

Bachelor • Lisboa

BIOTECHNOLOGY



Direction

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Secretariat

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Duration

3 Years

Credits

180 ects

Exams

Have one of the following sets:

- 02 Biologia e Geologia and 07 Física e Química
- 02 Biologia e Geologia and 16 Matemática
- 07 Física e Química and 16 Matemática
- 16 Matemática and 18 Português
- 02 Biologia e Geologia and 18 Português
- 07 Física e Química and 18 Português

Presentation

What is Biotechnology? It is the application of science and technologies in microorganisms, plants and animals, for the development of products of interest to society in a sustainable way. Modern Biotechnology plays a crucial role in the society of the future and covers industrial, service and laboratory sectors, in areas such as agri-food, environmental (bioremediation processes in the treatment of polluting waste, new intelligent materials, renewable fuels, biodegradable products), pharmaceuticals, chemistry, forensic technologies and medicine, becoming one of the spearheads in the various areas of diagnosis in the treatment of diseases and the fight against pathogens. The course at University Lusofona of Lisbon aims to train professionals in a currently priority area, Biotechnology, at national and global level. In the degree in Biotechnology, areas of transversal knowledge are studied, combining disciplines ranging from cellular and molecular biology, microbiology, genetics, bioprocesses, chemical and information technologies, among other areas. This unique characteristic of Biotechnology has ensured a growing and considerable rate of employability in the various industrial and service sectors where the multipurpose character of

applied sciences in a harmonious way, complemented by intense laboratory practice. In this way, the course intends to respond to the needs of the industry and national and international analysis and research laboratories.

STUDY PLAN

1st Year / Common Core

| 1º Semestre | ects | 2º Semestre | ects |
|-----------------------------|------|-------------------------------|------|
| Cell Biology | 5 | Food Science | 5 |
| General Chemistry | 5 | Fundamentals of Bioprocesses | 5 |
| Mathematics | 5 | General Physics | 5 |
| Software Applications | 5 | Introduction to Biotechnology | 5 |
| Statistics on Biotechnology | 5 | Microbiology | 5 |
| Vegetable Physiology | 5 | Organic Chemistry | 5 |





2nd Year / Common Core

| 1º Semestre | ects | 2º Semestre | ects |
|------------------------------------|------|----------------------------------|------|
| Analysis Instruments and Methods | 5 | Chemistry of Natural Products | 5 |
| Applied Toxicology | 5 | Computational Methods in Biology | 5 |
| Biomaterials | 5 | Fundamentals of Bioreactors | 5 |
| Controle of Quality of Bioproducts | 5 | General Biochemistry | 5 |
| Food Biotechnology | 5 | Industrial Microbiology | 5 |
| Genetics | 5 | Option I | 5 |

3rd Year / Common Core

| 1º Semestre | ects | 2º Semestre | ects |
|------------------------------|------|--|------|
| Bio-separations | 5 | Animal cell and tissue technologies | 5 |
| Environmental Biotechnology | 5 | Entrepreneurship - Technology and Innovation | 5 |
| Enzyme Technology | 5 | Forensic Technologies | 5 |
| Genetic Engineering | 5 | Nanotechnology | 5 |
| Option II | 5 | Option III | 5 |
| Pharmaceutical Biotechnology | 5 | Project | 5 |

Linha direta
para o teu futuro

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Documento gerado em 05-05-2025