HORTICULTURE: AAS

Associate in Applied Science | 61 credit hours minimum

Area of Interest: Science, Technology, Engineering, and Math (STEM)

Program Website (https://stlcc.edu/programs-academics/pathways/s-t-e-m/horticulture/)

Academic Advising (https://stlcc.edu/admissions/advising/)

Program Description:

The Associate in Applied Science in Horticulture centers on both the science and the art of horticulture through a combination of classroom theory, practical laboratory application, and on-the-job training. Courses in soils, integrated pest management, plant identification, plant culture, and cooperative horticulture are integral parts of the program. Students receive their training in the College's greenhouses, outdoor garden classroom, and laboratories. Students should enjoy working with plants and observing their culture and growth process.

Graduates may specialize in plant research, landscape design, landscape management, greenhouse management, horticulture retail sales, and urban forestry. Employment opportunities include national, state, and city parks departments, landscape contracting firms, golf courses, retail sales, plant research or biotech companies, greenhouse growing, and retail garden centers.

Location. This program is offered in its entirety at Meramec.

Related Programs. The Horticulture Department offers certificates in the following areas:

> Cannabis and Hemp Production, Certificate of Specialization (http://catalog.stlcc.edu/programs/cannabis-hemp-production-certificate-specialization/)
>
> Horticulture, Certificate of Proficiency (http://catalog.stlcc.edu/programs/horticulture-certificate-proficiency/)

Cost of Attendance. For more information on cost of attendance visit MoSCORES (https://scorecard.mo.gov/Search/).

Program Career and Salary Information. Pursuant to Missouri HB 1606 (2018), information regarding the number of credit hours, program length, employment rate, wage data, and graduates employed in careers related to their program of study at St. Louis Community College can be found at the following URL: https://scorecard.mo.gov/scorecard/ (https://www.google.com/url/?q=https://scorecard.mo.gov/scorecard/&sa=D&ust=1555536894857000&usg=AFQjCNG1xf3E_i2lO96zEytILO-s5xaJCQ). Search using School / Program "St. Louis Community College" and choose the degree or credential type of interest.

The following limitations to the data apply: Information provided is based on the most recent cohorts available. Typically, most recent cohorts for wage and completion data are six years prior to the current academic year. Time to complete a program of study varies depending on the number of credit hours students earn per semester.

Interested in this program? Start the enrollment process by visiting the Apply to STLCC (https://www.stlcc.edu/admissions/apply-to-stlcc/) page.

At the completion of the program, students are expected to:

1. identify an array of plant material in a landscape, greenhouse, or garden center setting.
2. gather accurate information for soil testing.
3. analyze soil test results for proper plant selection or changes to soil conditions.
4. manage landscape areas and gardens using proper and professional methods of pruning, planting, and fertilizing.
5. develop a landscape maintenance schedule that utilizes correct horticulture methods of management.
6. identify plant pests, insects, diseases, and weeds using sustainable methods.
7. design a residential or commercial landscape.
8. develop a business plan for a small business in the green industry.
9. apply the methods of propagating plant material using the latest technology available as practiced in a laboratory setting.
10. demonstrate the ability to collaborate with community landscape programs, tending gardens, and developing tree care programs.
11. maintain turf grass areas using current methods of seeding, installing, watering, fertilizing, and mowing.
12. operate a greenhouse using current greenhouse management methods.
13. discuss the advantages to the local ecology offered by native plants.
14. grow a variety of plants in a greenhouse or field setting.
15. utilize plants according to their preferred culture and soil requirements.

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. Information on who is eligible for a waiver can be found on the STLCC website (https://stlcc.edu/programs-academics/missouri-civics-exam.aspx).

Program of Study

Code	Title	Credit Hours
General Education		
ENG 101	College Composition I (MOTR ENGL 100)	3
MTH 140	Intermediate Algebra (or higher)	3
COM 201	Interpersonal Communication (MOTR COMM 120)	3
or COM 101	Oral Communication I (MOTR COMM 100)	
or COM 107	Public Speaking (MOTR COMM 110)	
XXX xxx	Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/)	3
CHM 109	Chemistry and the Environment (MOTR CHEM 100L)	4-5
or CHM 101	Fundamentals of Chemistry I (MOTR CHEM 100L)	
PHL 112	Business Ethics (MOTR PHIL 102P)	3
Program Requirements		
Select 6 credit hours of the following:		6
ACC 100	Applied Accounting	
or ACC 110	Financial Accounting	
ART 109	Drawing I (MOTR PERF 105D)	
BLW 101	Business Law I	
BUS 101	Small Business Management	
or BUS 104	Introduction to Business Administration	

ECO 140	Introduction to Economics (MOTR ECON 100)	
MGT 101	Introduction to Supervision	
MKT 104	Principles of Selling	

Horticulture Core Courses

HRT 101	Introductory Horticulture	4
or BIO 124	General Botany I (MOTR BIOL 100LB)	
HRT 102	Soils	3
HRT 105	Workplace Learning	2
HRT 206	Woody Plants - Trees and Vines	3
HRT 207	Woody Plants - Shrubs and Evergreens	3
HRT 214	Landscape Management	3
HRT 227	Integrated Pest Management	3
HRT 230	Herbaceous Perennials and Ornamental Grasses	3

Horticulture Electives		**12**

Select 12 credit hours of the following:

HRT 103	Plant Propagation	
HRT 104	Landscape Graphics	
HRT 106	Digital Applications in Landscape Design	
HRT 134	Micropropagation of Plants	
HRT 135	Introduction to Cannabis	
HRT 136	Cannabis and Hemp Cultivation	
HRT 137	Laboratory Methods for Cannabis Extraction	

