

#### République Algérienne Démocratique et Populaire Ministère de l'Enseignement Supérieur et de la Recherche Scientifique Université de Jijel Faculté des Sciences de la Nature et de la Vie



# Master Applied Microbiology

Field: Natural and Life Sciences

Sector: Biological Sciences

Specialty: Applied Microbiology

#### 1/ Admission Requirements

Admission to this Master's program is open to students holding a bachelor's degree in:

- ✓ Microbiology
- ✓ Agri-Food Technology
- ✓ Quality Control
- ✓ And to students holding other degrees in Biology deemed equivalent

## 2/ Objectives of the formation

The main objective of the program is to provide students with broad, multidisciplinary formation in the field of applied microbiology. The course will reinforce their conceptual and experimental skills through biotechnological, genetic, and biochemical approaches.

### 3/ Employability potential

Graduates will be able to find employment in:

- ✓ The food industry.
- ✓ The pharmaceutical industry.
- ✓ Quality control laboratories.
- ✓ Students may also pursue postgraduate studies: Doctorate.

	Teaching units		
	S1	S2	S3
<b>Fundamentals UE</b>			
UEF1	Microorganisms and health	Eenzyme technology	Microorganisms and the environment
Matter 1	Microorganisms and health	Enzyme technology	Environnemental biotechnology
Matter 2	-	-	Plant- microorganism interactions
UEF2	Microbiology of fermentations I	Separation and purification of biological macromolecules	Genetic engineering applied to microbial biotechnology
Matter 1	Industrials fermentations	Separation and purification of biological macromolecules	Genetic engineering applied to microbial biotechnology
Matter 2	Valorization of agri-food-product	-	-
UEF 3	-	Microbiology of fermentations II	-
Matter 1	-	Microbiology of fermentations II	-
Methodology UE			
UEM1	Fermented food technology General microbiology techniques	Quality control techniques	Working methodology
Matter 1	Fermented food technology	Quality control of fermentation products	Data analysis
Matter 2	General microbiology techniques	Molecular control techniques	Hygiene and security
Discovery UE			
UED1	Microbial interactions	Therapeutic microorganisms	Writing et analyzing articles
Matter 1	Microbial interactions	Therapeutic microorganisms	Writing et analyzing articles
Transverse UE			
UET1	Communication	Legislation	Entrepreneurship
Matter 1	Communication	Legislation	Entrepreneurship