

# Horticulture | Associate in Applied Science

## Field of Study Code: HORT.AAS

### Catalog Description:

The Horticulture program meets the needs of students entering the horticulture industry as well as those presently employed who wish to continue their professional growth. Besides providing horticultural knowledge and skills, the program emphasizes the business and management proficiency necessary to compete successfully in the horticulture industry. The **Horticulture degree** program requires a minimum of 64 credits in program requirements, program electives and general education in the courses listed below.

### Program Requirements ..... 25 to 26

Hort 1100	Introduction to Horticulture.....	3
Hort 1101	Soils and Fertilizers.....	3
Hort 1110*	Applied Plant Taxonomy .....	3
Hort 1130	Horticulture Business .....	3
<b>OR</b>		
Busin 1100	Introduction to Business .....	3
Hort 2221	Plant Propagation.....	3
Hort 2863*	Internship (Career & Technical Education) .....	3
Biolo 1110*	Environmental Biology .....	4
<b>OR</b>		
Biolo 1151*	Principles of Biological Science.....	5
<b>OR</b>		
Chemi 1211*	Survey of General Chemistry.....	5
Math 1104	Mathematics for Horticulture .....	3

### Program Electives ..... 27

When selecting program electives, students may include up to eight credits in any combination from the additional courses listed below. No more than three credits of internship can be applied as program elective credit toward this degree. (In addition to the courses listed above.)

Hort 1800	Special Project.....	1 to 3
Hort 2860	Internship (Career & Technical Education) .....	1 to 4
Hort 2865	Internship-Advanced (Career & Technical Education) .....	1 to 4
Arch 1211	Basic Computer-Aided Drafting-AutoCAD.....	3

Select a minimum of 27 credits from the courses listed below.

Hort 1105	Floral Design I.....	3
Hort 1109	OSHA 10 Hour Landscape Safety.....	1
Hort 1111	Landscape Design I .....	3
Hort 1112	Landscape Maintenance .....	3
Hort 1113	Landscape Construction .....	3
Hort 1114	Irrigation and Water Management .....	3
Hort 1115*	Floral Design II.....	3
Hort 1125	Water Use and Conservation in the Landscape.....	1
Hort 1131	Landscaping for Wildlife .....	1

### Suggested Course Sequence (Full-Time Enrollment)

**Please note: A student's readiness to perform college-level coursework is based on the student's placement test and/or ACT scores. Below 1000 level coursework may be required prior to the student taking courses in the suggested sequences.**

#### First Semester (15 credits)

- Engli 1101 (3)
- Hort 1100 (3)
- Hort 1101 (3)
- Hort 1110 (3)
- Busin 1100 or Hort 1130 (3)

#### Second Semester (11 to 17 credits)

- Speec 1100 (3)
- Biolo 1110 or 1151 or Chemi 1211 (4 to 5)
- Math 1104 (3)
- Program Elective (1 to 6)

#### Summer Term (1 to 6 credits)

- Program Elective (1 to 6)

#### Third Semester (6 to 9 credits)

- Social & Behavioral Sciences (3)
- Program Elective (3 to 9)

#### Fourth Semester (12 to 15 credits)

- Humanities & Fine Arts (3)
- Hort 2221 (3)
- Hort 2863 (3)
- Program Elective (3 to 6)

#### For more information:

If you are considering this program as an area of study, please contact the **Business and Applied Technology Division** office at 630-942-2592.

#### Program web site:

<http://www.cod.edu/programs/horticulture/>

HORT.AAS

Hort	1135	Introduction to Green Roofs .....	1
Hort	1140	Landscape Graphics.....	2
Hort	1141	Sustainable Landscape Design.....	1
Hort	1145	Perennial Plant Communities I .....	2
Hort	1151	2-Cycle Small Engine Repair and Maintenance .....	2
Hort	1152	4-Cycle Small Engine Repair and Maintenance .....	3
Hort	1185	Arboriculture .....	3
Hort	1820	Selected Topics.....	3
Hort	1821	Selected Topics.....	3
Hort	1824	Selected Topics.....	2
Hort	1826	Selected Topics.....	1
Hort	1827	Selected Topics.....	1
Hort	2211*	Computer-Aided Drafting for Landscape .....	3
Hort	2212*	Advanced Computer-Aided Drafting for Landscape.....	3
Hort	2213	3D Landscape Design.....	3
Hort	2214	Advanced 3D Landscape Design.....	2
Hort	2225	Specialty Floral Design .....	3
Hort	2231	Turf Science and Management .....	3
Hort	2241*	Landscape Plants I .....	3
Hort	2242*	Landscape Plants II .....	3
Hort	2243	Ornamental Grasses.....	2
Hort	2244*	Herbaceous Perennials.....	3
Hort	2245*	Perennial Plant Communities II .....	1
Hort	2251	Diseases of Ornamental Plants.....	3
Hort	2253*	Greenhouse Operations and Procedures .....	3
Hort	2255	Greenhouse Crop Production.....	3
Hort	2257	Bedding Plant Production.....	3
Hort	2261*	Insects of Ornamental Plants .....	3
Hort	2271*	Landscape Design II .....	3
Hort	2302	Sustainable Urban Vegetable and Herb Production.....	3
Hort	2304	Hydroponic and Aquaponic Production Systems .....	3
Hort	2308	Introduction to Composting.....	1

