td>SOIL 101</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Soil Science</td>
<td>FOR 208</td>
<td>SOIL 205/206</td>
<td>Available online at OSU as CSS 205</td>
</tr>
</tbody>
</table>

Courses Required for Crop & Soil Science Major: Option specific coursework

<table>
<thead>
<tr>
<th>CSS Option Requirements</th>
<th>COCC. Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</td>
<td>CH 221, CH 222, CH 223</td>
<td>CH 231/261, CH 232/262, CH 233/263</td>
<td>Lecture &amp; lab for 200-level Chemistry have separate course numbers at OSU</td>
</tr>
</tbody>
</table>
## Courses Required for Crop & Soil Science Major: Option specific coursework

<table>
<thead>
<tr>
<th>Courses</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus</td>
<td>MTH 241</td>
<td>MTH 241</td>
<td>Complete one(1) course from options</td>
</tr>
<tr>
<td>Calculus</td>
<td>MTH 245</td>
<td>MTH 245</td>
<td>All courses listed = Available online at OSU</td>
</tr>
<tr>
<td>Calculus</td>
<td>MTH 251</td>
<td>MTH 251</td>
<td></td>
</tr>
</tbody>
</table>

## CSS Option Requirements

<table>
<thead>
<tr>
<th>Agronomy</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</td>
<td>--</td>
<td>CROP 200</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Ag and Food Management</td>
<td>--</td>
<td>AEC 211</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Ag and Food Marketing</td>
<td>--</td>
<td>AEC 221</td>
<td>Available online at OSU</td>
</tr>
<tr>
<td>Economics</td>
<td>--</td>
<td>AEC 250</td>
<td>Complete one(1) course from options</td>
</tr>
<tr>
<td>Economics</td>
<td>EC 201</td>
<td>ECON 201</td>
<td>AEC 250: Available online at OSU</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>General Electives</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics</td>
<td>PHY 201</td>
<td>PH 201</td>
<td>Complete 7-8 credits</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>WR 227</td>
<td>WR 327 (LD)</td>
<td>(LD) = Lower Division Transfer</td>
</tr>
<tr>
<td>Microbiology</td>
<td>BI 234</td>
<td>MB 230</td>
<td>Must pass the ACS organic exam offered as part of COCC course to receive upper division credit: chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies</td>
</tr>
<tr>
<td>Organic Chemistry</td>
<td>CH 241</td>
<td>CH 331</td>
<td></td>
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<tr>
<td>Organic Chemistry</td>
<td>CH 243</td>
<td>CH 332</td>
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<tr>
<td>Organic Chemistry</td>
<td>CH 242</td>
<td>CH 337</td>
<td></td>
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<table>
<thead>
<tr>
<th>Plant Breeding &amp; Genetics</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Breeding &amp; Genetics</td>
<td>--</td>
<td>CH 121</td>
<td>CH 121-123 available online at OSU</td>
</tr>
<tr>
<td>Plant Breeding &amp; Genetics</td>
<td>--</td>
<td>CH 122</td>
<td></td>
</tr>
<tr>
<td>Plant Breeding &amp; Genetics</td>
<td>--</td>
<td>CH 123</td>
<td></td>
</tr>
<tr>
<td>Plant Materials</td>
<td>CROP 200</td>
<td></td>
<td>Complete one(1) course from options</td>
</tr>
<tr>
<td>Crop Eco &amp; Morph</td>
<td>--</td>
<td>HORT 226</td>
<td>All courses listed = Available online at OSU</td>
</tr>
<tr>
<td>Landscape PM 1</td>
<td>--</td>
<td>HORT 228</td>
<td></td>
</tr>
<tr>
<td>Landscape PM 2</td>
<td>--</td>
<td>HORT 255</td>
<td></td>
</tr>
<tr>
<td>Herbaceous Ornamental</td>
<td>--</td>
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</table>

