



## **Food Engineering**

### **1. Why a Master in Master of Science in Food Engineering with a profile in “Food Technology”, “Enology and Beverage Technology”, and “Food Biotechnology”**

This Master’s program provides advanced training in the field of food engineering, integrating technology, science, and innovation in food processing and product development. It is designed to meet the needs of the modern industry, preparing professionals capable of operating in the food and beverage sector at both national and international levels.

- It provides advanced knowledge in food processing, fermentation, product development, food safety, and sustainable production.
- It enhances practical and scientific skills in the food and beverage industry, research laboratories, and biotechnology companies.
- It opens career opportunities in quality management, product innovation, food safety, and industrial production.
- It equips students with the knowledge to develop safer, healthier, and more sustainable food products, while building a strong and competitive career.

### **2. Competences of the graduates**

Graduates of this program acquire an advanced combination of theoretical knowledge and practical skills in the field of food engineering, with a strong focus on research, product development, and industrial applications. They are prepared to operate in both research and production environments, integrating technology, innovation, and food safety into the design and optimization of processes.

The program aims to develop professional profiles oriented toward research and development (R&D) and industry, enabling graduates to contribute to technological innovation, process improvement, and the enhancement of quality in food and beverage products.

#### **The graduate:**

- Applies advanced food engineering methods in industrial processes and research projects
- Analyzes and optimizes processing operations in the food and beverage industry

- Develops new products and innovative processes within research and development (R&D)
- Applies fermentation processes and biotechnological technologies in industrial development
- Designs and improves production systems to increase efficiency and product quality
- Uses research methodologies, laboratory analysis, and scientific data processing
- Solves technological and engineering problems in industrial and research environments
- Integrates food safety principles and risk management into industrial processes
- Applies sustainability and innovation principles in product and process development

### **3. Potential employer and/or career path**

Graduates of this program have broad employment opportunities across various sectors related to production, quality control, and innovation in the food and beverage industry. Their professional profile is in demand both in the private sector and in research and regulatory institutions.

- Food and Beverage industries
- Biotechnology and innovation sector
- Research and development
- Food safety and regulatory bodies
- Consultancy and quality systems

### **4. Alumnus and their experiences**

Assoc. Prof. Dr. Anisa Peculi – Vice Dean for Teaching and Lecturer at the Faculty of Biotechnology and Food (FBU)

Dr. Klotilda Sula (Marku), Food Technology UBT, Lecturer at FBF

Dr. Fatjon Hoxha, Food Technology UBT, Lecturer at FBF

MSc. Ilir Hajdinaj, Director of ISUV (Institute of Food Safety and Veterinary)

M.Sc. Stelina Doksani- Specialist in the Production and Trade Standards Sector at the Ministry of Agriculture and Rural Development.

Lefter Muhaj – Technologist at the “Selita” Water Factory.

Klitjana Zarko- Technologist at the “Craco” Dried Fruit Processing Factory.

Sotir Biçaku - Technologist at the “La Perla” Dairy Factory.

Enxesika Daci- Technologist at the “Diamanti” Flour Factory.

Mustafa Petja – Technologist at the “Atlas” Flour Combine.

### **5. The interdisciplinary of the program (this is pretty much the same for each by may vary a little bit)**

During the development of this program, the principle of a multidisciplinary approach has been applied. This principle aims to integrate analytical, experimental, and technological methods from various scientific fields in order to generate advanced knowledge and innovative solutions to the complex challenges of the modern food system. The program harmoniously combines knowledge from natural sciences (food chemistry, microbiology, molecular biology), engineering sciences (food processing technologies, unit operations, process engineering), and biotechnological sciences (fermentation, enzyme engineering, bioprocesses), thereby creating a strong foundation for the development of new products and the optimization of industrial processes

15% Technology and Engineering

15% Natural Science

15% Economic and social Science, Law

55% Variable

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### **6. Which Bachelor Program are suggested**

- Food Technology
- Food and Nutrition Science
- Chemistry and Food Technology
- Biotechnology
- or other related fields in natural sciences and technology