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 124 credits earned at a community college may be applied toward a bachelor’s degree at OSU.
- Only courses with letter prefixes and numbers above 100 are accepted.
- More info at: agsci.oregonstate.edu/degree/crop-and-soil-science-bs-degree

Courses Required for Crop and Soil Science Major

<table>
<thead>
<tr>
<th>CSS Core Requirements</th>
<th>Chem. Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>BI 211</td>
<td>BI 211</td>
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<tr>
<td></td>
<td>BI 212</td>
<td>BI 212</td>
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<tr>
<td></td>
<td>BI 213</td>
<td>BI 213</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>--</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>Chem. Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agronomy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</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>
<tr>
<td>Calculus</td>
<td>MTH 241</td>
<td>MTH 241</td>
<td>Complete one(1) course from options</td>
</tr>
<tr>
<td></td>
<td>--</td>
<td>MTH 245</td>
<td>All courses listed = Available online at OSU</td>
</tr>
<tr>
<td></td>
<td>MTH 251</td>
<td>MTH 251</td>
<td></td>
</tr>
</tbody>
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<th>CSS Option Requirements</th>
<th>Chem. Course</th>
<th>OSU Course</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Crop Ecology &amp; Morphology</strong></td>
<td>CROP 200</td>
<td>Available online at OSU</td>
<td></td>
</tr>
<tr>
<td><strong>Ag and Food Management</strong></td>
<td>AEC 211</td>
<td>Available online at OSU</td>
<td></td>
</tr>
<tr>
<td><strong>Ag and Food Marketing</strong></td>
<td>AEC 221</td>
<td>Available online at OSU</td>
<td></td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td>AEC 250</td>
<td>Complete one(1) course from options AEC 250: Available online at OSU</td>
<td></td>
</tr>
</tbody>
</table>

#### Agronomy (cont. from previous page)

**General Electives**
- **Physics**
  - PHY 201
  - WR 227
  - CH 241/241B
  - CH 242/242B
  - CH 243/243B

- **Technical Writing**
  - BI 230
  - CH 331

- **Microbiology**
  - CH 332

- **Organic Chemistry**
  - CH 337

Complete 7-8 credits

- **Economics**
  - EC 201
  - PH 201
  - WR 327 (LD)

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

**Plant Breeding & Genetics**
(continued from previous page)

#### Plant Breeding & Genetics
(cross listed with Horticulture)

**Chemistry**
- CH 121
- CH 122
- CH 123
- CH 221
- CH 222
- CH 223

Only select one 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
  - MTH 241
  - MTH 251

- **Calculus**
  - MTH 112
  - MTH 241
  - MTH 251

Complete one(1) course from options

All courses listed = Available online at OSU

**Plant Materials**
- **Crop Eco & Morph**
  - CROP 200
- **Landscape PM 1**
  - HOR 226
  - HOR 276
- **Landscape PM 2**
  - HOR 228
  - HOR 255
- **Herbaceous Ornamental**
  - HORT 226
  - HORT 228
  - HORT 255

Complete one(1) course from options

All courses listed = Available online at OSU

#### Soil Science (continued on next page)

**Chemistry**
- CH 121
- CH 122
- CH 123
- CH 221
- CH 222
- CH 223

Only select one 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

**General Electives**
- **Ag and Food Mgmt**
- **Economics**
- **Gen Chm. Living Systems**
- **Organic Chemistry**
- **Organic Chemistry**
- **Calculus**
- **Calculus**
- **Physics**
- **Physics**
- **Org. Farm & Garden**

Complete 12 credits

(LD) = Lower Division Transfer

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

**Updated July 2019**
Courses Required for Crop & Soil Science Major:  Option specific coursework

### Soil Science (continued from previous page)

**CHOOSE TRACK:  Soil Research, General soils**

<table>
<thead>
<tr>
<th>Track</th>
<th>Earth Science</th>
<th>Calculus</th>
<th>Physics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Research</td>
<td>GEO 201</td>
<td>GEO 201</td>
<td>MTH 251</td>
</tr>
<tr>
<td></td>
<td>GEO 202</td>
<td>GEO 202</td>
<td>PHY 201</td>
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<tr>
<td></td>
<td>GEO 203</td>
<td>GEO 203</td>
<td>PHY 202</td>
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<td>GEO 221</td>
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<tr>
<td></td>
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<td>GEO 101</td>
<td></td>
</tr>
</tbody>
</table>

Complete one(1) course from Earth Science options, complete Calculus, and all Physics

GEO 221/101 = 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.

<table>
<thead>
<tr>
<th>General Soils</th>
<th>Earth Science</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GEO 201</td>
<td>MTH 112</td>
</tr>
<tr>
<td></td>
<td>GEO 202</td>
<td>MTH 241</td>
</tr>
<tr>
<td></td>
<td>GEO 203</td>
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<tr>
<td></td>
<td>--</td>
<td>MTH 121</td>
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<tr>
<td></td>
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<td>MTH 245</td>
</tr>
</tbody>
</table>

Complete one(1) course from Earth Science options, and one(1) course from the Math options

GEO 221/101, MTH 245 = Available online at OSU

If complete MTH 112, 241, OR 245 will also fulfill the MTH 111 requirement

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

<table>
<thead>
<tr>
<th>SKILLS COURSES</th>
<th>Math</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing I</td>
<td>WR 121. Required to transfer.</td>
</tr>
<tr>
<td>Writing II</td>
<td>Can be completed as part of major: see advisor</td>
</tr>
<tr>
<td>Speech (Writing III)</td>
<td>Choose one course from BaccCore link above</td>
</tr>
<tr>
<td>Fitness (HHS 231 and 241)</td>
<td>HPE 295</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PERSPECTIVE COURSES</th>
<th>Biological Science</th>
</tr>
</thead>
<tbody>
<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>Completed as part of major</td>
</tr>
<tr>
<td>Social Processes and Institutions</td>
<td>Completed as part of major</td>
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<tr>
<td>Western Culture</td>
<td>Completed as part of major</td>
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<thead>
<tr>
<th>DPD COURSE</th>
<th>Difference, Power, &amp; Discrimination</th>
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<td></td>
<td>Can be completed as part of major: see advisor</td>
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<thead>
<tr>
<th>SYNTHESIS COURSE</th>
<th>Contemporary Global Issues</th>
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<tbody>
<tr>
<td>Science, Technology, &amp; Society</td>
<td>Upper division course, take through OSU</td>
</tr>
</tbody>
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### 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.

**Chemeketa Community College**

[chemeketa.edu/students/advising/](chemeketa.edu/students/advising/)

**OSU College of Agricultural Sciences**

Student Advisor

Stefan Seiter
541-737-6372
seiters@oregonstate.edu