



Biological Sciences

Master Degree - Second Cycle Degree

duration 2 years - ECTS credits 120

Campus location: Camerino

School of Biosciences
and Veterinary Medicine

Responsabile Corso

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Educational Guidance

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Educational Manager

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Bachelor's Degree and Master's Degree Programmes

<https://www.unicam.it/didattica>

INTRODUCING THE MASTER / OVERVIEW

The second level degree in Biological Sciences (LM-6 class Biology) aims to train graduates with advanced knowledge and expertise in update biomolecular and biotechnological methodologies for application in diagnostic, nutritional, and environmental fields. Indeed, students can choose among parallel curricula:

- **Molecular Diagnostics and Biotechnology**
- **Nutrition: Functional and Sustainable Food**

These curricula, in combination with core courses, give students flexibility to tailor their degree to their background, interests, and career goals. In order to support the mobility and the successful integration of students and graduates in an international context, these courses are offered in English.

The characterization of the course is also enriched of two further curricula, offered in Italian language. The curriculum named

- **Nutrizione per il Benessere e lo Sport**

is more specifically aimed at preparing for the profession of nutritional biologist, with a particular attention towards sports nutrition.

The curriculum named

- **Biologia della conservazione e gestione ambientale**

is specifically aimed to prepare for professions related to environmental management.

In this curriculum, some teaching activities will be offered also in English to facilitate student mobility from other countries.

In parallel with the degree course in Biological Sciences, students can enroll in the Scuola di Studi Superiori "Carlo Urbani", an institution of excellence, subject to selection based solely on merit.

For more information, visit: <https://scuolastudisuperiori.unicam.it>

ADMITTANCE REQUIREMENTS

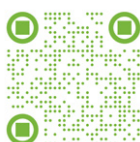
- Bachelor Degree that satisfies the requirements for access to University Master Degree courses
- List of subjects studied (transcript of records with grades obtained):
 - at least 15 ETCS in basic courses (Mathematics, Physics, Chemistry)
 - at least 60 ETCS in courses in biological areas
- Level of language proficiency (strongly recommended): ENGLISH level B2 (Independent User)

Further information on admission rules, pre-admission deadline and other services at <http://international.unicam.it>

CAREER OPPORTUNITIES

The goal of the Master course in Biological Sciences is to prepare its graduates to start a career in different areas of Biological Sciences with particular regard to scientific research and diagnostics on biomedical, nutritional, and environmental fields. Graduates will be able to deal with the application of biology and biotechnology, at functional and molecular level, in industry, in service sector and in various areas of public administration. The degree in Biological Sciences, through the specific curricula, properly prepares professional figures, such as the nutritional biologist, who are allowed to formulate personal diets and oversee education programs and nutritional and environmental surveillance programs. All curricula will prepare students to engage in research, lead lab teams, make development and planning decisions, create and apply research modalities to large projects.

Graduates in Biological Sciences will be adequately prepared for access to third education level (PhD programs or specialization school) in molecular biology and biotechnology all over the world.



Course structure 4 Percorsi

Molecular Diagnostics and Biotechnology

I year	CFU
Genomics and Proteomics	12
High Performance Bio-Analytical Methods	6
Epigenetics	6
Biology of Cancer and Biomolecular Therapeutic Agents	6
Clinical and Molecular Diagnostics	6
Rotation Laboratory	6
Student choice	8

Nutrition: Functional and Sustainable Food

I year	CFU
Alternative Food & Nutrients Sources	6
Applied Nutrition	6
Food Quality	12
Functional-Sustainable Food Technologies	6
Microbiota and Nutritional Conditions	6
Epigenetics	6
Pathological Conditions related to Nutritional Habits	6
Sustainable Food Systems	12

Biologia della Conservazione e Gestione Ambientale

I year	CFU
Ecologia delle comunità	8
Programmi di valutazione e monitoraggio della biodiversità/Biodiversity assessment and monitoring schemes	12
Statistica applicata	6
Genetica della popolazione ed ecologia animale	6
Principi di ecologia del paesaggio/Principles of landscape ecology	6
Igiene e monitoraggio ambientale	6
Attività di laboratorio/Rotation laboratory	6
Crediti liberi / Student choice	10

Nutrizione per il Benessere e lo Sport

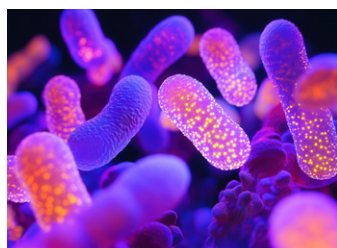
I year	CFU
Alimenti Funzionali per il Benessere e lo Sport	12
Epigenetica & Nutrizione	6
Fisiopatologia & Nutrizione	12
Metodi Bioanalitici per la Valutazione dello Stato Nutrizionale/Metabolico	6
Nutrizione Applicata 1: nutrizione per il benessere	6
Nutrizione Applicata 2: nutrizione a supporto dell'attività sportiva	6
Nutrizione di Precisione per il Benessere e lo Sport	12

II year	CFU
Stem Cell Technologies and Animal Models	12
Molecular Parasitology	6
Molecular Ecology	6
Molecular Archeological and Forensic Anthropology	6
Microbial Pathogenesis and Biofilms	6
Experimental Thesis	30
Final Dissertation	4

II year	CFU
Blood Parameters and Nutritional Conditions	6
Endocrine-Metabolic Interplay	6
Pharmacology and Food Toxicology	8
Internship	6
Student choice	8
Experimental Thesis	24
Final Dissertation	2

II year	CFU
Adattamento degli animali all'ambiente	6
Servizi ecosistemici	6
Genetica ed ecologia delle popolazioni vegetali	7
Microbiologia del suolo e biodiversità	7
Tesi sperimentale/ Experimental thesis	30
Dissertazione finale/ Final dissertation	4

II year	CFU
Basi Etnico-Culturali della Nutrizione	6
Ecosistema Microbiota-Stato Nutrizionale Organismo	6
Endocrinologia & Metabolismo	6
Parametri Biochimico-Clinici e Stato Nutrizionale	6
Tirocinio	6
A libera scelta	8
Tesi	20
Dissertazione Tesi	2



Student Services

Guidance
Scholarships
Welcome - Tutoring
Counseling and psychological well-being
Services for Students with Disabilities and DSA
International mobility



a.y. 2025/2026

Information

Guidance
 via Gentile III da Varano 2 - 62032 Camerino - 0737 404606 - 403727 - orientamento@unicam.it

Address Student Offices
(registrations, study plans, university transfers, university contributions)
 via Gentile III da Varano 26 - 62032 Camerino
Ticketing: <https://segreteriastudenti.unicam.it/>

Contributions and registrations
 Procedure available at <https://miiscrivo.unicam.it/>

Educational services, Classrooms, Lesson timetables
<https://www.unicam.it/studente>

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Polo degli Studenti



Tasse e contributi

Give consent to the acquisition of your **ISEE-U** to personalize your university fees