\* - course has a prerequisite

**General Education ..... 12**

Each candidate for an Associate in Applied Science (A.A.S.) degree shall satisfactorily complete a minimum of 18 credits in General Education. For the **Horticulture degree**, some General Education courses are already listed under program requirements. Therefore, students need a minimum of 12 credits besides those listed under program requirements.

Under the specified General Education headings below, the following courses are required for the **Horticulture degree**:

**Communication:** 6 credits

**Written:** (3 credits) English 1101 or 1105

**Oral:** (3 credits) Speech 1100, 1120 or 1150

**Physical and Life Sciences:** 3 to 5 credits

At least one course with a laboratory component (**Biology 1110, Biology 1151 or Chemistry 1211 in program requirements fulfills this requirement**)

**Mathematics:** 3 to 5 credits

Select a minimum of 3 credits (1000 level or above). Select Mathematics 1102, 1104 or 1120 only where required in the degree program. Only one from the following three courses may count toward overall degree requirement credit: Mathematics 1635, Psychology 2280 or Sociology 2205. Only one of the following courses may count toward overall degree credit: Mathematics 1428 or Mathematics 1431. (**Math 1104 in program requirements fulfills this requirement**)

**Humanities and Fine Arts:** 3 credits

**Social and Behavioral Sciences:** 3 credits

Complete at least 2 credits from the list of courses in the Global/Multicultural Studies or Contemporary Life Skills Category. (**Horticulture 1100 within program requirements fulfills this requirement**)

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**TOTAL CREDITS FOR AAS DEGREE**

**64 to 65**

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## Career Information HORT.AAS

**Job Title(s):** Nursery and Greenhouse Managers

Production Manager, Nursery Manager, Greenhouse Manager, Grower, Propagation Manager, Farm Manager, Garden Center Manager, Harvesting Manager, Horticulturist, Perennial House Manager

For salary and wage information, please visit: [www.onetonline.org](http://www.onetonline.org)

If you would like information regarding internships, resume development, interviewing and job search skills, please contact the Career Services Center

Phone: 630-942-2230

[www.cod.edu/careerservices](http://www.cod.edu/careerservices)

Twitter: @codcareercenter

**Related Occupations:**

Aquacultural Managers

Soil and Water Conservationists

Industrial Production Managers

First-Line Supervisors of Landscaping,

Lawn Service, and Groundskeeping

Workers

Agricultural Inspectors

Forest and Conservation Technicians

Forest and Conservation Workers

# Horticulture | Associate in Applied Science

## Field of Study Code: HORT.AAS.LAND

### Catalog Description:

The **Landscape Contracting and Management degree** develops a student's ability to design, implement, and maintain landscape projects. Students build professional skills in plant healthcare, design, estimating, installation and project management while earning an Associate's in Applied Science Degree. Landscape contracting graduates are well-placed to work in the growing field of sustainable landscaping, or enter a Bachelors program in Horticulture or related field. This degree requires a minimum of 71 credits in program requirements, program electives, and general education in the courses listed below.

