

## Master's Program in Nutrition and Pathology

## 1. Program Identity

Institution: University of Oran 1 Ahmed Ben Bella

**Faculty: Faculty of Natural and Life Sciences** 

**Department: Biology** 

Field: Biology

**Specialization: Nutrition and Pathology** 

### 2. Program Overview

This Master's program focuses on **nutrition**, **metabolic regulation**, **and diet-related pathologies**, combining theoretical knowledge with applied research. It aims to train professionals capable of addressing nutritional challenges in clinical, industrial, and public health contexts. Students acquire skills in experimental design, nutritional assessment, and therapeutic interventions.

### 3. Admission Requirements

- Eligibility:
  - o Bachelor's degree in **Nutrition**, **Biology**, or related fields.
- Capacity: Limited to 20 students per cohort.

#### 4. Curriculum Structure

#### Semester 1:

Course	Hours	Credits
Human Nutrition	67h30	6
Physiology of Regulation	45h	4



Course	Hours	Credits
Food Behavior	45h	4
Food Science	45h	4
Instrumental Analysis	60h	5
Sensory Evaluation Methods	45h	4
Scientific English	45h	2
Communication Skills	22h30	1

# Semester 2:

Course	Hours	Credits
Nutritional Pathophysiology	67h30	6
Metabolic Exploration	45h	4
Food Hygiene	45h	4
Food Additives	45h	4
Food Processing & Labeling	60h	5
Biostatistics	45h	4
Advanced Scientific English	45h	2
Food Legislation	22h30	1

# Semester 3:

Course	Hours	Credits
Public Health Nutrition	82h30	8
Physical Activity & Health	60h	5
Nutritional Therapy	60h	5
Institutional Catering	60h	5
Research Methodology	45h	4



Course	Hours	Credits
Experimental Nutrition	45h	2
Entrepreneurship	22h30	1

### Semester 4:

• Internship/Thesis: 3–6 months in hospitals, research labs, or industries.

## **5. Specialization Courses**

- Advanced Topics:
  - o Nutritional Interventions for Chronic Diseases (diabetes, obesity).
  - o Food Safety & Quality Control (HACCP, ISO standards).
  - o Experimental Models (animal studies, cell cultures).

# 6. Teaching Language

- **Primary**: French (lectures, exams).
- **Secondary**: English (scientific writing, research papers).

### 7. Facilities & Research

- Laboratories:
  - Pedagogical Labs (spectrophotometers, centrifuges, lyophilizers).
  - Research Labs (e.g., "Impact of Fish Oil Coproducts on Obesity").
- Partnerships: Hospitals, schools, food industries.

## 8. Career Opportunities

Teaching

Dietary Counseling and Nutritional Education in Dietetics and Nutrition



- Analyst in Nutrition, Functional Diagnostics, and Institutional Catering
- Quality Control Laboratories
- Food Industries