



The new Master's Degree Programme in **"Food and Beverage Innovation and Management"** will be activated in the A.Y. 2016-2017 fully in English at the Department of Agricultural, Food and Environmental Sciences of Marche Polytechnic University, Ancona (Italy).

It aims to train professionals able to perform technical tasks and advanced management activities in food and beverage production, processing, storage, distribution and administration. Fundamental objective of professional activities of Graduates is management, including coordination and guidance, of activities aimed to continuously improve food and beverages from the sanitary, sensory, nutritional, and economic point of view, with the aim to adopt and propose innovations in production processes, in respect to environmental compatibility and sustainability. Even in the agro-feed sector most of the innovations are in fact driven by keyword "sustainability", in its multiple economic, environmental and social aspects. In particular, the modern skills of a Food Technologist should include a

deep knowledge of strategies of environmentally

sustainable rationalization of processes and energy sources, including the management of waste and waste processing, and the knowledge of regulations regarding the environmental performance of a product and the communication of this performance.

Moreover, the curriculum intends to give the graduate the ability to combine innovation and sustainability in Italian food tradition, and more generally, in the Mediterranean one, aspect that contribute to identify the curriculum as unique at the national and European level.

The professional activity of graduates takes place both as freelancers and in companies that, at different levels, deal with: production, processing, storage and distribution of food, drinks, foods for special purposes, supplements, functional foods, ingredients, enzymes, processing aids, food additives and flavorings. Their skills are also required in public and private organizations monitoring and certifying protection and improvement of food production. Graduates demonstrate their professionalism also in companies related to the production of food, which provide materials, equipment, facilities and services.

These specific objectives are achieved through a multi-disciplinary training in fields of science, technology, management and law, which allows to train professionals able to work in production and services sectors, both strongly varying on the basis of legislation and expectations of consumers/users changes. The education offering of the curriculum is especially designed to create graduates with high capacities of information integration: the cultural background of a Food Technologist is characterized by a strong multidisciplinary approach, but it is only through the ability to integrate the multiplicity of knowledge that is possible to have professional skills and attitude to problem solving.

Along with the conventional method of teaching, linear transmission of knowledge is accompanied by the use of the LMS (Learning Management System) technology platform "Moodle", for the development of blended training courses.

**Master Degree Programme (2nd cycle) FOOD AND BEVERAGE INNOVATION AND
MANAGEMENT (FOBIM) (Code AM04)**

1st YEAR (will be activated in the A.Y. 2016-2017)

| | SEMESTER* (tentative) | | Courses | | no. of lecture hours | ECTS number |
|--|--------------------------|--|---|--|----------------------------|----------------|
| | 1 | | Accessory foods and beverages | | 54 | 6 |
| | 2 | | Emerging food technologies | | 54 | 6 |
| | 2 | | Energy and environmental sustainability in the agro-food industry | | 54 | 6 |
| | 1 | | Food biochemistry | | 54 | 6 |
| | 2 | | Food marketing and management | | 54 | 6 |
| | 1 | | Food policy | | 54 | 6 |
| | | | Fruit quality and disease management | | | |
| | 2 | | <i>Module 1: Fruit quality control</i> | | 54 | 6 |
| | 2 | | <i>Module 2: Postharvest disease management</i> | | 27 | 3 |
| | 2 | | Genetic resources and food traceability | | 54 | 6 |
| | | | total 1st year | | 459 | 51 |

2nd YEAR (will be activated in the A.Y. 2017-2018)

| | SEMESTER (tentative) | | Courses | | no. of lecture hours | ECTS number |
|--|-------------------------|--|---|--|----------------------------|----------------|
| | 1 | | Enzymology in food processing | | 54 | 6 |
| | | | Functional foods and beverages | | | |
| | 2 | | <i>Module 1: Functional components</i> | | 54 | 6 |
| | 2 | | <i>Module 2: Beneficial microbes</i> | | 54 | 6 |
| | 1 | | Microbiological risk management | | 54 | 6 |
| | | | total 2nd year | | 216 | 24 |
| | | | Optional courses/A scelta dello studente | | 108 | 12 |
| | | | Other activities/Altre attività (Lingua/Language) | | | 6 |
| | | | Traineeship/Tirocinio | | | 6 |
| | | | Final work/Prova finale | | | 21 |
| | | | TOTAL of the Master Programme | | 783 | 120 |

*1=autumn; 2=spring

Optional courses

| | SEM | | Courses | | no. of lecture hours | ECTS number |
|---------------|-----|--|-------------------------------------|--|----------------------------|----------------|
| to be decided | | | Budgeting | | 54 | 6 |
| to be decided | | | Corporate communication e new media | | 54 | 6 |
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