

FOOD SCIENCE, B.S.

Begin Campus: Any Penn State Campus

End Campus: University Park

Program Learning Objectives

- Students will apply the fundamental principles of engineering and unit operations related to preservation, packaging, and cleaning and sanitation in order to manufacture safe and nutritious foods.
- Students will be able to apply the fundamental concepts central to Food Science (e.g. engineering, microbiology, chemistry, etc) with consideration for the legal, economic, and ethical constraints surrounding food production and consumption.
- Students will evaluate how people interact with food with respect to biology, behavior, and culture.
- Students will be able to identify and characterize beneficial, pathogenic, and spoilage microorganisms in foods, and to use their knowledge of microbial growth, injury, and cell death to control the growth of microorganisms in foods and to solve applied food microbiology problems.
- Students will be able to describe the chemical composition of foods, the properties and reactions of food components, and analyze the major and minor components of foods.