Università di Camerino

Bachelor Degree in

Biosciences and Biotechnology

First Cycle Degree

Duration 3 years

ECTS credits 180

Location Camerino

Language English

WEB SITE http://biologybiotechnology.unicam.it

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 2014/15).

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.

a.y. 2015/2016
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 www.unicam.it/international

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.

Curriculum Biology
Degree in BIOLOGY

1 year
General Biology and Histology
General and Inorganic Chemistry
Mathematics and Statistics
Organic Chemistry
Physics
English
Laboratory I

2 year
Molecular Biology, General Genetics
Computer Sciences
Biochemistry
Anatomy and Physiology
General Microbiology
Zoology and Botany
Cell and Developmental Biology
Laboratory II

3 year
Hygiene and Clinical Microbiology
Fundamentals of Pathology
and Parasitology
Molecular Genetics
Clinical Biochemistry
Student’s choice
Internship
Final test

Curriculum Biotechnology
Degree in BIOTECHNOLOGY

1 year
General Biology and Histology
General and Inorganic Chemistry
Mathematics and Statistics
Organic Chemistry
Physics
English
Laboratory I

2 year
Molecular Biology, General Genetics
Computer Sciences
Biochemistry
Fundamentals of Pathology
Intellectual Property, Regulatory
and Bioethical Concerns
Cell Biology and Biotechnology
Food Chemistry and Processing
Laboratory II

3 year
Molecular Genetics, Genetics
of Microorganism
and Microbial Biotechnology
General and Industrial Microbiology
Physiology
Clinical Biochemistry and Molecular
Applications in Biomedicine
Student’s choice
Internship
Final test

COURSE COORDINATOR
AND DELEGATES
School of Bioscience
and Veterinary Medicine
Director
Prof. Manuela Prenna

Course Coordinator
prof. Guido Favia
guido.favia@unicam.it
0737 403230

Didactic Manager
Dr. Elena Cardellini
elena.cardellini@unicam.it
0737 402132

Biosciences and Biotechnology
Secretary
Mrs. Ada Forti
ada.forti@unicam.it
0737 402869

Delegate for Educational Guidance
Prof. Gabriella Gabrielli
gabriella.gabrielli@unicam.it
0737 402705

Delegate for International Mobility
Prof. Cristina Marchini
cristina.marchini@unicam.it
0737 403275

Delegate for Tutoring
Prof. Consuelo Amantini
consuelo.amantini@unicam.it
0737 403312