HORTICULTURE - BACHELOR OF SCIENCE IN AGRICULTURE

Horticulture includes a wide variety of topics that relate to fruit, vegetable and ornamental crops. Careers range from production management to processing and marketing, retail and wholesale management, greenhouse and nursery production, floriculture, landscaping, turf management, research and development, various service activities and positions with local, state and federal agencies.

Students must complete all University degree requirements, which include: General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits, but may be needed in order to take the necessary English and Mathematics coursework.

### Prefix | Title | Credits
--- | --- | ---
**General Education** |  |  |
**Area I: Communications** |  |  |
English Composition - Level 1 |  |  |
English Composition - Level 2 |  |  |
ENGL 2210G | Professional & Technical Communication |  |
**Oral Communication** |  |  |
**Area II: Mathematics** |  |  |
MATH 1220G | College Algebra |  |
**Area III/IV: Laboratory Sciences and Social/Behavioral Sciences** |  |  |
CHEM 1215G | General Chemistry I Lecture and Laboratory for STEM Majors |  |
CHEM 1225G | General Chemistry II Lecture and Laboratory for STEM Majors |  |
**Area IV: Social & Behavioral Sciences Course (3 credits)** |  |  |
**Area V: Humanities** |  |  |
**Area VI: Creative and Fine Arts** |  |  |
**General Education Elective** |  |  |
AGRO 1110G/ | Introduction to Plant Science (Lecture & Lab) |  |
HORT 1115G |  |  |
**Viewing A Wider World** |  |  |
**Departmental/College Requirements** |  |  |
EPWS 303 | Economic Entomology |  |
EPWS 310 | Plant Pathology |  |
EPWS 314 | Plant Physiology |  |
HORT 2160 | Plant Propagation |  |
HORT 365 | Principles of Crop Production |  |
HORT 447 | Seminar |  |
SOIL 2110 | Introduction to Soil Science |  |
**Choose 21 credits from the following:** |  |  |
HORT 2110 | Ornamental Plants I |  |
HORT 2120 | Ornamental Plants II |  |
HORT 2130 | Floral Quality Evaluation and Design |  |
HORT 2990 | Floriculture Field Practicum |  |
HORT 2996 | Special Topics |  |
HORT 300 | Special Topics |  |
HORT 302V | Forestry and Society |  |
HORT 305 | Principles of Genetics |  |
HORT 307 | Landscape Design |  |
HORT 310 | Medicinal Herbs |  |
HORT 315 | Crop Physiology |  |
HORT 377 | Introduction to Turfgrass Management |  |
HORT 378 | Turfgrass Science |  |
HORT 391 | Internship |  |
HORT 449 | Special Problems |  |
HORT 450 | Special Topics |  |
HORT 452 | Plant Breeding |  |
HORT 471 | Plant Mineral Nutrition |  |
HORT 479 | Advanced Turfgrass Science |  |
HORT 485 | Vegetable Crop Management |  |
HORT 488 | Greenhouse Management |  |
HORT 492 | Diagnosing Plant Disorders |  |
Choose 28 credits from the following: | 28 |
A ST 311 | Statistical Applications |  |
ACCT 2110 | Principles of Accounting I |  |
ACCT 2120 | Principles of Accounting II |  |
AEER 2110 | Principles of Food and Agribusiness Management |  |
AEER 2140 | Technology and Communication for Business Management |  |
AEER 305 | Marketing and Food Agricultural Products |  |
AEER 315V | World Agriculture and Food Problems |  |
AEER 425 | Food and Agribusiness Financial Management |  |
AGRO 303V | Genetics and Society |  |
AGRO 311 | Introduction to Weed Science |  |
AGRO 483 | Sustainable Production of Agronomic Crops |  |
ARTS 1610 | Drawing I |  |
ARTS 2610 | Drawing II |  |
AXED 303 | Small Engine Technology |  |
AXED 331 | Agricultural Structures |  |
BCHE 341 | Survey of Biochemistry |  |
BIOL 301 | Principles of Ecology |  |
BIOL 313 | Structure and Function of Plants |  |
BLAW 316 | Legal Environment of Business |  |
BLAW 385V | Consumers and the Law |  |
BUSA 1110 | Intro to Business |  |
CHEM 2115 | Survey of Organic Chemistry and Laboratory |  |
E T 106 | Drafting Concepts/Computer Drafting Fundamentals |  |
ECON 2110G | Macroeconomic Principles |  |
ECON 2120G | Microeconomics Principles |  |
EPWS 301 | Agricultural Biotechnology |  |
EPWS 373 | Fungal Biology |  |
EPWS 481 | Plant Nematology |  |
FSST 320 | Food Microbiology |  |
FSST 421 | Food Chemistry |  |
GENE 305 L | Genetic Techniques |  |
GENE 315 | Molecular Genetics |  |
GENE 320 | Hereditary and Population Genetics |  |
MGMT 309 | Human Behavior in Organizations |  |
MGMT 332 | Human Resources Management |  |
MKTG 303 | Principles of Marketing |  |
MKTG 313 | Retail Management |  |
SOIL 2110L | Introduction to Soil Science Laboratory |  |
SOIL 312 | Soil Management and Fertility |  |
SOIL 312 L | Soil Management and Fertility Lab |  |
### Horticulture - Bachelor of Science in Agriculture

