



BIOSCIENCES AND BIOTECHNOLOGY

Università di Camerino

Bachelor Degree

First Cycle Degree

Duration 3 years

ECTS credits 180

Location Camerino

All courses are taught in English

School of Bioscience and Veterinary Medicine

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Course Coordinator

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web site

http://biologybiotechnology.unicam.it

Delegates

Educational Guidance

prof. Gabriella Gabrielli gabriella.gabrielli@unicam.it 0737 402705

Tutoring

prof. Consuelo Amantini consuelo.amantini@unicam.it 0737 403312

International Mobility

prof. Cristina Marchini cristina.marchini@unicam.it 0737 403275

Stage and Placement

prof. Claudio Alimenti claudio.alimenti@unicam.it 0737 403221 The bachelor degree in Biosciences and Biotechnology is an interclass degree: it consists of a common first year, where the student is provided with a solid base in mathematics, physics, chemistry, and cell biology, followed by a second and third year when the student follows either the program leading to the Biology or Biotechnology degree. Upon enrollment in the interclass degree, students must indicate the qualification desired (Biology or Biotechnology); however, the final decision between the two program degrees can be delayed to the third year, provided that the missing credits have been fully covered.

The course benefits from a friendly and skillful teaching staff and reliable supporting structures, such as laboratories, libraries, in addition to dedicated tutorship services. The Bachelor in Biosciences and Biotechnology is in the geo-biological group which ranked first in Italy for the quality of education in the ranking of Italian Universities (CENSIS, Ranking 2017/18).

Career opportunities

The course in **Biology** is appropriate for students desiring a focused, in-depth grounding in all the essential elements of the biological sciences, and is particularly suitable for students intending to pursue graduate study in biological and applied sciences.

The course in **Biotechnology** focuses on the study of biological processes of living organisms. Students learn the skills needed to naturally manipulate processes in the development of new medicine, food and organic substances. This course provides students with a basic knowledge for the study of biotechnology with an emphasis on DNA technology, cell and molecular biology, and a wide range of practical skills, supplemented with relevant aspects of ethics law and business.

In both programs, the foundation of knowledge, plus laboratory experience, prepares students to function effectively in a variety of technical and laboratory research settings.

The graduates in **Biosciences and Biotechnology** are also qualified for access to Master courses in either biological and biotechnological fields, by which they could achieve higher professionalism and also access to doctoral courses in biology or related fields.





COURSE STRUCTURE

Classes are held in two semesters, from the beginning of October to the end of January, and then from the beginning of March to the middle of June. The February break is devoted to the Winter Exam Session.

The program of study is structured around a comprehensive core curriculum that is common to both Biology and Biotechnology major but, upper-division level, coursework is designed to achieve a deeper education in specialized areas of Biology or Biotechnology. The course programs also offer flexibility through electives.

Completion of the degree program requires an internship carried out by the student under the supervision of an UNICAM tutor. An internship is a practical experience to be carried out in the university laboratories or in the workplace that offers the student an opportunity to apply, connect, and extend academic theory and competencies to build professional skills and network.

Degree Biology (L-13)

l year	ECTS	II year	ECTS	III year	ECTS
General Biology and Histology	12	Molecular Biology, General Genetics	14	Hygiene and Clinical Microbiology	6
General and Inorganic Chemistry	8	Biochemistry	8	Physiology and Fundamentals	
Mathematics	8	Anatomy	6	of Pathology	12
Physics	7	General Microbiology	6	Ecology and Parasitology	6
Statistics and Computer Sciences	8	Zoology and Botany	14	Molecular Genetics	6
Organic Chemistry	7	Cell and Developmental Biology	8	Clinical Biochemistry	6
English language - Level B2	6	Laboratory II	6	Student's choice	12
Laboratory I	6			Stage	5
				Final Test	3

Degree Biotechnology (L-2)

ECTS	II year	ECTS	III year	ECTS
12	Molecular Biology and General General	tics14	Molecular Genetics, Genetics	
8	Biochemistry	8	of Microrganism and Microbial	
8	General and Industrial Microbiology	12	Biotechnology	12
7	Intellectual Property, Regulatory		Physiology and Fundamentals	
8	and Bioethical Concerns	6	of Pathology	12
7	Cell Biology and Biotechnology	8	Clinical Biochemistry	6
6	Food Chemistry and Processing	6	Molecular Applications in Biomedic	ine 8
6	Laboratory II	6	Student's choice	12
			Stage	5
			Final Test	3
	12 8 8 7 8 7 6	Molecular Biology and General General Biochemistry Biochemistry General and Industrial Microbiology Intellectual Property, Regulatory and Bioethical Concerns Cell Biology and Biotechnology Food Chemistry and Processing	Molecular Biology and General Genetics 14 Biochemistry 8 General and Industrial Microbiology 12 Intellectual Property, Regulatory and Bioethical Concerns 6 Cell Biology and Biotechnology 8 Food Chemistry and Processing 6	Molecular Biology and General Genetics 14 Biochemistry Biochemistry Biochemistry Biochemistry Biotechnology Intellectual Property, Regulatory Biotechnology and Fundamentals Biochemistry Biotechnology Physiology and Fundamentals For Cell Biology and Biotechnology Cell Biology and Biotechnology Food Chemistry and Processing Laboratory II Biochemistry Biotechnology Clinical Biochemistry Molecular Applications in Biomedic Student's choice Stage

Test 2018 for background knowledge

A verification of background knowledge is mandatory for all students who enroll at the University for the first time, but it does not affect in any way the registration. It is also possible to enroll before completing the verification.

http://biologybiotechnology.unicam.it/test2018

ENTRY REQUIREMENTS

High School Diploma

(with minimum 12 years education) Level of language competence required: ENGLISH level B1 (Threshold level) of the CEFR

INFORMATION FOR ENROLLMENT, TUITION FEES, OTHER SERVICES

at http://international.unicam.it

Didactic Manager

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