



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Second Cycle Degree (Master of Science, MSc) in
Biotechnology for Food Science (BFS)
Curriculum in English



BioTECH



In academic year 2016-2017, the University of Padua inaugurated a new curriculum of the Master Degree in “**Biotechnologies for Food Science (BFS)**” to be entirely taught in English

The “**Biotechnologies for Food Science**” Master degree (MSc) is an interdisciplinary and research-oriented Master of Science (MSc) programme focused on the application of **advanced biotechnologies in food production and safety**



biotechnologies



blue biotechnology (marine biotechnologies)



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green biotechnology (agri-food biotechnologies)



grey biotechnology (environmental biotechnologies)



red biotechnology (medical & pharmaceutical biotechnologies)



white biotechnology (industrial biotechnologies)



why a MSc in *Biotechnologies for Food Science*



an answer to a request from **public agencies/institutions, animal and agri-food industries** as well as **consumers** of agri-food products



prepare personnel with knowledge and methodological skills helpful in the field of food safety





why a MSc in *Biotechnologies for Food Science* ?



Agri-food is the first field of application in which humans used biotechnologic methodologies and skills to get new products and innovative processes





LM-9

Medical, Pharmaceutical and Veterinary Biotechnologies

second cycle degree

120 ECTS



Part-time student enrolment

Attendance

50% lectures

70% hands-on, lab sessions



DAFNAE



MAPS

TESAF



All teaching activities at our campus (Agripolis)

Campus facilities and more information at

<http://www.agrariamedicinaveterinaria.unipd.it/utilita/scuola/contatti/erasmus>

1

Access requirements



open access with requisites for EU and non-EU citizens legally staying in Italy



25 places available for non-EU citizens residing abroad; of these, 1 place is reserved for Chinese students on the Marco Polo Programme



open access for BSc graduated students with a **known background of Biotechnology and Biological Sciences** (e.g., mostly referable to Genetics and Molecular Biology)... see ③

2

Access requirements



English language at a B2 level as per the Common European Framework of Reference for Languages (CEFR) - or corresponding level (e.g. Academic IELTS or TOEFL/IBT) is required




if the candidate is an English mother tongue speaker or has attended their upper secondary school or a degree course in English, no language certification is necessary

3

Access requirements



admission depends on **preliminary assessment** by the MSc Teaching Commission of the candidate's reasons, knowledge and competences by means of an **interview** also by 



should it not be possible to assess degree equivalence, the Commission will assess the candidate's foreign degree classification and overall curriculum with the Italian standard, to determine whether the requirements are met or not

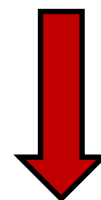


at the end of the assessment process, the Commission will draw a **merit list only for non-EU citizens residing abroad**



the list will be used only in the event that the number of eligible candidates exceeds the number of places available

Entry requirements



...Applicants are expected to meet specific curricular requirements and have specific skills and abilities in:

- ☐ *biological systems (from a molecular and cellular point of view);*
- ☐ *biotechnology for the production of goods and services through the analysis and use of biological systems;*
- ☐ *scientific method and its application to concrete situations and adequate knowledge of ethical regulations and issues.*



Fee waivers at UNIPD



<http://www.unipd.it/en/fee-waivers>



UNIVERSITÀ
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Menu ▾ Studying in Padova ▾ Funding and Fees ▾ > Fee-waivers

Fee-waivers

The University of Padova and the Veneto Region offer several fee-waiver options. Below is a list of the funding opportunities that are most often used by international students in Padova.

— Fee-waivers for students enrolling in degree courses held in English

The University of Padova offers 100 full tuition fee-waivers to students enrolling in one of its degree courses completely held in English. Fee-waivers are offered for 1 academic year.

Who can apply

Talented prospective international students from all over the world, having obtained their previous degree outside Italy, and wishing to enrol in one of University of Padova degree courses held in English. To be eligible, you must:

- > have a non-Italian nationality
- > hold a non-Italian secondary school diploma (for first-cycle degree applicants) or a non-Italian first-cycle/ Bachelor diploma (for 2nd level / Master degree applicants)
- > have been admitted to one of University of Padova degree courses taught in English
- > not benefit of other national or international scholarships or grants, except for those issued by Regione Veneto and by the Galilean School of Higher Education.
- > be able to comply with the conditions for obtaining an Italian visa

Failure to meet one or more of these criteria automatically means that you are not eligible.



