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.

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: [https://cropandsoil.oregonstate.edu/degree/crop-and-soil-science-bs-degree](https://cropandsoil.oregonstate.edu/degree/crop-and-soil-science-bs-degree)
- More info for LaGrande Campus: [agsci.oregonstate.edu/agprogrameou/degree/crop-soil-sciences](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>Equivalent UCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>BI 211</td>
<td>BI LD2</td>
<td>-Only select one full series (either all 211-213 or all of 221-223)</td>
</tr>
<tr>
<td>Principles of Biology</td>
<td>BI 212</td>
<td>BI LD2</td>
<td>-OSU now only offers BI 221-223. If taking BI 211-213, you must take entire series at Umpqua CC.</td>
</tr>
<tr>
<td></td>
<td>BI 213</td>
<td>BI LD2</td>
<td>Refer to <a href="https://admissions.oregonstate.edu/id1-and-ld2-explained">https://admissions.oregonstate.edu/id1-and-ld2-explained</a> to learn more about BI LD2 equivalency.</td>
</tr>
<tr>
<td>Principles of Biology</td>
<td>--</td>
<td>BI 221</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>BI 222</td>
<td></td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>BI 223</td>
<td></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>SOIL 205/206</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>UCC Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</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></td>
<td>CH 222</td>
<td>CH 232/262</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CH 223</td>
<td>CH 233/263</td>
<td></td>
</tr>
</tbody>
</table>
## Calculus

- MTH 242
- MTH 241
- MTH 245
- MTH 251

Choose one

All courses listed: Available online at OSU

## Agronomy (cont. from previous page)

### Crop Ecology & Morphology
- AEC 211
- CROP 200

Available online at OSU

### Ag and Food Management
- AEC 221
- AEC 221

### Economics
- ECON 201
- AEC 250
- ECON 201

Complete 1 course

AEC 250: Available online at OSU

### General Electives

#### Physics
- PH 201
- PH 201

Complete 7-8 credits

(\(LD\) = Lower Division Transfer)

Must pass the ACS organic exam offered as part of UCC course to receive upper division credit: [chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies](http://chemistry.oregonstate.edu/content/organic-chemistry-transfer-policies)

#### Technical Writing
- WR 227
- WR 327 (\(LD\))

#### Microbiology
- BI 234
- CH 331

#### Organic Chemistry
- CH 241
- CH 332
- CH 242
- CH 337

### Plant Breeding & Genetics

(cross listed with Horticulture)

### Chemistry
- CH 121
- CH 122
- CH 123

CH 121-123: Available online at OSU

Only select one full sequence (either all 100-level, or 200-level)

Lecture & lab for 200-level Chemistry have separate course numbers at OSU

### Math

#### Elementary Functions
- MTH 112

Complete one(1) course

All courses listed: Available online at OSU

#### Calculus
- MTH 241
- MTH 245
- MTH 251

### Plant Materials

#### Crop Eco & Morph
- CROP 200

Complete one(1) course

All courses listed: Available online at OSU

#### Landscape PM 1
- HORT 226

#### Landscape PM 2
- HORT 228

#### Herbaceous Ornamental
- HORT 255

### Soil Science (continued on next page)

### Chemistry
- CH 221
- CH 231/261

CH 121-123: Available online at OSU

Only select one full sequence (either all 100-level, or 200-level)

Lecture & lab for 200-level Chemistry have separate course numbers at OSU

### College Algebra
- MTH 111

Minimum requirement; see TRACK for more detail below

### Crop Ecology & Morphology
- CROP 200

Other course options available post-transfer

Available online at OSU

### General Electives

#### Ag and Food Mgmt
- AEC 211

#### Economics
- AEC 250

#### Gen Chm. Living Systems
- CH 241
- CH 331 (\(LD\))

#### Organic Chemistry
- CH 243
- CH 332 (\(LD\))

#### Calculus
- MTH 251
- MTH 251

#### Physics
- PH 201
- PH 201

#### Org. Farm & Garden
- HORT 260

Complete 12 credits

All courses listed= Available online at OSU

If interested in pursuing graduate school, recommended for students to complete entire Physics series:

PH 201, 202, 203

If complete MTH 251 or 252, will also fulfill the MTH 111 requirement

(\(LD\) = Lower Division transfer)
### Soil Science (continued from previous page)

**SOIL RESEARCH**

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth Science</td>
<td>G 201 GEO 201</td>
</tr>
<tr>
<td>Calculus</td>
<td>G 202 GEO 202</td>
</tr>
<tr>
<td>Calculus</td>
<td>G 203 GEO 203</td>
</tr>
<tr>
<td>Calculus</td>
<td>G 221 GEO 221</td>
</tr>
<tr>
<td>Calculus</td>
<td>G 101</td>
</tr>
<tr>
<td>General Soils</td>
<td>MTH 251 MTH 251</td>
</tr>
<tr>
<td>Math</td>
<td>MTH 201 MTH 202</td>
</tr>
</tbody>
</table>

- Complete one(1) course from Earth Science options, complete Calculus, and all Physics
- G 101 = Available online at OSU
- If interested in pursuing graduate school, recommended for students to complete entire Physics series: PH 201, 202, 203
- If complete MTH 251, will fulfill the MTH 111 req.

