

STUDYING BIOTECHNOLOGY FOR THE BIO-BASED AND HEALTH INDUSTRY (BBHI) AT INSUBRIA



MASTER'S DEGREE INTERNATIONAL PROGRAMME
2 YEARS - DEGREE CLASS LM-8

Why Industrial biotechnology?

Industrial biotechnology represents the most advanced and applicative aspect of this field. It exploits biological systems to produce bio-goods (such as innovative drugs, bioplastics, renewable energy sources) and bio-services (sustainable industrial and circular economy processes, bioremediation) to improve human welfare and environment quality.

The biotech sector shows a constant growth. The employment rate of graduates in **BBHI** is very high, also because Lombardy is the Italian biotech district and thanks to the proximity of the Swiss Confederation.



Strengths of the BBHI Master's Degree Programme at Insubria

- High number of highly qualified teachers involved in excellent research activities;
- Tutors to monitor of the student's career;
- Scholarships available to deserving students;
- Several contact with public or private companies, technology parks and incubators;
- Links to biotech network or associations, companies and research institutions;
- The presence of several laboratory activities, visit to companies, seminars, meetings.

Study plan main points

- **BBHI** is taught entirely in **English**
- **Two curricula**

Bio-base industry (white biotech):

- green chemistry
- biomasses conversion
- circular bioeconomy
- bioremediation
- biotech for agro-food chains

Health industry (red biotech):

- design & production of drugs, biopharmaceuticals
- nutraceuticals
- therapeutic enzymes
- diagnostic systems
- innovative biotech therapies

Campus Insubria

The teaching activity will take place at Insubria University Campus in Varese



- Attention to soft skills and cross-sectoral subjects.
- Extensive internship at research labs of excellence either at the University or at institutes/companies in Italy or abroad.
- After the Master's Degree, you can complete your scientific formation with a PhD in biotechnology at Varese or with other PhDs in Italy or abroad.

Career opportunities

The Industrial Biotechnologist can be:

- a **researcher** in the development process of new biotech drugs, biomedical devices, novel processes transformation of molecules and biomasses in the several sectors (biomedical, agro-food, pharmaceutical, nutraceutical, environmental, biorefinery, fine chemicals, cosmetics);
- a **manager/employee** in biotech plants, biorefineries, diagnostic and analytical labs;
- a **manager/employee** of quality control and certification laboratory;
- a **consultant/employee** in agencies for the training, technology transfer, patenting and regulatory procedures or for the scientific dissemination;
- a **Biologist**, registered in the "Albo professionale dei biologi" after passing the relevant State Exam.



High degree of internationalization



- Possibility to perform studies and traineeships abroad (UE and Swiss)
- Possibility to achieve the Double Degree title of MSc in Biotechnology and Food Science (Prague, Czech Republic)



Who can enrol?

Candidates must:

- have a bachelor degree in Biotechnology, Biological Sciences or similar programmes.
- possess a certification for English language (level B2) or attend a (free) course in Scientific English held by Insubria University.
- take an interview about their scientific preparation.



Dipartimento di Biotecnologie e Scienze della Vita



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Chiaramente Insubria!

Information