# **BREWING SCIENCE AND OPERATIONS, CERTIFICATE**

Saint Louis University's School for Professional Studies is proud to offer you our online certificate in brewing science and operations. Brewing experts in the St. Louis area will teach you the scientific processes of brewing and fermentation, the engineering operations components of breweries, beer style and evaluation, the process used to manage a brewery, and how fermented beverages impact society.

As part of the Saint Louis University School for Professional Studies, this program offers enterprising adults like you a flexible option to meet your personal and career goals. With multiple start dates available, you can begin working toward your certificate at any time. All courses are offered in eight-week terms through SLU Online, making advanced education more accessible for working professionals.

## Faculty

As a student in the School for Professional Studies at Saint Louis University, you'll learn from exceptional faculty who are leading experts in their fields. They bring real-world knowledge to the classroom and are dedicated to your professional success. Learn more on our faculty page (https://www.slu.edu/professional-studies/contact-us/faculty/).

Earn the complete Brewing Science and Operations Certificate or take targeted courses in brewing science or brewing operations.

#### Careers

The list of possible jobs in the brewing industry is quite extensive. Graduates of the brewing science and operations certificate will be prepared to pursue various in-demand positions in the following broad categories:

- Brewing
- Operations engineering
- Supply chain management
- · Hospitality industry
- · Business development
- Sales, marketing and distribution

# **Fieldwork and Research Opportunities**

Both local and virtual students will have the opportunity to participate in fieldwork as a part of the certificate in brewing science and operations program. Local students will be able to visit several St. Louis breweries, where brewing professionals will provide guided lectures and first-hand demonstrations of the brewing process. Virtual students will be able to attend these visits via streaming video and can post questions via live chat.

# Tuition

Tuition	Cost Per Credit
Undergraduate Tuition	
Standard Tuition	\$650
Active Duty/Veteran (TA eligible or GI Bill); First Responders	\$295

Additional charges may apply. Other resources are listed below:

Net Price Calculator (https://www.slu.edu/financial-aid/tuition-and-costs/ calculator.php)

Information on Tuition and Fees (https://catalog.slu.edu/academic-policies/student-financial-services/tuition/)

Miscellaneous Fees (https://catalog.slu.edu/academic-policies/student-financial-services/fees/)

Information on Summer Tuition (https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer/)

### **Scholarships and Financial Aid**

There are two principal ways to help finance a Saint Louis University education:

- Scholarships: Scholarships are awarded based on academic achievement, service, leadership and financial need. The School for Professional Studies offers numerous scholarships (https://www.slu.edu/professional-studies/becoming-a-student/tuition-scholarships-aid/) and awards specifically for new students.
- **Financial Aid**: Financial aid is provided in the form of grants and loans, some of which require repayment.

To determine eligibility for financial assistance, submit the Free Application for Federal Student Aid (FAFSA) early for maximum consideration. FAFSA is available online at https://studentaid.gov/h/ apply-for-aid/fafsa (https://studentaid.gov/h/apply-for-aid/fafsa/).

For information on other scholarships and financial aid, visit the student financial services office online at https://www.slu.edu/financial-aid (https://www.slu.edu/financial-aid/).

#### **Learning Outcomes**

- 1. Graduates will be able to apply the scientific processes (chemical, biological and physical) of brewing and fermentation.
- 2. Graduates will be able to describe the engineering operations components of a brewery.
- 3. Graduates will be able to explain beer style and evaluation.
- 4. Graduates will be able to explain the processes used to manage a brewery.
- 5. Graduates will be able to describe how fermented beverages impact society (history, community, society, economic).

### Requirements Admission Requirements

- Completed application
- · High school diploma or composite GED score of at least 2250
- Minimum transfer cumulative GPA of 2.5 (unless qualified for conditional admittance)
- · Official transcript from the most recent institution attended

Upon admission, a new student must successfully complete a virtual meeting with their academic coach to be enrolled in first-term coursework.

The School for Professional Studies welcomes adult learners who are seeking an undergraduate education after life circumstances interrupted their educational journey. Adult life circumstances, for the purposes of admission, would include individuals with at least one of the following characteristics:

- · Delayed enrollment in post-secondary education
- · Attends part-time for at least part of the academic year
- · Works full-time (35 hours or more/week) while enrolled
- · Is financially independent
- Has dependents other than a spouse
- Is a single parent
- · Has other demands that make traditional education less feasible

#### **Program Requirements**

Code	Title	Credits
Select 6 courses	18	
BREW 1000	Brewing Essentials	
BREW 1500	0 Brewing & Beer Styles	
BREW 1750	Conditioning, Packaging & Distribution	
BREW 2000	Biochemistry of Brewing	
BREW 2500	Sensory and Beer Services	
BREW 2600	Quality Assurance and Quality Control in the Brewery	
BREW 2750	Brewery Operations and Accounting	
Total Credits		18

#### **Continuation Standards**

Students must maintain a minimum of 2.00 GPA and receive a C or better in all certificate classes.

#### Roadmap

Roadmaps are recommended semester-by-semester plans of study for programs and assume full-time enrollment unless otherwise noted.

Courses and milestones designated as critical (marked with !) must be completed in the semester listed to ensure a timely graduation. Transfer credit may change the roadmap.

This roadmap should not be used in the place of regular academic advising appointments. All students are encouraged to meet with their advisor/mentor each semester. Requirements, course availability and sequencing are subject to change.

Course	Title	Credits	5
Year One			
Fall			
Fall 1			
BREW Requireme	ent	э	3
Fall 2			
BREW Requireme	ent	з	3
	Credits	6	5
Spring			
Spring 1			
BREW Requireme	ent	з	3
Spring 2			
BREW Requireme	ent	з	3
	Credits	6	;

Summer	
Summer 1	
BREW Requirement	3
Summer 2	
BREW Requirement	3
Credits	6
Total Credits	18