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>SOIL 456</td>
<td>Irrigation and Drainage</td>
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</tr>
<tr>
<td>SOIL 476</td>
<td>Soil Microbiology</td>
<td></td>
</tr>
<tr>
<td>SPAN 1110</td>
<td>Spanish I</td>
<td></td>
</tr>
<tr>
<td>SPAN 2110</td>
<td>Spanish III</td>
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<tr>
<td>SPAN 2120</td>
<td>Spanish IV</td>
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<tr>
<td><strong>Non-Departmental Requirements (in addition to Gen.Ed/VWW)</strong></td>
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<tr>
<td>BIOL 2110G</td>
<td>Principles of Biology: Cellular and Molecular Biology</td>
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<tr>
<td><strong>Electives to bring the total credit to 120</strong></td>
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<tr>
<td><strong>Total Credits</strong></td>
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<td>120</td>
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</table>

1. See the General Education section of the catalog for a full list of courses.

2. MATH 1220G College Algebra is required for the degree but students may need to take any prerequisites needed to enter MATH 1220G first.

3. Requires a grade of C- or above in horticulture courses.

4. See the Viewing a Wider World Section of the catalog for a full list of courses.

5. Elective credit may vary based on prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However, students may end up needing to complete more or less on a case-by-case basis and students should discuss elective requirements with their advisor.

### A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1220G College Algebra and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

#### Course Title Credits

<table>
<thead>
<tr>
<th>Semester 1</th>
<th>First Year</th>
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<tbody>
<tr>
<td>ENGL 1110G</td>
<td>Composition I$^1$</td>
</tr>
<tr>
<td>MATH 1220G</td>
<td>College Algebra$^1$</td>
</tr>
<tr>
<td>HORT 1115G</td>
<td>Introductory Plant Science</td>
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<tr>
<td>Area IV: Social and Behavioral Science Course$^2$</td>
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<tr>
<td>ACES 1120</td>
<td>Freshman Orientation$^2$</td>
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<tr>
<th>Semester 2</th>
<th>First Year</th>
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<tbody>
<tr>
<td>ENGL 2210G</td>
<td>Professional &amp; Technical Communication$^1$</td>
</tr>
<tr>
<td>CHEM 1215G</td>
<td>General Chemistry I Lecture and Laboratory for STEM Majors$^1$</td>
</tr>
<tr>
<td>Area V: Humanities Course$^2$</td>
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<tr>
<td>HORT Elective Course</td>
<td>3</td>
</tr>
<tr>
<td>HORT Elective Course</td>
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<tr>
<td><strong>Credits</strong></td>
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<table>
<thead>
<tr>
<th>Semester 1</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>AXED 2120G</td>
<td>Effective Leadership and Communication in Agriculture</td>
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<tr>
<td>or COMM 1115G</td>
<td>or Introduction to Communication</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Second Year</th>
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<tbody>
<tr>
<td>EPWS 303</td>
<td>Economic Entomology (Spring Only)$^1$</td>
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<tr>
<td>HORT 2160</td>
<td>Plant Propagation</td>
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<td>VWW: Viewing a Wider World Course$^3$</td>
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<tr>
<td>HORT Elective Course</td>
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<td><strong>Credits</strong></td>
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<tr>
<th>Semester 2</th>
<th>Third Year</th>
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<tr>
<td>EPWS 310</td>
<td>Plant Pathology (Fall Only)$^1$</td>
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<td>HORT Prefix Course</td>
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<tr>
<td>HORT Prefix Course</td>
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<tr>
<td>VWW: Viewing a Wider World Course$^3$</td>
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<tr>
<td>HORT Elective Course</td>
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<td><strong>Credits</strong></td>
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<tr>
<th>Semester 2</th>
<th>Fourth Year</th>
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<tr>
<td>HORT 365</td>
<td>Principles of Crop Production</td>
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<td>HORT Elective Course</td>
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<tr>
<td>HORT Upper-Division Prefix Course</td>
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<tr>
<td>HORT Upper-Division Elective Course</td>
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<table>
<thead>
<tr>
<th>Semester 2</th>
<th>Fourth Year</th>
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<tbody>
<tr>
<td>HORT 447</td>
<td>Seminar</td>
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<td>HORT Upper-Division Elective Course</td>
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<tr>
<td>Elective Course</td>
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<td>Elective Course</td>
<td>3</td>
</tr>
<tr>
<td><strong>Credits</strong></td>
<td></td>
</tr>
</tbody>
</table>