Further information on the degree course at:

www.unipd.it/en/biotechnologie-alimentazione

For general enquiries about the course, please contact:

biotechnologiesforfoodscience.bca@unipd.it

marina.basaglia@unipd.it

mauro.dacasto@unipd.it



BFS



Curriculum (in English) in **BIOTECHNOLOGIES FOR FOOD SCIENCE (BFS)**

Course structure

120 ECTS – 2 years

12 course units

120 ECTS – 2 years

Applied genomics for animal and crop improvement

Applied Bioinformatics

Food Microbiology and Food Microbial Biotechnology

Molecular basis of disease, immunology, and transmissible diseases

Laboratory of advanced DNA, RNA, and protein analysis

Biotechnology for crop production

Epidemiology and risk analysis

Traceability tools for species authentication

Advanced technologies for the agrifood sector (nanotechnologies, proteomics, metabolomics)

1st

Biotechnology for plant protection

Food toxicology and food regulation

Foreign language (English)

2nd



Objectives

.... provide our students competences/skills

how to produce healthier and safer food following a cross-cutting, farm/field-to-fork approach

knowledge on cutting-edge methods (e.g., genomics, bioinformatics, proteomics, metabolomics, nanotechnologies) in the context of animal and crop production, food quality and safety

to understand how food (e.g., disease mechanisms and pathogens of crop and farm animals) might impact on human health

to use biotechnology to help preventing disease and improve food production

knowledge on food toxicology, food law and traceability for food authentication, to prevent the presence of contaminants in the agri-food chain and give consumers information on the real origin of what they eat

MSc thesis



opportunities for intensive tutoring and for master thesis-related stages of **at least six months** duration will be available

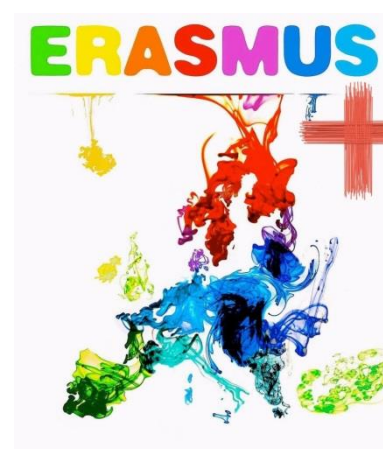
Where?

in our campus or in UNIPD laboratories with outstanding knowledge in this sector of agri-food industry

in other relevant national and international organizations in the private or public sphere



- ☐ **B** Gent
- ☐ **F** Tolosa
- ☐ **HU** Kaposvar
- ☐ **NL** Nijmegen
- ☐ **PL** Poznan
- ☐ **S** Umea
- ☐ **FL** Kuopio
- ☐ **F** Brest
- ☐ other available (and free) position in other Universities
- ☐ new exchange programs



MSc BFS graduates

since 2003 on, most of our students were graduated within September (of their 2nd year)

the mean final score is > **105/110**



MSc BFS graduates (data from ALMA LAUREA)



~**100%** satisfaction for our MSc in BFS

~ **94%** of our graduate students would enrol again in our MSc



MSc BFS comparative evaluation

7.90 overall satisfaction (UNIPD 7.58)

8,23 MSc organization (UNIPD, 7.92)

7.93 teaching (UNIPD, 7.64)



Professional opportunities

As advanced biotechnologies increasingly move from research to production, the job market demands professional profiles that have a strong technological background and, at the same time are able to move across a variety of other specialized disciplines, and interact with all the different actors in the agri-food sector.

The broad cross-disciplinary expertise offered by our MSc programme, will open job opportunities in private and public research centers, in public institutions dealing with animal health and food safety, in the private agro-food sector, at various levels from animal and crop production, food processing, to large food retail chains.

Important Note



Professional opportunities



Research laboratories

- ☐ academia
- ☐ public/private institutions working in the field of agri-food science and safety, e.g. Veterinary and Public Health Institute, INRA, Contract Research Organizations (CRO), ...

