

INSPIRING GLOBAL CHANGE SINCE 1222

SCHOOL OF SCIENCE

QUANTITATIVE AND COMPUTATIONAL BIOSCIENCES

The QuaCBio Master's degree combines courses from the biological and hard science realms, with a strong emphasis on hands-on bioinformatics trainings. Through this approach, students with a comprehensive STEM background are expected to get together and cross-contaminate when dealing with Big Data in omics, evolution, ecology and physiology and become the next generation of Computational Biologists.



UNIVERSITÀ
DI PADOVA

QUANTITATIVE AND COMPUTATIONAL BIOSCIENCES

LEVEL Master

SCHOOL Science

DEPARTMENT Biology

DURATION 2 years (120 ECTS)

START DATE October

LOCATION Padua, Italy

PROGRAMME COORDINATOR

Luca Pagani

WEB

www.unipd.it/en/computational-biosciences

APPLY.UNIPD.IT



TOP 150 2025

Biological Sciences



BY SUBJECT

ENTRY REQUIREMENTS

- Bachelor's degree (or higher) in Biology, Biotechnology, Chemistry, Physics, Mathematics, Informatics, Statistics or Engineering
- English language: B2 level (CEFR) or equivalent

PROGRAMME STRUCTURE

1st year: Recommended courses for students with a biology background: General Mathematics; Statistics and R
Recommended courses for students without a biology background: Introduction to Molecular and Cellular Biology and Introduction to Ecology

Big data: an ethical and economical perspective; Informatics and Python; Next Generation Sequencing; Quantitative Imaging; Machine Learning and Neural Networks; Sensors, measurement errors and data management; Advanced Statistics and Data Analysis; Systems Biology; Computational Human Evolution
2nd year: Complex systems and agent-based simulations; Nature in context; Metagenomics.

Elective courses, research internship and thesis.

TUITION FEES AND SCHOLARSHIPS

Annual fees: up to €2.900,00 (3 instalments)

Scholarships and fee-waivers for international students available.
www.unipd.it/en/funding-and-fees

CAREER OPPORTUNITIES

Graduates work as Bioinformaticians, Data Scientists within the Biology realm, Big Data and Complex system analysts, Developer of novel analytical methods in Biology.