MUSHROOM SCIENCE AND TECHNOLOGY, MINOR

Requirements for a minor may be completed at any campus location offering the specified courses for the minor. Students may not change from a campus that offers their major to a campus that does not offer their major for the purpose of completing a minor.

Program Description

This interdisciplinary minor is designed to prepare students for a career in the mushroom industry. The minor offers practical work experience at the University's Mushroom Research Center. Students are required to complete a minimum of 22 credits. The core of prescribed courses provides a foundation in the basic fundamentals of mushroom science and technology.

What is Mushroom Science and Technology?

Mushroom science is the interdisciplinary study of cultivated mushrooms covering topics including improving production efficiency, reducing disease impacts as well as studying the use of alternative raw materials. This research provides alternative disease management strategies for mushroom growers that are constantly facing economic challenges associated with mushroom diseases. The successful use of new substrates provides growers alternatives when raw materials are in short supply or not economical for use in mushroom production. Improving production efficiencies has always been a priority research area for mushroom scientists and any findings that can improve yields, regardless of the magnitude, will benefit farmers.

You Might Like This Program If...

- You are interested in mycology, growing mushrooms.
- You are looking for a career in one of Pennsylvania's leading agricultural industries as the state grows nearly two-thirds of the country's mushrooms.

The industry is constantly searching for college graduates interested in becoming leaders in this dynamic industry.

Program Requirements

Requirement	Credits
Requirements for the Minor	22

Requirements for the Minor

A grade of C or better is required for all courses in the minor, as specified by Senate Policy 59-10 (https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/59-00-minors-and-certificates/). In addition, at least six credits of the minor must be unique from the prescribed courses required by a student's major(s).

Code	Title	Credits
Prescribed Courses		
Prescribed Courses: Require a grade of C or better		
BIOL 110	Biology: Basic Concepts and Biodiversity	4
PPEM 405	Microbe-Plant Interactions: Plant Disease and Biological Control	3
PPEM 425	Biology of Fungi	4
PPEM 496	Independent Studies	2
Additional Courses		
Additional Courses: Require a grade of C or better		
Select 9 credits of the following:		9
AGBM 200	Introduction to Agricultural Business Management	
ENT 202		
ENT 313	Introduction to Entomology	
FDSC 408	Food Microbiology	
FDSC 409	Laboratory in Food Microbiology	
MICRB 201	Introductory Microbiology	
MICRB 202	Introductory Microbiology Laboratory	

Academic Advising

The objectives of the university's academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in-and out-of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee's unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/students/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

University Park

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Career Paths

Careers

Mushrooms are one of Pennsylvania's leading cash crops. The mushroom industry is seeking college graduates to fill a wide array of both technical and managerial positions. Technical positions cover areas related to daily production, quality control, and food safety systems. This minor will give you a better understanding of mushroom cultivation as well as the current state of production systems throughout the United States. The minor adviser works closely with producers and is contacted by companies looking for employees on a regular basis.

Opportunities for Graduate Studies

Graduate studies in mushroom cultivation are limited; however, Penn State is unique in that it does offer graduate degrees where the student's projects can be based on mushroom cultivation, and where the student has an opportunity to work directly with industry representatives if desired. The mushroom program is housed in the Department of Plant Pathology and Environmental Microbiology in the College of Agricultural Sciences.

More Information About Opportunities for Graduate Studies (https://agsci.psu.edu/academics/undergraduate/minors/mushroom-science-and-technology)

Contact

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