

Branch: Chemistry and Chemical Engineering



Code: PHBITE

Option: Pharmaceutical Bioprocessing Technology

Level: Master

Prerequisites:

Opportunities:

After completing the Master in Pharmaceutical Bioprocess Engineering, graduates can work in the biotechnology, chemical, cosmetic and pharmaceutical industries, both in research and development and in production, engineering and quality management. In addition, functions in engineering and plant construction for these industries are possible. The fields of activity are as follows:

Controlling, planning, evaluating and optimizing biotechnological and pharmaceutical processes

Ensuring the quality of manufactured products in accordance with applicable guidelines.

Planning, design and control of production facilities

Development of new manufacturing processes for biotechnological and pharmaceutical products

Academic or industrial research and development

Description:

The Master's program in Pharmaceutical Bioprocess Engineering deals with the scientific and technical aspects of innovative biotechnological and pharmaceutical production.

What is the purpose of this study program?

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course focuses on plant engineering, process engineering and process control. On the other hand, the focus is on molecular biology, bioprocessing and pharmaceutical technology.

Therefore, in-depth topics in this curriculum include production and fermentation processes, reactor technology, process development and optimization, bioprocess engineering, protein chemistry and analysis, hygiene, quality management and legal requirements in pharmaceutical production.

Quality and competences:

Students enter the program after having received a solid mathematical and scientific education in the bachelor program. In addition, they have already acquired extensive knowledge in the fields of process engineering and bioprocess technology. The focus on engineering and process engineering is again central to the compulsory area of the Master's program. On an equal footing, the technological profile of bioprocesses is refined. The special feature of the MSc program in Pharmaceutical Bioprocess Engineering is the wide choice of elective modules. Priority is given to bioprocess engineering and biotechnology as well as engineering sciences and process engineering. In addition, the program is complemented by a wide range of courses in energy and environmental engineering as well as in law and economics. In addition, students deepen their scientific work in preparation for future tasks in research and science.

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