### Program Requirements ..... 59 to 60

Hort 1100	Introduction to Horticulture.....	3
Hort 1101	Soils and Fertilizers.....	3
Hort 1109	OSHA 10-Hour Landscape Safety .....	1
Hort 1111	Landscape Design I .....	3
Hort 1112	Landscape Maintenance .....	3
Hort 1113	Landscape Construction .....	3
Hort 1114	Irrigation and Water Management .....	3
Hort 1130	Horticulture Business .....	3
Hort 2211*	Computer-Aided Drafting for Landscape .....	3
Hort 2213	3D Landscape Design.....	3
Hort 2231	Turf Science and Management .....	3
Hort 2235	Landscape Estimating and Bidding.....	3
Hort 2241*	Landscape Plants I .....	3
Hort 2242*	Landscape Plants II .....	3
Hort 2251	Diseases of Ornamental Plants.....	3
Hort 2261	Insects of Ornamental Plants .....	3
Hort 2863*	Internship (Career & Technical Education) .....	3
Biolo 1110*	Environmental Biology .....	4
<b>OR</b>		
Biolo 1151*	Principles of Biological Science.....	5
<b>OR</b>		
Chemi 1211*	Survey of General Chemistry.....	5
Econo 2201*	Macroeconomics and the Global Economy....	3
<b>OR</b>		
Econo 2202*	Microeconomics and the Global Economy....	3
Math 1104	Mathematics for Horticulture .....	3

### Program Electives ..... 3

Select a minimum of three credits from the courses listed below (In addition to the courses listed above).

Hort 1125	Water Use and Conservation in the Landscape.....	1
Hort 1131	Landscaping for Wildlife .....	1
Hort 1135	Introduction to Green Roofs .....	1
Hort 1140	Landscape Graphics.....	2
Hort 1141	Sustainable Landscape Design.....	1
Hort 1145	Perennial Plant Communities I .....	2

### Suggested Course Sequence (Full-Time Enrollment)

*Please note: A student's readiness to perform college-level coursework is based on the student's placement test and/or ACT scores. Below 1000 level coursework may be required prior to the student taking courses in the suggested sequences.*

#### First Semester (16 credits)

- Engli 1101 (3)
- Hort 1100 (3)
- Hort 1101 (3)
- Hort 1109 (1)
- Hort 1111 (3)
- Hort 1130 (3)

#### Second Semester (16 to 17 credits)

- Speec 1100 (3)
- Biolo 1110 or Chemi 1151 or Chemi 1211 (4 to 5)
- Math 1104 (3)
- Hort 1113 (3)
- Hort 2211 (3)

#### Summer Term (9 credits)

- Hort 1114 (3)
- Hort 2231 (3)
- Program Elective (3)

#### Third Semester (15 credits)

- Econo 2201 or Econo 2202 (3)
- Hort 1112 (3)
- Hort 2213 (3)
- Hort 2241 (3)
- Hort 2251 (3)

#### Fourth Semester (15 credits)

- Humanities & Fine Arts (3)
- Hort 2235 (3)
- Hort 2242 (3)
- Hort 2261 (3)
- Hort 2863 (3)

#### For more information:

If you are considering this program as an area of study, please contact the **Business and Applied Technology Division** office at 630-942-2592.

#### Program web site:

<http://www.cod.edu/programs/horticulture/>

Hort	1150	Power Equipment Electrical Systems .....	3
Hort	1151	2-Cycle Small Engine Repair and Maintenance .....	2
Hort	1152	4-Cycle Small Engine Repair and Maintenance .....	3
Hort	1153	Portable Power Generator Repair and Maintenance .....	2
Hort	1154	Compact Diesel Engines .....	3
Hort	1155	Power Equipment Drivelines/Hydraulics/ Hydrostatics .....	3
Hort	1185	Arboriculture.....	3
Hort	2212*	Advanced Computer-Aided Drafting for Landscape .....	3
Hort	2213	3D Landscape Design .....	3
Hort	2214	Advanced 3D Landscape Design.....	2
Hort	2225	Specialty Floral Design .....	3
Hort	2231	Turf Science and Management .....	3
Hort	2241*	Landscape Plants I.....	3
Hort	2242*	Landscape Plants II.....	3
Hort	2243	Ornamental Grasses .....	2
Hort	2244*	Herbaceous Perennials.....	3
Hort	2245*	Perennial Plant Communities II.....	1
Hort	2251	Diseases of Ornamental Plants .....	3
Hort	2253*	Greenhouse Operations and Procedures .....	3
Hort	2255	Greenhouse Crop Production .....	3
Hort	2257	Bedding Plant Production .....	3
Hort	2261*	Insects of Ornamental Plants .....	3
Hort	2271*	Landscape Design II.....	3

\* - course has a prerequisite

**General Education .....9**

Each candidate for an Associate in Applied Science (A.A.S.) degree shall satisfactorily complete a minimum of 18 credits in General Education. (In addition to the courses listed below.)

For the **Horticulture degree**, some General Education courses are already listed under program requirements. Therefore, students need a minimum of nine credits besides those listed under program requirements.

