



University of Agronomic Sciences and
Veterinary Medicine Bucharest



Faculty of Biotechnology

MASTER PROGRAM ” BIOTECHNOLOGY AND ENTREPRENEURSHIP”

Course overview

- 2 years full time (4 semesters)
- Available to domestic and international students.
- Start month: October; End month: July
- Tuition/Fees (Academic year 2019/2020): *to be decided by the UASMVB administration*
- 120 transferable ECTS

Location:

UASMV Bucharest “Agronomie” campus; building - Faculty of Biotechnology
59, Marasti Bld, Bucharest, district 1, 011464

Master coordinator:

Habilitate Assoc. Prof. PhD Florentina MATEI
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Context and objectives

Few people start a biotech company purely for making money, because is easiest to make money in IT, law or banking. Biotechnology companies are usually started by people which combine science and commerce, which have a strong desire to work independently and with friends. A successful Biotech entrepreneur has to acquire and demonstrate significant combinations of technical, commercial and operational skills; the acquisitions start in school and continue all life long, because Biotech is a "living" science, in a permanent change.

The Master program “Biotechnology and Entrepreneurship”, integrated in the high education studies’ cycle Bachelor – Master- Doctorate- Continuous Training of the Faculty of Biotechnology from UASMV Bucharest, is an answer to the need of connecting the scientific area of Biotechnology with the entrepreneurial environment, in the national and international context in which the development of entrepreneurial culture is a priority, as tool to reduce unemployment among graduates, especially young graduates, as well as mechanism to revive the economy.

The program is designed to provide students with a broad coverage of key areas of modern biotechnology and a basic understanding of business and finance issues. This new program brings together a strong science foundation with biotechnology enterprise and entrepreneurship, providing a unique educational venue for scientists to better understand the entire biotechnology enterprise and issues unique to the industry.

Addressability

The program is suitable for students who are interested in working in biotechnology companies and/or aspire to be involved in a start-up in the field. Being thought in English, both national and international students are welcome.

Pre-request: proved good level of English language (write, read, speak); at least B2 level

Competences, skills, knowledge to be acquired

- capacity to formulate strategies which reflects the interdisciplinary nature of biotechnology;
- knowledge on biotech concepts and fundamentals useful for the production of marketable services and products;
- conducting and controlling the technology and processes for the production of marketable services and products;
- quality control of biotech processes proving marketable potential;
- competences for research and development in the area of biotechnologies;
- knowledge on technological transfer and intellectual property rights;
- managerial competences for biotech companies/start-ups;
- development of financial strategies for start-ups in biotech;
- development of marketing strategies for biotech services/products;
- communication strategies in biotech business;
- use of digital instruments in the business development and coordination.

Career opportunities

The graduates will be ready to be part of a start-up (as partner or consultant) which will deliver products or services in the field of biotechnology. The specialisation areas of these start-ups are very divers: production of diagnostic tools, production of bio-products for agriculture, food starter culture production, biofuels, delivering services for chemical and molecular analysis (medical diagnostic, pollutants monitoring), etc.

Meanwhile, the graduates can get employed in bigger sized biotech companies in different positions, like product developer, production's coordinator, laboratory coordinator, quality manager, project manager, specialist in biotech products marketing, executive director.

Structure and Curriculum

The structure and the content of the program bring together classical elements of the European Master studies with innovative elements borrough from the international practice in entrepreneurship. The practical stages will be taken in a biotech company and there are already signed conventions with some stakeholders (Evic Eurofins Romania, Laboratoarele Medica FarmImpex S.R.L, Ecological Application S.R.L, Laboratorium S.R.L., Agrobiotechrom, etc).

No.	Disciplines Academic year 2019/2021	Course (hours)	Practice / seminar (hours)	Year 1 ECTS	Year 2 ECTS
1.	Applied Biochemistry and Enzymology	28	28	8	-
2.	Applied Microbiology	28	28	8	-
3.	Advanced Molecular Biology	28	14	8	-
4.	Communication and Leadership	14	14	6	-
5.	Advanced Agricultural Biotechnology	28	14	8	-
6.	Advances in Food Biotechnology	28	28	8	-
7.	Pharmaceutical Biotechnology and Health Care	28	14	8	-
8.	Good laboratory and manufacturing practice in industrial biotechnology	28	-	6	-
9.	Entrepreneurship in Biotechnology - Starting-up, Management and Marketing	28	14	-	6
10.	Risks' and Quality Management	28	14	-	6
11.	Project Management	28	28	-	6
12.	Digital Tools for Bio-Entrepreneurs	28	14	-	6
13.	Intellectual property management <i>or</i> Human Resources Management	28	-	-	6
14.	Individual training and Internship (10 weeks x 20 hours)	-	200	-	20
15.	Elaboration of dissertation paper (4 weeks x 30 hours)	-	100	-	10