<table>
<thead>
<tr>
<th>Soil Science</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Science</td>
<td>--</td>
<td>CH 121</td>
<td>CH 121-123 available online at OSU</td>
</tr>
<tr>
<td>Soil Science</td>
<td>--</td>
<td>CH 122</td>
<td>Only select one full sequence (either all 100-level, or 200-level)</td>
</tr>
<tr>
<td>Soil Science</td>
<td>--</td>
<td>CH 123</td>
<td></td>
</tr>
<tr>
<td>Soil Science</td>
<td>CH 221</td>
<td>CH 231/261</td>
<td>Lecture &amp; lab for 200-level Chemistry have separate course numbers at OSU</td>
</tr>
<tr>
<td>Soil Science</td>
<td>CH 222</td>
<td>CH 232/262</td>
<td></td>
</tr>
<tr>
<td>Soil Science</td>
<td>CH 223</td>
<td>CH 233/262</td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>MTH 111</td>
<td>MTH 111</td>
<td>Minimum requirement; see TRACK for more detail below</td>
</tr>
<tr>
<td>Crop Ecology &amp; Morphology</td>
<td>CROP 200</td>
<td></td>
<td>Other course options available post-transfer</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Electives</th>
<th>COCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag and Food Mgmt</td>
<td>--</td>
<td>AEC 211</td>
<td>Complete 12 credits</td>
</tr>
<tr>
<td>Economics</td>
<td>--</td>
<td>AEC 250</td>
<td>(LD) = Lower Division Transfer</td>
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<tr>
<td>Gen Chm. Living Systems</td>
<td>--</td>
<td>CH 130</td>
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<tr>
<td>Organic Chemistry</td>
<td>CH 241</td>
<td>CH 331 (LD)</td>
<td>All courses listed = Available online at OSU</td>
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<tr>
<td>Organic Chemistry</td>
<td>CH 243</td>
<td>CH 332 (LD)</td>
<td></td>
</tr>
<tr>
<td>Calculus</td>
<td>MTH 251</td>
<td>MTH 251</td>
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<tr>
<td>Calculus</td>
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</tr>
<tr>
<td>Physics</td>
<td>PH 201</td>
<td>PH 201</td>
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<tr>
<td>Physics</td>
<td>PH 202</td>
<td>PH 202</td>
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<tr>
<td>Org. Farm &amp; Garden</td>
<td>--</td>
<td>HORT 260</td>
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*Updated October 2020*
### Courses Required for Crop & Soil Science Major: Option specific coursework

<table>
<thead>
<tr>
<th>Soil Science</th>
<th>(continued from previous page)</th>
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</thead>
<tbody>
<tr>
<td><strong>SOIL RESEARCH</strong></td>
<td><strong>EARTH SCIENCE</strong></td>
</tr>
<tr>
<td>G 201</td>
<td>GEO 201</td>
</tr>
<tr>
<td>G 202</td>
<td>GEO 202</td>
</tr>
<tr>
<td>G 203</td>
<td>GEO 203</td>
</tr>
<tr>
<td>--</td>
<td>GEO 221</td>
</tr>
<tr>
<td>--</td>
<td>GEO 101</td>
</tr>
<tr>
<td>MTH 251</td>
<td>MTH 251</td>
</tr>
<tr>
<td>PHY 201</td>
<td>PH 201</td>
</tr>
<tr>
<td>PHY 202</td>
<td>PH 202</td>
</tr>
<tr>
<td><strong>CALCULUS</strong></td>
<td><strong>PHYSICS</strong></td>
</tr>
<tr>
<td>MTH 251</td>
<td>MTH 251</td>
</tr>
<tr>
<td>PHY 201</td>
<td>PH 201</td>
</tr>
<tr>
<td>PHY 202</td>
<td>PH 202</td>
</tr>
<tr>
<td><strong>GENERAL SOILS</strong></td>
<td><strong>EARTH SCIENCE</strong></td>
</tr>
<tr>
<td>G 201</td>
<td>GEO 201</td>
</tr>
<tr>
<td>G 202</td>
<td>GEO 202</td>
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<tr>
<td>G 203</td>
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<tr>
<td>--</td>
<td>GEO 221</td>
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<td>--</td>
<td>GEO 101</td>
</tr>
<tr>
<td>MTH 112</td>
<td>MTH 112</td>
</tr>
<tr>
<td>MTH 241</td>
<td>MTH 241</td>
</tr>
<tr>
<td>MTH 245</td>
<td>MTH 245</td>
</tr>
</tbody>
</table>

