

**CERTIFICATE IN  
FERMENTATION SCIENCE**

The Department of Chemistry at Eastern Kentucky University (EKU) offers a certificate in Fermentation Science. This is a 24-credit program. The program is open to both degree seeking and non-degree seeking students who have been accepted to EKU. This multidisciplinary certificate program provides a practical and integrated educational experience for students interested in the science behind fermentation, including but not limited to the production of fermented foods, beverages, and industrial products. This program will also enhance your current studies or experience to become a part of the fast-growing fermentation and brewing industry with a certificate from Eastern Kentucky University's academic microbrewery.

For more information, **visit us at [www.chemistry.eku.edu](http://www.chemistry.eku.edu)**

**Student Testimonial**

*"I entered this program with the limited experience of a home brewer. I am graduating this program with the vast knowledge of a Brew Master."*

**-Christopher McClain**

**MISSION**

The certificate in Fermentation Science program aims to provide a comprehensive education in the fermentation chemistry and microbiology, quality control, sensory analysis, and the analytical methods specific to the brewing industry. This program is supported by a state-of-the-art microbrewery and instrumentation facilities.

**GOAL**

The goal is to prepare graduates who are qualified for employment in any sector of fermentation and brewing and its supporting industries. Our aim is to provide the local and global industry with qualified and experienced students that will have a strong foundation in the scientific and business principles required for sustainable economic growth.

**OVERVIEW**

Students will be exposed to a wide range of disciplines such as analytical chemistry and microbiology and its applications to broaden their career scope and assure long-term success.

**CAREER OPPORTUNITES**

- |   |                                      |
|---|--------------------------------------|
| Brewing Production                        | Distillation Technologies            |
| Wine Production                           | Food and Beverage Processing         |
| Applied Biotechnology                     | Bio-pharmaceuticals                  |
| Applied Chemistry                         | Environmental Remediation            |
| Waste and Water Treatment                 | Applied Microbiology                 |
| Business Development and Entrepreneurship | Federal employment ( USDA, FDA, CDC) |
| Research and Development                  | Graduate Studies                     |

**COURSE OUTLINE**

Total Curriculum requirements.....24 hours  
 Core Requirements .....13 hours  
 FMT 140 (4), FMT 343 (3), FMT 344 (4), FMT 345(2)  
 Electives.....11 hours  
 If a University certificate is chosen then 11 additional credit hours must come from the following list : CHE or FMT 349, 349A/N, 495A/B, 501A-D, FMT 549, CHE 101/101L or CHE 111/111L, BIO 111, AGR 130, 131 (1), 430, EHS 280, 380, OSH 110 or department approved courses. If CHE OR FMT 349, 349A-N and/or 495 is taken, only 3 hours can be applied to the certificates.

**ADMISSION REQUIREMENTS**

Open to both degree seeking and non-degree seeking students who have been accepted to EKU.

**For More Information Please contact the:**

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