Under the specified General Education headings below, the following courses are required:

**Communication:** 6 credits

**Written:** (3 credits) English 1101 or 1105

**Oral:** (3 credits) Speech 1100, 1120 or 1150

**Physical and Life Sciences:** 3 to 5 credits

At least one course with a laboratory component

**(Biology 1110, Biology 1151 or Chemistry 1211 in program requirements fulfills this requirement)**

**Mathematics:** 3 to 5 credits

Select a minimum of 3 credits (1000 level or above).

Select Mathematics 1102, 1104 or 1120 only where required in the degree program. Only one from the following three courses may count toward

overall degree requirement credit: Mathematics 1635, Psychology 2280 or Sociology 2205. Only one of the following courses may count toward overall degree credit: Mathematics 1428 or Mathematics 1431.

**(Math 1104 in program requirements fulfills this requirement)**

**Humanities and Fine Arts:** 3 credits

**Social and Behavioral Sciences:** 3 credits  
**(Economics 2201 or Economics 2202 1211 in program requirements fulfills this requirement)**

Complete at least 2 credits from the list of courses in the Global/Multicultural Studies or Contemporary Life Skills Category. **(Horticulture 1100 within program requirements fulfills this requirement)**

**TOTAL CREDITS FOR AAS DEGREE**  
**71 to 72**

## **Career Information: HORT.AAS.LAND**

**Job Title(s): First-Line Supervisors of Landscaping, Lawn Service, and Grounds keeping Workers (SOC 37-1012):**

Directly supervise and coordinate activities of workers engaged in landscaping or grounds keeping activities. Work may involve reviewing contracts to ascertain service, machine, and workforce requirements; answering inquiries from potential customers regarding methods, material, and price ranges; and preparing estimates according to labor, material, and machine costs.

For salary and wage information, please visit: [www.onetonline.org](http://www.onetonline.org)

If you would like information regarding internships, resume development, and job search skills, please contact the Career Services Center.

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Twitter: @codcareercenter

### **Related Occupations:**

Golf Course Superintendent

Landscape Supervisor

Landscape Manager

Grounds Maintenance Supervisor

Grounds Foreman

Grounds Crew Supervisor

Groundskeeper Supervisor

Grounds Supervisor

Grounds Manager

Field Manager

Greenhouse Worker

HORT.AAS.LAND

# Horticulture | Associate in Applied Science

Field of Study Code: HORT.AAS.URBAN

## Catalog Description:

The **Sustainable Urban Agriculture degree** offers a hands-on approach to becoming a professional in the field of urban farming and sustainable urban agriculture. The goal of the program is to help society improve the health of its environment, food, and communities. Students gain practical experience working alongside professional urban farmers. Students will critically analyze historical and current food systems to offer more sustainable solutions. Includes sustainable urban agriculture management and marketing techniques for food production systems.

## Program Requirements ..... 42 to 43

Biolo 1110*	Environmental Biology .....	4
<b>OR</b>		
Biolo 1151*	Principles of Biological Science I.....	5
<b>OR</b>		
Chemi 1211*	Survey of General Chemistry.....	5
Hort 1100	Introduction to Horticulture.....	3
Hort 1101	Soils and Fertilizers.....	3
Hort 1109	OSHA 10-Hour Landscape Safety.....	1
Hort 1125	Water Use and Conservation in the Landscape.....	1
Hort 1135	Introduction to Green Roofs .....	1
Hort 1141	Sustainable Landscape Design.....	1
Hort 2253	Greenhouse Operations and Procedures .....	3
Hort 2300	Introduction to Sustainable Urban Agriculture.....	3
Hort 2301*	Principles of Agroecology .....	3
Hort 2302*	Sustainable Urban Vegetable and Herb Production.....	3
Hort 2303	Urban Agriculture Issues .....	2
Hort 2304	Hydroponic and Aquaponic Production Systems.....	3
Hort 2305	Local Foods.....	2
Hort 2307	Business Principles of Sustainable Agriculture.....	2
Hort 2308	Introduction to Composting.....	1
Hort 2863*	Internship (Career & Technical Ed).....	3
Math 1104	Mathematics for Horticulture .....	3

## Program Electives ..... 10

Choose 10 credits from the following courses:

