



الجامعة المصرية اليابانية للعلوم و التكنولوجيا
エジプト日本科学技術大学
EGYPT-JAPAN UNIVERSITY OF SCIENCE AND TECHNOLOGY

**Professional
Diploma
Food Safety
& Quality
Management**

Program Overview

Did you know that consuming unsafe food that contains bacteria, viruses or chemical substances causes more than 200 different diseases? Food safety is the study of how to handle, prepare, and store food in a proper way that ensures it does not cause illness.

This professional diploma aims to provide you with the skills and knowledge of producing safe food of premium quality. Through a combination of lectures and lab work in food technology, members will learn how to conduct proper food analysis using advanced equipment such as GC-MS, ICP, and LCMS.

With the food and beverage industry in Egypt growing at a steady rate since 2015 and reaching 500 billion Egyptian pounds, it has become extremely important to acquire knowledge about food safety and quality management to enable you to work in this competitive market.



Learning Outcomes

- Demonstrate how to conduct food composition and analysis tests
- Practice microbiological techniques such as ELISA, PCR and real PCR
- Describe the fundamentals of food safety and authenticity and food contamination
- Explain national and international laws
- Understand and implement total quality management approach
- Discover the role of food and nutrition in health and disease
- Learn the principles underlying food processing and storage

Program Features

- Collaboration with the National Food Safety Authority
- Six core courses about food technology.
- Select five out of eight elective courses.
- Real case studies by industry experts.
- Field trips to food factories.
- Project-based learning course.



Program Outline

1. Core Courses

Food Chemistry and Analysis (2 credit hours)

Learn the basics of food chemistry and how the processing of the different types of food (lipids, proteins, carbohydrates) affects its safety and quality.

Food Microbiology (2 credit hours)

Explore the world of microorganisms: their classification, sources in food, factors affecting their growth, toxicity, and detection.

Quality Control (2 credit hours)

Understand the principles of food quality assurance and total quality management (TQM). Also discover the ethics and social responsibility in the food industry.

Nutrition and Health (2 credit hours)

An introduction to the basic definitions of food, nutrients, and their functions. Find out the energy content of food, the basal metabolic rate (BMR, weight management, obesity, how to design healthy and balanced foods, and the effective management of food intake and nutrition.

Food Safety (2 credit hours)

Get to know good manufacturing and hygiene practices ideal for food handling, and applications of HACCP.

Food Spoilage (2 credit hours)

Learn the causes of food spoilage in the food and beverage industries, and how preservatives are used to prevent food from spoiling.

2. Elective Courses

In addition to the core courses, participants choose 5 courses (2 credit hours each) from the list below to broaden their understanding of food safety and quality management by choosing subjects relevant to their professional experience.

- Analytical Chemistry and Instrumentation
- Heat Treatment
- Food Packaging
- Food Fermentation
- Oils and Fats
- Law and Legislation of Foods
- Food Additives
- Food Engineering

3. Graduation Project (Project-based learning course)

The students must participate in a self-learning project. They must present innovative concepts and competitive solutions to a food industry problem.

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Awarded degree

Graduate Diploma in Food Safety and Quality Management.

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Admission Requirements:

1. A bachelor's degree from one of the following faculties: Engineering, Pharmacy, Science, Tourism, Agriculture, or Veterinary Medicine.
2. Passing a personal interview.

How can you apply?

- Visit the link www.ejust.edu.eg login and create an account
- Fill the application and upload all the required documents
- Once you submit the application, you will receive a confirmation email

About the Basic and Applied Science (BAS) Institute

The Basic and Applied Science Institute several interdisciplinary tracks: Space Environment, Nanoscience, Biotechnology, Applied and Computational Mathematics, and Energy Materials. The institute is committed to enhance existing curricula and to develop new programs that will continue to give our future alumni a competitive edge. We know our graduates will be passionate scientists devoted to improving the quality of human life in Egypt through knowledge and technology.



About E-JUST

Egypt-Japan University of Science and Technology (E-JUST) is a research-oriented university with the determination to improve the academic environment and become a benchmark for Egyptian and African countries in higher education. The university was established in May of 2009 based on a bilateral agreement between the Egyptian and Japanese governments. In 2010, it accepted the first batch of graduate students and started the excellence journey.

In September 2017, E-JUST reached another milestone when it inaugurated the Faculty of International Business and Humanities (FIBH). It was also in that year that the university began accepting high school students in both the Faculty of Engineering and the Faculty of International Business.

The partnership between both governments is extremely strong to ensure the ease of the educational journey of students. The Japan International Cooperation Agency (JICA) fully supports E-JUST by sending their experts to assist and guide in the technical transfer and management of the university. JICA also sends academic experts from the Japanese Cooperating Universities (JCU) to support in teaching, joint research and co-supervising the graduate students. In addition, JICA provides state-of-the-art equipment and tools for educational and research purposes. As for the Egyptian government, it fully supports the university's needs from capital to operating expenses.

All decisions that govern the university are done through its Board of Trustees (BoT) members, which is comprised of 20 prominent figures from Egypt and Japan. The Egyptian side includes a representative of the Ministry of Foreign Affairs, a representative of the Ministry of International Cooperation, and a representative of the Ministry of Higher Education. Whereas the Japanese side includes the Senior Vice President of JICA, a representative of the Ministry of Education, Culture, Sports, Science and Technology, and a representative of the Ministry of Foreign Affairs, and the presidents of five leading Japanese universities.




For more Information


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