### 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 Umpqua courses that fulfill Bacc Core requirements: [admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college](admissions.oregonstate.edu/baccalaureate-core-course-equivalencies-umpqua-community-college)

### Skills Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>WR 121</td>
</tr>
<tr>
<td>Writing I</td>
<td>Can be completed as part of major: see advisor</td>
</tr>
<tr>
<td>Writing II</td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td>Speech (Writing III)</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Fitness</td>
<td>HPE 295</td>
</tr>
</tbody>
</table>

### Perspective Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Science</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Physical Science</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Additional Biological or Physical Science</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Cultural Diversity</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Literature and the Arts</td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td>Social Processes and Institutions</td>
<td>Completed as part of major</td>
</tr>
<tr>
<td>Western Culture</td>
<td>Choose one course from BaccCore link above</td>
</tr>
</tbody>
</table>

### DPD Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference, Power, &amp; Discrimination</td>
<td>Can be completed as part of major: see advisor</td>
</tr>
</tbody>
</table>

### Synthesis Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemporary Global Issues</td>
<td>Upper division course, take through OSU</td>
</tr>
<tr>
<td>Science, Technology, &amp; Society</td>
<td>Upper division course, take through OSU</td>
</tr>
</tbody>
</table>

### Important Notes & Resources

- See a [sample degree plan](https://catalog.oregonstate.edu) by searching "Crop and Soil Science" in the OSU Catalog at [catalog.oregonstate.edu](catalog.oregonstate.edu). Or find a sample degree plan on the Crop and Soil Science Degree Fact Sheet [agsci.oregonstate.edu/degree-factsheet/crop-soil-science](agsci.oregonstate.edu/degree-factsheet/crop-soil-science).
- Crop and Soil Science offers 3 options which allow students to specialize. The options are [Agronomy](https://catalog.oregonstate.edu), [Plant Breeding and Genetics](https://catalog.oregonstate.edu), and [Soil Science](https://catalog.oregonstate.edu). More details can be found by searching "Crop and Soil Science" in the OSU Catalog at [catalog.oregonstate.edu](catalog.oregonstate.edu).
- Other similar majors to explore: [Horticulture](https://catalog.oregonstate.edu), [Botany](https://catalog.oregonstate.edu), and [Biology](https://catalog.oregonstate.edu). Check out all OSU programs at [catalog.oregonstate.edu](catalog.oregonstate.edu).
- 100 and 200 level and lower division Baccalaureate Core are priority courses to complete before transferring to OSU.

Updated September 2021
• For Crop and Soil Sciences students, the best time to transfer is fall term, particularly due to the Crop and Soil Science series courses. Talk with an OSU advisor about your specific timeline.
• It is important to speak with the Crop and Soil Science Advisor, Stefan Seiter, early on, and often, to ensure correct course selection and sequencing for programs offered at the Corvallis campus and via Ecampus. Stefan can be reached at stefan.seiter@oregonstate.edu. Contact Michelle Hines - michelle.hines@oregonstate.edu for information about the Crop and Soil Sciences Program offered on the Easter Oregon University Campus.

Resources and OSU Information:
• Students do not have to complete a transfer degree in order to transfer to OSU.
  o 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 transfer student 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
• Visit OSU for a campus tour and meet with an advisor; schedule your visit at visitosu.oregonstate.edu/visit-campus.

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 and LaGrande campus: https://www.eou.edu/admissions/visit/.

<table>
<thead>
<tr>
<th>Umpqua Community College</th>
<th>umpqua.edu/areas-of-study/transfer-education</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSU College of Agricultural Sciences</td>
<td></td>
</tr>
<tr>
<td>Student Advisor</td>
<td>Stefan Seiter, 541-737-6372, <a href="mailto:seiters@oregonstate.edu">seiters@oregonstate.edu</a></td>
</tr>
</tbody>
</table>

OSU College of Agricultural Sciences prohibits discrimination in all its programs, services, activities, and materials.