

BIOFOOD ENGINEERING

MISSION

The mission of the Bio-Food Engineering Department is to:

- Prepare students for rewarding careers in the diverse fields of biomedical engineering and the health care industry
- Educate leaders of the future in the field of food engineering at positions of academic, industrial and government
- Create new knowledge at the interface between Bio- engineering and Food science
- Offer the accumulation of food engineering to food industry and society's benefit with a variety of educational tools.
- Pursue continued education in biomedical research

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PROGRAM EDUCATIONAL OBJECTIVES

Upon successful completion of this program, the enrolled students will be able

- To be able to use and apply theoretic and practical information on fundamental sciences and engineering sciences and mathematics in food engineering area
- To be able to identify, describe, model, solve engineering problems related to food engineering applications
- To be able to design and understand a system or process to meet certain requirements
- To be able to choose and use techniques, skills and tools necessary for food engineering practices, have ability to use information technologies
- To be able to design experiment/system, apply, collect, analyze data and deduce results
- To be able to work individually as well as part of team
- To be able to be aware of vocational ethics and social responsibility
- To be able to be aware of issues about the environment, health, work safety and legalities results in solving problems related to food engineering discipline
- To be able to evaluate safe food production and quality assurance along with, environmental problems, maintainability, ethics, health, security and social issues
- To be able to train food engineers excelling in management, research, entrepreneurship and have ability to deal with the problems of current era

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PROGRAM OUTCOMES

By the time biofood engineering students graduate, they will attain:

- An ability to apply sufficient knowledge in mathematics, science and engineering related to their branches
- An ability to model and solve complex Food Engineering problems using theoretical and practical knowledge in these areas.
- The ability to identify, describe, formulate and solve complex food engineering problems.
- An ability to select and effectively use modern methods and information technologies for complex problems in Food Engineering applications
- An ability to design, conduct experiments, collect data, and analyze and interpret results in order to examine complex problems and research topics in Food Engineering
- An ability to work effectively and take responsibility in individual and multidisciplinary teams
- An ability to be ethical and behave in accordance with ethical principles.
- Ability to communicate effectively
- Ability to engage in lifelong learning
- Ability to monitor developments in science and technology and constantly renew themselves
- A knowledge on the effects of food engineering practices on the universal and social dimensions of issues such as employee health,

environment and work safety; awareness of the legal consequences of engineering applications

- A recognition of the need for, and an ability to engage in life-long learning.
- A knowledge of contemporary issues.
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.