HRT 140	Topics in Horticulture	
HRT 201	Turfgrass Management	
HRT 205	Nursery and Garden Center Practices	
HRT 217	Landscape Design I	
HRT 218	Landscape Design II	
HRT 220	Landscape Irrigation	
HRT 235	Annuals and Vegetables	
HRT 241	Greenhouse Management	
HRT 242	Urban Tree Management	
HRT 250	Native Landscaping Practices	

Total Credit Hours	**61-62**

Full-Time Academic Plan

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PLEASE NOTE: If you originally enrolled at STLCC prior to Spring 2024, you may need to view an archived catalog (https://www.stlcc.edu/programs-academics/course-catalog/) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
HRT 101 or BIO 124	Introductory Horticulture or General Botany I (MOTR BIOL 100LB)	4	Reading Proficiency	
Program Requirement Elective		3		Choose from ACC 100 OR ACC 110, ART 109, BLW 101, BUS 101 OR BUS 104, ECO 140, MGT 101, MKT 104
CHM 109 or 101	Chemistry and the Environment (MOTR CHEM 100L) or Fundamentals of Chemistry I (MOTR CHEM 100L)	4-5	MTH 020 with a minimum grade of "C" or testing into MTH 140 or higher, and Reading Proficiency	CHM 109 is preferred.
HRT Elective		3		Choose from HRT 106, HRT 134, HRT 135, HRT 140, HRT 201, HRT 205, HRT 217, HRT 220, HRT 241, HRT 242, and HRT 250. See footnote below.
HRT 206	Woody Plants - Trees and Vines	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	Offered in the Fall semester only.
	Credit Hours	**17-18**		
Spring				
HRT 102	Soils	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	
HRT 207	Woody Plants - Shrubs and Evergreens	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	Offered in the Spring semester only.

HRT Elective		3		Choose from HRT 103, HRT 104, HRT 106, HRT 136, HRT 137, HRT 140, HRT 241, and HRT 242. See footnote below.
MTH 140	Intermediate Algebra (or higher)	3	Satisfactory placement and Reading Proficiency	

COM 101
  or 201
  or 107
	Oral Communication I (MOTR COMM 100)
	    or Interpersonal Communication (MOTR COMM 120)
	    or Public Speaking (MOTR COMM 110)
		3	Concurrent enrollment in ENG 070 or Reading Proficiency	

	Credit Hours	**15**		
Summer				
HRT 230	Herbaceous Perennials and Ornamental Grasses	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	Offered in the summer term only
HRT 214	Landscape Management	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	
ENG 101	College Composition I (MOTR ENGL 100)	3	Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079	
If a student wishes to take HRT 235, they can take it in the summer semester and adjust their academic plan accordingly. HRT 235 will fulfill 3 hours of the Horticulture Elective requirement.				See footnote below.
	Credit Hours	**9**		
Second Year				
Fall				
HRT 227	Integrated Pest Management	3	HRT 101 or BIO 124, HRT 206, HRT 207 with minimum grades of "C", and Reading Proficiency	
HRT Elective		3		Choose from HRT 106, HRT 134, HRT 135, HRT 140, HRT 201, HRT 205, HRT 217, HRT 220, HRT 241, HRT 242, and HRT 250. See footnote below.
XXX xxx	Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/)	3		
PHL 112	Business Ethics (MOTR PHIL 102P)	3	Reading Proficiency	
	Credit Hours	**12**		
Spring				
HRT 105	Workplace Learning	2	HRT 102, HRT 206, HRT 207, HRT 214, and HRT 230 with minimum grades of "C", approval of Horticulture Department Program Coordinator, and Reading Proficiency	
HRT Elective		3		Choose from HRT 103, HRT 104, HRT 106, HRT 136, HRT 137, HRT 140, HRT 241, and HRT 242. See footnote below.

Program Requirement Elective		3		Choose from ACC 100 OR ACC 110, ART 109, BLW 101, BUS 101 OR BUS 104, ECO 140, MGT 101, MKT 104
	Credit Hours	**8**		
	Total Credit Hours	**61-62**		

[1] Horticulture Electives can be taken in any semester, provided the student has met the prerequisites. However, the following Horticulture courses that fulfill the Horticulture Elective requirement are only taught in the fall: HRT 134, HRT 135, HRT 201, HRT 205, HRT 217, HRT 220, and HRT 250. The following courses, that fulfill the Horticulture Elective requirement, are taught in both the fall and spring semester: HRT 106, HRT 140, HRT 241, and HRT 242.

[2] Horticulture Electives can be taken in any semester, provided the student has met the prerequisites. However, the following Horticulture courses that fulfill the Horticulture Elective requirement are only taught in the spring: HRT 103, HRT 104, HRT 136, HRT 137, and HRT 218. The following courses, that fulfill the Horticulture Elective requirement, are taught in both the fall and spring semester: HRT 106, HRT 140, HRT 241, and HRT 242.

[3] Horticulture electives can be taken in any semester, provided the student has met the prerequisites. However, HRT 235, which fulfills the Horticulture elective is only taught in the summer.

*Click on the hyperlinked course number to view additional information about the course.

**Students completing a course that has been assigned a MOTR number may transfer that course to any public institution in Missouri. Those who complete CORE 42 requirements will have that verification on their transcript.

*** It is your responsibility to verify that the courses listed above will transfer to the four-year institution of your choice. Maximize your transfer credits/classes by meeting with an academic advisor.