| **Total Credits** | | 120 |

1. These courses have prerequisites and it is the students responsibility to check and fulfill all course prerequisites listed for these courses.

2. See the General Education section of the catalog for a full list of courses.
HORT Elective Courses:
- HORT 2110 Ornamental Plants I
- HORT 2120 Ornamental Plants II
- HORT 2130 Floral Quality Evaluation and Design
- HORT 2990 Floriculture Field Practicum
- HORT 300 Special Topics
- HORT 302V Forestry and Society
- HORT 305 Principles of Genetics
- HORT 307 Landscape Design
- HORT 310 Medicinal Herbs
- HORT 315 Crop Physiology
- HORT 377 Introduction to Turfgrass Management
- HORT 378 Turfgrass Science
- HORT 391 Internship
- HORT 449 Special Problems
- HORT 450 Special Topics
- HORT 462 Plant Breeding
- HORT 471 Plant Mineral Nutrition
- HORT 479 Advanced Turfgrass Science
- HORT 485 Vegetable Crop Management
- HORT 488 Greenhouse Management
- HORT 492 Diagnosing Plant Disorders

HORT Core Courses:
- A ST 311 Statistical Applications
- ACCT 2110 Principles of Accounting I
- ACCT 2120 Principles of Accounting II
- AECE 2110 Principles of Food and Agribusiness Management
- AECE 2140 Technology and Communication for Business Management
- AECE 305 Marketing and Food Agricultural Products
- AECE 315V World Agriculture and Food Problems
- AECE 425 Food and Agribusiness Financial Management
- AGRO 303V Genetics and Society
- AGRO 311 Introduction to Weed Science
- AGRO 483 Sustainable Production of Agronomic Crops
- ARTS 1610 Drawing I
- ARTS 2610 Drawing II
- AXED 303 Small Engine Technology
- AXED 331 Agricultural Structures
- BCHI 341 Survey of Biochemistry
- BIOL 301 Principles of Ecology
- BIOL 313 Structure and Function of Plants
- BLAW 316 Legal Environment of Business
- BLAW 385V Consumers and the Law
- BUSA 1110 Intro to Business
- CHEM 2115 Survey of Organic Chemistry and Laboratory
- E T 106 Drafting Concepts/Computer Drafting Fundamentals I
- ECON 2110G Macroeconomic Principles
- ECON 2120G Microeconomics Principles
- EPWS 301 Agricultural Biotechnology
- EPWS 373 Fungal Biology
- EPWS 481 Plant Nematology
- FSTE 320 Food Microbiology
- FSTE 421 Food Chemistry
- GENE 305L Genetic Techniques
- GENE 315 Molecular Genetics
- GENE 320 Hereditary and Population Genetics
- MGMT 309 Human Behavior in Organizations
- MGMT 332 Human Resources Management
- MKTG 303 Principles of Marketing
- MKTG 313 Retail Management
- SOIL 2110L Introduction to Soil Science Laboratory
- SOIL 312 Soil Management and Fertility/SOIL 312L Soil Management and Fertility Lab
- SOIL 456 Irrigation and Drainage
- SOIL 476 Soil Microbiology
- SPAN 1110 Spanish I
- SPAN 2110 Spanish III

See the Viewing a Wider World section of the catalog for a full list of courses.