### 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 Central Oregon CC courses that fulfill Bacc Core requirements: [https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-central-oregon-community-college](https://admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-central-oregon-community-college)

<table>
<thead>
<tr>
<th>SKILLS COURSES</th>
<th><strong>Math</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing I</td>
<td>Complete as part of major</td>
</tr>
<tr>
<td>Writing II</td>
<td>WR 121. Required to transfer.</td>
</tr>
<tr>
<td>Speech (Writing III)</td>
<td>Can be completed as part of major: see advisor</td>
</tr>
<tr>
<td>Fitness (HHS 231 and 241)</td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td><strong>PERSPECTIVE COURSES</strong></td>
<td><strong>BIOLOGICAL SCIENCE</strong></td>
</tr>
<tr>
<td></td>
<td>Physical Science</td>
</tr>
<tr>
<td></td>
<td>Additional Biological or Physical Science</td>
</tr>
<tr>
<td></td>
<td>Cultural Diversity</td>
</tr>
<tr>
<td></td>
<td>Literature and the Arts</td>
</tr>
<tr>
<td></td>
<td>Social Processes and Institutions</td>
</tr>
<tr>
<td></td>
<td>Western Culture</td>
</tr>
<tr>
<td></td>
<td>Completed as part of major</td>
</tr>
<tr>
<td></td>
<td>Completed as part of major</td>
</tr>
<tr>
<td></td>
<td>Completed as part of major</td>
</tr>
<tr>
<td></td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td></td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td></td>
<td>Completed as part of major</td>
</tr>
<tr>
<td></td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td><strong>DPD COURSE</strong></td>
<td><strong>Difference, Power, &amp; Discrimination</strong></td>
</tr>
<tr>
<td></td>
<td>Can be completed as part of major: see advisor</td>
</tr>
<tr>
<td><strong>SYNTHESIS COURSES</strong></td>
<td><strong>Contemporary Global Issues</strong></td>
</tr>
<tr>
<td></td>
<td>Science, Technology, &amp; Society</td>
</tr>
<tr>
<td></td>
<td>Upper division course, take through OSU</td>
</tr>
<tr>
<td></td>
<td>Upper division course, take through OSU</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. To schedule a visit, go to Corvallis campus: [visitosu.oregonstate.edu/visit-campus](https://visitosu.oregonstate.edu/visit-campus) and LaGrande campus: [https://www.eou.edu/admissions/visit/](https://www.eou.edu/admissions/visit/).

<table>
<thead>
<tr>
<th>Central Oregon Community College</th>
<th><a href="http://cocc.edu/departments/cap/advising/plan.aspx">cocc.edu/departments/cap/advising/plan.aspx</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>OSU College of Agricultural Sciences</td>
<td>Stefan Seiter</td>
</tr>
<tr>
<td>Student Advisor</td>
<td>541-737-6372</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:seiters@oregonstate.edu">seiters@oregonstate.edu</a></td>
</tr>
<tr>
<td></td>
<td>Michelle Hines, OSU AG &amp; NR Program at EOU in LaGrande, 541-962-3047</td>
</tr>
<tr>
<td></td>
<td><a href="mailto:michelle.hines@oregonstate.edu">michelle.hines@oregonstate.edu</a></td>
</tr>
</tbody>
</table>

*Updated October 2020*