



BYDGOSZCZ UNIVERSITY OF SCIENCE AND TECHNOLOGY

Faculty of Agriculture and Biotechnology

BIOTECHNOLOGY first-cycle, full-time studies

(6TH qualification framework) Semesters: 7

Profile: Academic Limit: 30 students

Characteristics of the field:

A biotechnologist deals with designing biotechnological processes and conducting them to obtain products with desirable features for agriculture, horticulture, food, pharmaceutical, environmental protection and other industries, designing and conducting experiments in the field of biotechnology, working in research and diagnostic laboratories and constituting the scientific research base for the biotechnological, pharmaceutical, cosmetics or food industries and agricultural or horticultural enterprises, active participation in the management of institutions using industrial biotechnological processes and activities for the social acceptance of biotechnology products. Education in the field of Biotechnology began in the academic year 1997/1998. In 2006 and 2011, the field was positively assessed by the Polish Accreditation Committee for the quality of education.

Specialisations:

- Applied biotechnology
- Biotechnology in animal production

What will you study?

During your education, you will study basic humanities and science subjects, including: chemistry, mathematics, physics and biophysics; and major subjects, like plant/animal genetics and breeding, botany, cytogenetics, cell biology, microbiology, plant and animal physiology, embryology, molecular biology, microbial biotechnology and mycology. You will have the opportunity to complete a 4-week work practice after the 6th semester of studies. We offer interesting elective subjects, and specialization subjects to choose from: tissue and cell cultures of plants/animals, molecular virology, biotechnology in plant and animal production, industrial biotechnology and biotechnology of food of plant origin. When you choose your specialization, you will participate in dedicated classes. You can choose between the Applied biotechnology and Biotechnology in animal production.

Where will you work after graduation?

After studying Biotechnology, you will be prepared to work in the broadly understood biotechnology industry and in related industries. You will be able to work in research, control, diagnostic and quality control laboratories, performing basic analytics and research work with the use of biological material and conducting biotechnological processes used in horticulture, the food and pharmaceutical industries, and environmental protection. Numerous graduates of Biotechnology successfully work in renowned laboratories around the world. If you are interested in developing your passion for science, we invite you to start second and third-cycle studies, in order to work at a university or in research and scientific institutions in the future.

Why should you study Biotechnology?

Studies in the field of Biotechnology give the opportunity to get to know various aspects of biotechnology in practice (like biotechnology of plants, animals, microorganisms), which broadens the possibilities of finding a job in various areas of the biotechnology industry. They give the possibility of internships in biotechnology and related companies from our region (e.g. Vitroflora, Vitrogen, IHAR, Institute of Orchard Genetics, Sadkiewicz Institute and many others). In 2022 our first and second-cycle studies in the field of Biotechnology won both the full (6-year) accreditation of the Polish Accreditation Committee (PKA) and the accreditation certificate called "Studies with Future" for the first-cycle, and also the statuette of the Education Quality Leader! Classes in the field of Biotechnology are conducted in small laboratory groups, which give students the opportunity to learn directly how to operate modern and unique scientific equipment (e.g. flow cytometers, confocal microscope, thermocyclers, RT-PCR, HPLC, etc.). We also offer the world-class level of scientific research conducted by the scientific staff expressed in numerous publications with the highest Impact Factor. Our Biotechnology students often participate in these studies by completing their master's and engineering theses. The field of Biotechnology is also distinguished by thriving, award-winning Scientific Clubs. As part of the activities of these clubs, students who actively participate, have the opportunity to go to scientific conferences, workshops or trips to biotechnology companies. This gives students an additional opportunity to improve their skills both in performing and presenting research. Studies at the Faculty of Agriculture and Biotechnology also give you the opportunity to travel abroad as part of the Erasmus+ program. An additional advantage of studying Biotechnology in Bydgoszcz is the strategic, almost central location of the city on the map of Poland, which gives a great opportunity for tourist and leisure trips. In addition, many companies in the industry and shopping centres are located in Bydgoszcz, which can make it easier to find a job both during studies and after graduation.

The procedure for submitting candidates is available at: <https://iro.pbs.edu.pl/en/full-studies/full-studies>

Online registration for higher education for the 2025/2026 academic year is scheduled to begin on June 5, 2025

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