Teaching Organization

The schedule of face-to-face classes will be principally in the afternoon, despite some practica! Sessions or visits to companies/institutions of the sector that can be programmed in the morning. The students will use the rest of the day to independent work. Classes will be given by teachers from participating universities and professionals invited through video conference, from the university or centre where they are. The students will go to the classes in the university they had enrolled. With a view to minimize the shift of students, the most part of the practical classes will be duplicated. In case of the students have to shift, a transport will be prepared to take them to the place of the practice or complementary activity such as dissemination sessions, forums or visits to companies.

In the web page of the master's degree (http://masterbiotecnologiaavanzada.com) it is possible to consult each module with its organization and teaching programme.

Enrolment Calendar

FIRST CALL* FOR INSCRIPTION AND ENROLMENT (UVIGO)

- June 22-July 2: Telematic Preregistration (without payment) (http://matricula.uvigo.es)
- July 10: Publication Accepted Provisional List
- July 11-13: Complaints
- July 17: Publication Accepted Final List 1st call
- July 18-23: Enrolment confirmation (with payment)

FIRST CALL* FOR INSCRIPTION AND ENROLMENT (UDC)

- June 24-July 3: Telematic Preregistration (without payment) (https://matricula.udc.es/preinsMaster/identif.asp)
- July 10: Publication Accepted Provisional List
- July 10-12: Complaints
- July 19: Publication Accepted Final List 1st call
- August 20-26: Enrolment confirmation (with payment)

* In case of no covering all the vacancies, more preregistration calls will be open (see web of the master)

General Information

School period: 3 semesters, 90 credits ECTS

30 vacancies (15 UVIGO and 15 UDC)

Coordinators

Prof .Dr. Diana Valverde. Faculty of Biology. UVIGO.
Tel. 986811953, email: dianaval@ uvigo.es.

Prof. Dr. Manuel Becerra. Faculty of Sciences.UDC.
Tel. 881012057, email: manu@ udc.es

MBA

Master 's degree in Advanced Biotechnology

Universidade Vigo — UNIVERSIDADE DA CORUÑA

http://masterbiotecnologiaavanzada.com

Objectives

Current biotechnology includes a group of very sophisticated techniques and technologies that are replacing the classic methodologies, favoring more immediate results and allowing dealing with new inconceivable challenges until just a few years ago. Nowadays, highly qualified professionals are necessaries for facing the new challenges the biotechnological sector is confronting, both in the business and research area.

The Master pretends to be a postgraduate offer with potentially useful quality for the Degrees/Bachelor's degree of the experimental (Biology, Biotechnology, Biochemistry, Chemistry, Environmental Sciences, Sea Sciences, etc.), health (Pharmacy, Medicine, Veterinary, etc.) and engineering fields (Agronomy, Chemistry, Food Science and Technology, Company organization, Materials, etc.), as well as a via for the education of professionals and doctors between the graduates of those degrees.

The main objective is to provide to those professionals, an advanced education in Biotechnology, with a specialized and multidisciplinary character, giving them the necessary tools to promote the initiation in research and professional tasks. This is why the profile of this master is double:

-Job Education: the students of the professional itinerary will make the External Internships and the End-of-master Project about the biotechnological industry.

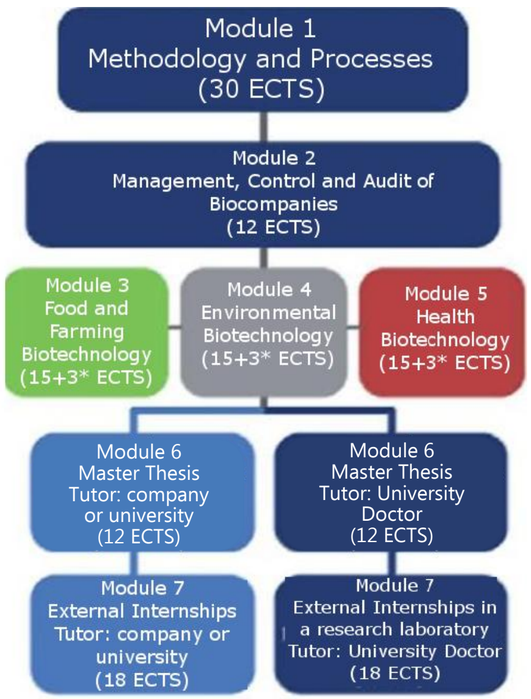
-Academic-Research: the students of the PhD itinerary, once finished the period of education, will be able to make the Doctoral Thesis in some of the research fields that is offered in the Advanced Technology PhD Programme.

Structure

The master's degree has 90 ECTS credits, divided in three semesters of 30 ECTS credits with the following structure:

- A common module of mandatory subjects including modules 1 and 2.
- Three specialties to choose during the 2nd semester: Food and Farming Biotechnology, Environmental Biotechnology and Health Biotechnology.
- The students will make the Master Thesis (12 ECTS) and the External Internships (18 ECTS) during the third semester.
- In the two first semesters a total of 60 ECTS credits are taught. They form the basic knowledge of Biotechnology and the specialty.
- In the third semester, the student will develop the Master Thesis and the External Internships, directly related to the specialty and with the selected professional or academic-research itinerary.

* Optative (3 ECTS) of other orientation.



Generals

MODULE 1. METHODOLOGIES AND PROCESSES: 1st semester (30 ECTS)
- Genetic engineering and transgenesis (4,5 ECTS)
- Cellular and tissue engineering (3 ECTS)
- Genomics and Proteomics (4,5 ECTS)
- Bioinformatics (3 ECTS)
- Industrial Biotechnology (6 ECTS)
- Biotechnological processes and products (3 ECTS)
- Techniques with application in Biotechnology (6 ECTS)

MODULE 2. MANAGEMENT, CONTROL AND AUDIT OF BIOCOMPANIES: 2nd semester (12 ECTS)
- Organization and management: company management and laboratory efficient management(4,5 ECTS)
- Audit of biotechnological companies (4,5 ECTS)
- Legal and ethical aspects in Biotechnology (3 ECTS)

Specialities

MODULE 3. FOOD AND FARMING BIOTECHNOLOGY: 2nd semester (18 ECTS)
- Food biotechnology (3 ECTS)
- Food analysis, food security and traceability (3ECTS)
- Plant biotechnology (3 ECTS)
- Animal biotechnology (3 ECTS)
- Biotechnology applied to sustainable development (3 ECTS)
- Optative of other orientations (3 ECTS)

MODULE 4. ENVIRONMENTAL BIOTECHNOLOGY: 2nd semester (18 ECTS)
- Environmental pollution (3 ECTS)
- Environmental technology and water management (3 ECTS)
- Environmental technology and soil and air management (3 ECTS)
- Prevention, management and environmental audits (3 ECTS)
- Biotechnology applied to sustainable development (3 ECTS)
- Optative of other orientations (3 ECTS)

MODULE 5. HEALTH BIOTECHNOLOGY 2nd semester (18 ECTS)
- Molecular diagnostics and therapy (3 ECTS)
- Assisted reproduction(3 ECTS)
- Design and production of vaccines and drugs (3 ECTS)
- Design of new specific drugs (3 ECTS)
- Biotechnological tools for forensic analysis (3 ECTS)
- Optative of other orientation (3 ECTS)

Generals

MODULE 6. MASTER THESIS: 3rd semester (12 ECTS)

MODULE 7. EXTERNAL INTERNSHIPS: 3rd semester (18 ECTS)