Horticulture BSA
Degree Requirements

General Education Core Curriculum

Total Degree Hours 120 hours

I. Foundation Courses (10 hours)
ENGL 1101 or ENGL 1101E or ENGL 1101S (3)
ENGL 1102 or ENGL 1102E or ENGL 1103 or ENGL 1050H or ENGL 1060H (3)
FYOS 1001 (1)
MATH 1113* or MATH 2200* or MATH 2250* or MATH 2300H* or MATH 2400* or MATH 2410* or MATH 2410H* (3)

*In addition to meeting upper-level course prerequisites, this course can be used to satisfy College of Agricultural and Environmental Sciences graduation requirements.

II. Sciences (8 hours)
At least one of the physical science or life science courses must include a laboratory.
Physical Sciences (3-4 hours)
Preferred Course(s): CHEM 1211*, CHEM 1211L* or CHEM 1311H*, CHEM 1311L*

*In addition to meeting upper-level course prerequisites, this course can be used to satisfy College of Agricultural and Environmental Sciences graduation requirements.

Life Sciences (4 hours)
Preferred Course(s): BIOL 1107, BIOL 1107L* or BIOL 2107H, BIOL 2107L* or PBIO 1210, PBIO 1210L* (4)

*In addition to meeting upper-level course prerequisites, this course can be used to satisfy College of Agricultural and Environmental Sciences graduation requirements.

III. Quantitative Reasoning (3-4 hours)
Preferred course: STAT 2000
PHYS 1111, PHYS 1111L or PHYS 1112, PHYS 1112L

IV. World Languages and Culture, Humanities and the Arts (12 hours)
World Languages and Culture (9 hours)
Preferred Course(s): SPAN and LAND

Humanities and the Arts (3 hours)
COMM 1110 or COMM 2150* (3)

V. Social Sciences (9 hours)
HIST 2111 or HIST 2111E or HIST 2111H or HIST 2112 or HIST 2112E or HIST 2112H or HIST 3080H (3)
POLS 1101 or POLS 1101E or POLS 1105H (3)
Plus one additional social science (3)

Area VI (18 hours)
HORT 2000 or 2000E (3)
HORT 2100 (1)
BIOL 1104, BIOL 1104L or BIOL 1108, BIOL 1108L (4)
STAT 2000 or BIOS 2010 (3)
3-4 additional hours of courses from Area II in Physical Sciences*
2-4 hours of 1000/2000 level electives

Notes:
*If CHEM 1211, CHEM 1211L is not taken in Area II, then it should be taken in Area VI. If CHEM 1211 CHEM 1211L is taken in Area II, then a second Physical Science should be taken in Area VI.

Students on a science-based track, or contemplating graduate school, should take the following combination in Areas II and VI: CHEM 1211, CHEM 1211L, or AND CHEM 1212, CHEM 1212L AND PHYS 1111-1111L or PHYS 1112-1112L AND STAT 2000 AND BIOL 1108, BIOL 1108L.

If any of the courses in Area VI have been used to satisfy Areas II-V of the Core Curriculum, General Electives may be taken here. Refer to College-wide requirements when selecting General Electives.
Major Requirements (60 hours)

**Horticulture Core Courses (15 hours)**
- CRSS 3060 Soil Science (4)
- HORT 3000 Wonderful World of Horticulture Plants (3)
- HORT 3620 Plant Propagation (3)
- HORT 3640 Inheritance of Plant Traits (1)
- HORT 4430/6430 or HORT 4430/6430E Plant Physiology (3)
- HORT 4990/6990 Horticulture Seminar (1)

**Horticulture Core Courses Science (Choose at least 6 hours)**
- CRSS(HORT)(ECOL) 4590/6590 Soil Fertility and Plant Nutrition (3)
- HORT 3620, HORT 3620L Plant Propagation (3)
- HORT 4210/6210 Postharvest Physiology (3)
- HORT(CRSS)(PBGG) 4140/6140 Plant Breeding (3)

**Experiential Learning (Choose 3 hours)**
- HORT 3910 Horticulture Internship (3)
- HORT 3920 UGArden Internship (3)
- HORT 3930 Trial Garden Internship (3)
- HORT 3940S Botanical Garden Internship (3)
- HORT 4770E/6770E Wonderful World of Plants and Pollinators (3)
- HORT 4920/6920 Organic Horticulture Entrepreneurship (3)
- HORT 4960R Undergraduate Horticulture Research (3)

**Plant Protection Course (Choose 6 hours)**
- CRSS 4250/6250 Pesticides and Transgenic Crops (3)
- CRSS 4340/6340 and 4340L/6340L Weed Science (4)
- ENTO 3740-3740L Insect Pest Management (4)
- ENTO 4500E/6500E Biological Control of Insects (3)
- ENTO 4740/6740 Integrated Pest Management (3)
- PATH 3550 Plant Pathology (3)
- PATH 4360/6360 Ornamental Pest Management (3)

**Crop Management Courses (Choose 6 hours)**
- HORT 4010/6010 Vegetable Production (3)
- HORT 4020/6020 Fruit Production (3)
- HORT 4050/6050 Greenhouse Management (3)
- HORT 4090/6090 Sustainable Landscape Management (3)
- HORT 4125/6125 Organic Agriculture Systems (3)
- HORT 4630/6630 Nursery Management (3)