Professional opportunities



Agri-food industries

- ☐ public/private industries related with agri-food safety, biotechnologies
- ☐ process quality control, SOPs

MSc BFS graduates (data from ALMA LAUREA)



after one and three years, **72,0%** and **92,0%** of our graduate students have a job, respectively



School of Agricultural Sciences and Veterinary Medicine

Search



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[DISCOVERING PADOVA](#)

[INTERNATIONAL AREA](#)



AVVISI E NOTIZIE

EVENTS

PLANT HEALTH SEMINARS 2017-18 AND GUEST LECTURES

For more information visit
www.dafnae.unipd.it or contact the
seminars/lecture host.

INFO



- [Lectures timetable](#)
- [Public examinations](#)
- [International student handbook](#)

OPPORTUNITIES



- [Student Administration Office](#)
- [Erasmus desks](#)
- [AUSF](#)
- [The Students Representatives](#)

NEWS

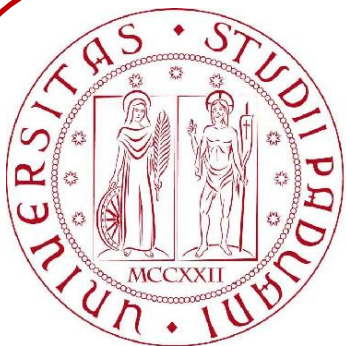


LECTURES ROOMS AND LABS



MOODLE





websites:

<http://www.unipd.it>

<http://www.agrariamedicinaveterinaria.unipd.it/>

Further addresses

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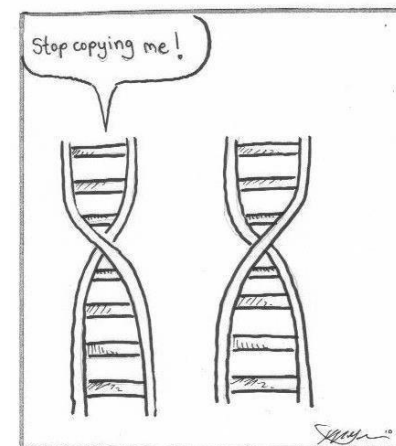
Teaching Committee

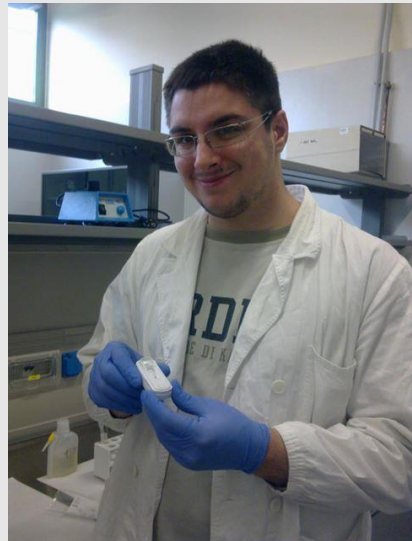
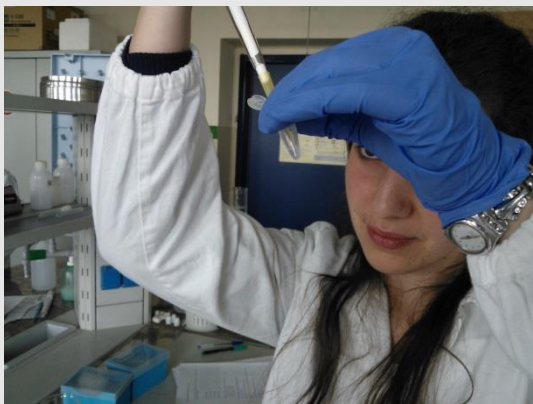
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Biotechnology for Food Science (BFS)

Curriculum in English



Biotechnology

field molecular CSHL industry new pharmaceuticals findings greatly pain links DNA

basic lives early biology discovery recombinant increase genetics techniques prominent expanded technologies applies human sciences creating goal regular agricultural emerging improving scientists dramatically maintained crop links DNA

institutions developing work technology since biotech world laboratory alleviation informed benefited one

