

CANNABIS AND HEMP PRODUCTION: CS

Certificate of Specialization | 13 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 Certificate of Specialization in Cannabis and Hemp Production affords students the opportunity to learn the specialized processes necessary to grow, manage, and cultivate cannabis and hemp plants using industrial hemp in accordance with state and federal laws. The certificate will equip students with the knowledge necessary to gain employment in this growing segment of the agriculture and horticulture industries.

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

Related Programs. The Horticulture Department offers an associate and a certificate in the following areas:

Horticulture, Associate in Applied Science (<http://catalog.stlcc.edu/programs/horticulture-aas/>)

Horticulture, Certificate of Proficiency (<http://catalog.stlcc.edu/programs/horticulture-certificate-proficiency/>)

Financial Aid. This Certificate of Specialization is not eligible for financial aid.

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. demonstrate the methods of propagating cannabis and hemp.
2. implement Best Management Practices (BMP) in a greenhouse production setting.
3. implement Integrated Pest Management (IPM) solutions to cannabis and hemp plants in a greenhouse setting.
4. create a growing plan for cannabis and hemp production.
5. describe the vegetative and flowering growth stages of cannabis and hemp.
6. identify the different uses for synthetic and biological products.
7. use flow hoods to maintain sterility of the product.
8. determine relative levels of different cannabinoids and potential chemical contaminants.
9. perform solvent-based, solventless, and modern extraction methods.
10. synthesize the different types of products that can be produced in a laboratory.

Code	Title	Credit Hours
Program Requirements		
HRT 101 or BIO 124	Introductory Horticulture General Botany I (MOTR BIOL 100LB)	4
HRT 135	Introduction to Cannabis	3
HRT 136	Cannabis and Hemp Cultivation	3
HRT 137	Laboratory Methods for Cannabis Extraction	3
Total Credit Hours		13

Part-Time Academic Plan

PLEASE NOTE: If you originally enrolled at STLCC prior to Fall 2025, you may need to view an **archived catalog** (<http://catalog.stlcc.edu/archived-catalogs/>) 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	Exploratory Course, Gateway Course, Critical Course
HRT 135	Introduction to Cannabis	3	Concurrent or prior enrollment in HRT 101 or BIO 124 with a minimum grade of "C", and Reading Proficiency	Gateway Course, Critical Course
	Credit Hours	7		

Spring				
HRT 136	Cannabis and Hemp Cultivation	3	Prior or concurrent enrollment in HRT 135 with a minimum grade of "C" and Reading Proficiency	
HRT 137	Laboratory Methods for Cannabis Extraction	3	HRT 135 with a minimum grade of "C" and Reading Proficiency	
	Credit Hours	6		
	Total Credit Hours	13		

Critical Courses: Critical courses are most important to a student's declared major and most strongly predict later success in the major. A critical course requires a minimal grade to progress to higher-level courses.

Gateway Courses: Gateway courses are courses in many career pathways that must be completed before progression in higher-level courses. These may be the same as critical and/or exploratory courses.

Exploratory Courses: Exploratory courses are first-semester courses that introduce the program and career field.

*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.