

University of Oum El Bouaghi

Faculty of exact sciences and natural and life sciences

Department of natural and life sciences

Program name: Bachelor's degree in biochemistry

- **Level: Bachelor**
- **Domain: Natural and life sciences**
- **Field: Biological sciences**
- **Specialty: Biochemistry**

1. Program Description:

The general objective of this training is to enable students to acquire theoretical and technical knowledge in the field of Biochemistry. These achievements allow them: (1) to integrate a Master of research or professional in the fields relating to the sectors of Biochemistry; (2) to acquire the knowledge necessary to integrate active life, after the License, with promising prospects for employment in areas such as public health, agri-food, quality control laboratories, animals productions, biotechnologies and their development.

2. Entry Requirements

The minimum baccalaureate rates accepted at Algerian universities are used to establish the rate at which a student must have earned their degree in order to enter the program.

3. Program Units and modules

Total Semester 1

Fundamental units

- **UEF 1.1:**
 - Subject 1: General and organic chemistry
 - Subject 2: cellular biology

Methodological units

- **UEM 1.1:**
 - Subject 1: Mathematics Statistics Computer Science
 - Subject 2: Communication and Expression Techniques 1 (in French)

Discovery units

- **UED 1.1:**
 - Subject 1: Geology

Cross units

- **UET 1.1**
 - Subject 1: Universal History of Biological Sciences

Total Semester 2

Fundamental units

- **UEF 2.1**
 - Subject 1: Thermodynamics and chemistry of solutions
 - Subject 2: Plant's biology
 - Subject 3: Animal Biology

Methodological units

- **UEM 2.1**
 - Subject 1: Physical
 - Subject 2: Communication and Expression Techniques 2

Cross units

➤ **UET 2.1**

- Subject 1: Work methods

Total Semester 3

Fundamental units

➤ **UEF 2.1.1**

- Subject 1: Zoology

➤ **UEF 2.1.2**

- Subject 1: Biochemistry
- Subject 2: Genetic

Methodological units

➤ **UEM 2.1.1**

- Subject 1: Communication and Expression Techniques

➤ **UEM 2.1.2**

- Subject 1: Work methods

Discovery units

➤ **UED 2.1.1**

- Subject 1: Biophysics

Total Semester 4

Fundamental units

➤ **UEF 2.2.1**

- Subject 1: Botany

➤ **UEF 2.2.2**

- Subject 1: Microbiology
- Subject 2: Immunology

Methodological units

➤ **UEM 2.2.1**

- Subject 1: General ecology

➤ **UEM 2.2.2**

- Subject 1: Biostatistics

Total Semester 5

Fundamental units

- UEF1 (O/P): Cellular Biochemistry and Enzymology
 - Subject 1: Enzymology
 - Subject 2: Cellular and functional biochemistry
- UEF2 (O/P): Immunology and metabolic regulation
 - Subject 1: Cellular and Molecular Immunology
 - Subject 2: Metabolic regulation

Methodological units

- UEM1 (O/P): Analysis techniques
 - Subject 1: Biochemical Analysis Methods
- UEM2 (O/P): Biostatistics
 - Subject 1: Biostatistics

Total Semester 6

Fundamental units

- UEF 3.2.1 (O/P): Molecular biology and genetic engineering
 - Subject 1: Molecular biology
 - Subject 2: Genetic Engineering
- UEF2 (O/P): Microbial biochemistry
 - Subject 1: Microbial biochemistry

Methodological units

- UEM1(O/P): Pharmacology/toxicology
 - Subject 1: Pharmacology/toxicology
- UEM2 (O/P): Bioinformatics
 - Subject 1: Bioinformatics

Discovery units

- UED1 (O/P): Metabolic diseases
 - Subject 1: Metabolic diseases
- UED2 (O/P): Scientific English
 - Subject 1: Scientific English

4. Other

The biochemistry license introduces the student to many disciplines, of major importance in the operation of research and quality control laboratories:

- * Research Laboratory of Universities, Research-Development Centers
- * Hospital-University Analysis Laboratories, Biological Analysis Laboratories
- * Pilot laboratories in Bio Industries.