Biolo 2150*	Ecology .....	4
Botan 1320*	Prairie Ecology .....	4
Earth 1135*	Water Science-Fundamentals of Hydrology...4	
Hort 1114	Irrigation and Water Management .....	3
Hort 2221	Plant Propagation.....	3
Hort 2251	Diseases of Ornamental Plants.....	3
Hort 2261	Insects of Ornamental Plants .....	3
Marke 2210	Principles of Marketing .....	3
Math 1428*	College Algebra with Applications.....	3
Math 1635*	Statistics .....	4

\* - course has a prerequisite

8/19/19

## Suggested Course Sequence (Full-Time Enrollment)

**Please note: A student's readiness to perform college-level coursework is based on the student's placement test and/or ACT scores. Below 1000 level coursework may be required prior to the student taking courses in the suggested sequences.**

### First Semester (14 to 15 credits)

- Engli 1101 (3)
- Hort 1100 (3)
- Hort 1101 (3)
- Biolo 1110 or Biolo 1151 or Chemi 1211 (4 to 5)
- Hort 1125 (1)

### Second Semester (13 credits)

- Spec 1100 (3)
- Math 1104 (3)
- Hort 1141 (1)
- Hort 2305 (2)
- Hort 2308 (1)
- Social & Behavioral Sciences (3)

### Summer Term (6 credits)

- Hort 1109 (1)
- Hort 2301 (3)
- Hort 2303 (2)

### Third Semester (15 credits)

- Hort 2300 (3)
- Hort 1135 (1)
- Hort 2304 (3)
- Hort 2302 (3)
- Hort 2307 (2)
- Hort 2261 (3)

### Fourth Semester (16 credits)

- Humanities & Fine Arts (3)
- Hort 2253 (3)
- Hort 2221 (3) recommended
- Botan 1320 (4) recommended
- Hort 2863 (3)

HORT.AAS.URBAN

**General Education ..... 12**

Each candidate for an Associate in Applied Science (A.A.S.) degree shall satisfactorily complete a minimum of 18 credits in General Education. (In addition to the courses listed above.)

For the **Sustainable Urban Agriculture degree**, some General Education courses are already listed under program requirements. Therefore, students need 12 credits besides those listed under program requirements.

Under the specified General Education headings below, the following courses are required:

**Communication:** 6 credits

**Written:** (3 credits) English 1101 or 1105

**Oral:** (3 credits) Speech 1100, 1120 or 1150

**Physical and Life Sciences:** 3 to 5 credits

At least one course with a laboratory component

***(Biology 1110, 1151 or Chemistry 1211 in program requirements fulfills this requirement)***

**Mathematics:** 3 to 5 credits

Select a minimum of 3 credits (1000 level or above).

Select Mathematics 1102, 1104 or 1120 only where required in the degree program. Only one from the following three courses may count toward overall degree requirement credit: Mathematics 1635, Psychology 2280 or Sociology 2205. Only one of the following courses may count toward overall degree credit: Mathematics 1428 or Mathematics 1431.

***(Mathematics 1104 in program requirements fulfills this requirement)***

**Humanities and Fine Arts:** 3 credits

**Social and Behavioral Sciences:** 3 credits

Complete at least 2 credits from the list of courses in the Global/Multicultural Studies or Contemporary Life Skills Category.

***(Horticulture 1100 within program requirements fulfills this requirement)***

**TOTAL CREDITS FOR AAS DEGREE**

**64 to 65**

**For more information:**

If you are considering this program as an area of study, please contact the **Business and Applied Technology Division** office at 630-942-2592.

**Program web site:**

<http://www.cod.edu/programs/horticulture/>



## **Career Information: HORT.AAS.URBAN**

**Job Title(s): Farmworkers and Laborers, Crop, Nursery, and Greenhouse (SOC 45-2092):**

Manually plant, cultivate, and harvest vegetables, fruits, nuts, horticultural specialties, and field crops. Use hand tools, such as shovels, trowels, hoes, tampers, pruning hooks, shears, and knives. Duties may include tilling soil and applying fertilizers; transplanting, weeding, thinning, or pruning crops; applying pesticides; or cleaning, grading, sorting, packing, and loading harvested products. May construct trellises, repair fences and farm buildings, or participate in irrigation activities.

For salary and wage information, please visit: [www.onetonline.org](http://www.onetonline.org)

If you would like information regarding internships, resume development, and job search skills, please contact the Career Services Center.

Phone: 630-942-2230

[www.cod/careerservices](http://www.cod/careerservices)

Twitter: @codcareercenter

### **Related Occupations:**

Greenhouse Worker

Transplant Worker

Propagation Worker

Plant Production Worker

Picker Field Worker

Irrigator Farm Laborer Vegetable Grower

Tractor Operator