



FERMENTATION A.S.

FERMENTATION SCIENCE

Fermentation is the process by which organisms convert carbohydrates into energy and other by-products in the absence of oxygen. Fermentation is commonly used to refer to the production of alcohol from sugars, as in the production of beer and wine, but it is also present in many other common processes, such as the leavening of bread or the production of sauerkraut.

As the market for these products has increased, so has the need for trained and knowledgeable college graduates to fill scientific positions in these rapidly growing industries. The Fermentation Science program at Motlow State Community College brings together subjects from multiple disciplines and frames them in the context of the science of fermentation and its practical application. The course of study includes a foundation in chemistry, biology, and other courses directly related to fermentation.

Career Opportunities:

- Fermentation Scientist (\$25-150k/year)
- Biologist (\$48-66k/year)
- Chemist (\$44-69k/year)
- Food Technologist (\$38-65k/year)
- Brewer (\$25-49k/year)
 (Occupational Outlook Handbook)

The Associate of Science (A.S.) degree in Fermentation at Motlow prepares students for transfer to a university through the Tennessee Transfer Pathway (TTP). TTPs enable you to complete your degree at Motlow and then transfer to any Tennessee public university, and several Tennessee private universities, as a junior to complete your bachelor's degree.

Fermentation is now understood to be an ideal vehicle for the production of highly nutritious and long-term stable foods with unique flavors, textures, and aromas. Tennessee is home to a large and diverse community of food processors, and the most significant growth has been in the fermented foods segment of this vitally important industry.





