

University of Oum El Bouaghi

Faculty of exact sciences and natural and life sciences

Department of natural and life sciences

Program name: Master's degree Ecology of natural environments

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- **Level: Master**
- **Domain: Natural and life sciences**
- **Field: ecology and environment**
- **Specialty: Ecology of natural environment**

1. Program Description:

Our training also aims to provide the theoretical and methodological bases necessary for understanding and studying the dynamics of natural environments as well as ecosystems and their exploitation. It offers lessons on the knowledge and preservation of natural environments. It will train specialists capable of ensuring a continuum between species inventories and academic research in order to develop diagnostic criteria, evaluation of monitoring processes, conservation, restoration of biodiversity and ecosystems. The multidisciplinary training will allow students to acquire theoretical and practical bases on ecological diversity, species diversity and genetic diversity to pursue research work.

2. Entry Requirements

Thus, through this specialty, we also plan to train students and fill the gap in terms of qualified teacher-researchers in ecology and develop lines of research that can contribute, in collaboration with vital sectors (health, industries, agronomy, agroalimentary...) to the development of the university. Structures linked to the environment, relating to the fields of surveillance, engineering or economic development (national parks, nature reserves, environment department, agricultural services department, etc.). They will be able to intervene on issues as varied as the erosion of biodiversity, global changes, chemical or physical pollution and their impact on the ecosystem and human health, but also on all aspects related to sustainable development, rehabilitation of habitats and ecosystems in general.

3. Program Units and modules

Modules studied in the first year

First semester/

Fundamental units

- Subject 1: Origin and operation ecosystems
- Subject 2: Stand study and inventory methods
- Subject 3: Biogeography

Methodological units

- Subject 1: Hydrochemistry and water quality
- Subject 2: Conservation and restoration natural environments

Discovery units

- Subject 1: Sustainable development

Transversal units

- Subject 1: Communication

Second Semester/

Fundamental units

- Subject 1: Ecology of species and populations
- Subject 2: Natural landscapes
- Subject 3: Protection of spaces

Methodological units

- Subject 1: Evaluation of the quality of ecosystems
- Subject 2: Global Change Aspects

Discovery units

- Subject 1: Biostatistics

Transversal units

- Subject 1: Legislation

Modules studied in the second year :

Third Semester/

Fundamental units

- Subject 1: Eco-ethology
- Subject 2: Population genetics
- Subject 3: Biodiversity of biological entities

Methodological units

Subject 1:Vegetation mapping

Subject 2:Geographic Information System (GIS)

Discovery units

Subject 1:Ecosystem management plans

Transversal units

Subject 1:Entrepreneurship

Fourth Semester

Graduation thesis realization

4. Other

Examinations can take different forms, including reports of practical work, tutorials and oral presentations.

The tests of the knowledge acquired are by:

- Written tests of knowledge of all teaching units
- Reports of the results of practical work
- Tests of control of mastery of practical work
- Oral presentation of personal work
- End of study project that begins at the end of the third semester of the Master. He corresponds to an activity supervised by a teacher-researcher. Based on the subject assigned, the student must:
 - * search scientific literature (books, articles and information online)
 - * Analyze data acquired after experimental work
 - * Write a synthetic written document
 - * Prepare an oral defense on the subject before a jury