**Business Course (Choose 3 hours)**
- AAEC 3200 Selling in Agribusiness (3)
- AAEC 3980 or AAEC 3980E Introduction to Agribusiness Management (3)
- AGCM 3820E Branding and Marketing for Ag. Communication (3)
- ENTR 5500 Introduction to Entrepreneurship (3)
- HORT 4091/6091 Horticulture Professional Practices (3)

**Horticulture Major Electives (21 hours)**
These courses will be selected from a list of Horticulture, Pathology, Entomology, Crop and Soils, Agricultural and Environmental Economics, and Landscape Architecture courses in consultation with their faculty mentor. Students may also choose from a select list of social science courses directly related to careers in allied horticulture fields of study. Students can use electives to dig deeper or broaden their horizon. Though students are free to choose any horticulture electives, below are examples of pathways students can pursue if they have an interest in a specific area of study under the umbrella of horticulture.
Possible Pathways

Sustainable and Organic Food Production
CRSS 4020S/6020S Social Sustainability in Agricultural and Food Systems (3)
FISH 4550/6550, FISH 4550L/6550L Sustainable Aquaculture (4)
HORT 3300 Organic Gardening (3)
HORT 3200 Hydroponics (3)
HORT 3920 UGArden Internship (3)
HORT 4030/6030S Sustainable Community Food Production (3)
HORT 4125/6125 Organic Agriculture Systems (4)
HORT 4920/6920 Organic Horticulture Entrepreneurship (3)

Urban Forestry
FORS 3010 Dendrology (3)
HORT 3720 Wood Plant Identification (4)
COFA 5001 Urban Tree Management I (3)
COFA 5300, COFA 5300L Community Soils and Site Development (4)
COFA 5010, COFA 5010L Urban Tree Management II (4)
COFA 5500 Community Forest Management (3)
COFA 4650 Community Forestry and Arboriculture Practicum (3)

Medicinal Plants
ANTH 4300/6300 Ethnobotany (3)
HORT 3510 Perennial Plant Identification 1 (2)
HORT 3520 Perennial Plant Identification 2 (2)
HORT 3440 or 3440E Herbs, Spices and Medicinal Plants (3)
HORT 3920 UGArden Internship (Herbs) (3)
PBIO 3010 Fungi Friends and Foes (3)

Greenhouse Nursery Production
HORT 3200 Hydroponics (3)
HORT 3510 Perennial Plant Identification 1 (2)
HORT 3520 Perennial Plant Identification 2 (2)
HORT 3720 Wood Plant Identification (4)
HORT 4050/6050 Greenhouse Management (3)
HORT 4590/6590 Soil Fertility and Plant Nutrition (3)
HORT 4630/6630 Nursery Management (3)

Botanical Gardens and Public Horticulture
HORT 3510 Perennial Plant Identification 1 (2)
HORT 3520 Perennial Plant Identification 2 (2)
HORT 3720 Wood Plant Identification (4)

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Landscape Contracting
AGCM 3820E Branding and Marketing for Agricultural Communication (3)
CRSS 3270 Turfgrass Management (3)
COFA 5001 Urban Tree Management I (3)
HORT 3720 Wood Plant Identification (4)
HORT 3510 Perennial Plant Identification 1 (2)
HORT 3520 Perennial Plant Identification 2 (2)
HORT 4090 Sustainable Landscape Management (3)
PATH 4360/6360 Ornamental Pest Management (3)

STEM
CHEM 1212 Chemistry II (4)
BIOL 1108 Principles of Biology II (4)
BIOL 4300W Biological Sciences Scientific Research Writing (3)
PBIO 4650/6650 Plant Taxonomy (4)
STAT 2000 Statistics (3)
GENE 3200 Genetics (3)
HORT 4140/6140 Plant Breeding (3)
PHYS 1111 Elementary Physics (4)
HORT 4590/6590 Soil Fertility and Plant Nutrition (3)
HORT 4960R Faculty-Mentored Undergraduate Research I (3)

Pre-Med
CHEM 1212, CHEM 1212L General Chemistry II (4)
CHEM 2211, CHEM 2211L Organic Chemistry I (4)
CHEM 2212, CHEM 2212L Organic Chemistry II (4)
BIOL 1107, BIOL 1107L General Biology I (4)
PHYS 1111, PHYS 1111L or PHYS 1211, PHYS 1211L Physics I (4)
PHYS 1112, PHYS 1112L or PHYS 1212, PHYS 1212L Physics II (4)
BCMB 3100 Introductory Biochemistry and Molecular Biology or BCMB 4010 (4)
and BCMB 4020 Biochemistry and Molecular Biology I and Biochemistry and Molecular Biology II (4)
Horticulture Minor
Degree Requirements

Minor Requirements (15 hours)
Courses taken to satisfy Core Areas I through V may not be counted as course work in the minor. Courses taken in Core Area VI may be counted as course work in the minor.

Required (6 hours)
HORT 2000 or HORT2000E Sustainable Plant Production (3)
HORT 3000 Wonderful World of Horticulture Plants (3)

Horticulture Management Courses (choose only 1 of the following)
HORT 4050/6050 Greenhouse Management (3)
HORT 4630/6630 Nursery Management (3)
HORT 4090/6090 Sustainable Landscape Management and Design (3)
HORT 4125/6125 Organic Agriculture Systems (3)
HORT 4010/6010 Vegetable Culture (3)
HORT 4020/6020 Fruit Production (3)
HORT 4015/6015 Medicinal Herb Production (3)

Select 6 additional hours of HORT courses at 3000-level or above