



**BYDGOSZCZ UNIVERSITY
OF SCIENCE AND TECHNOLOGY**
Faculty of Agriculture and Biotechnology

Biotechnology 2nd cycle

Structure of studies - second cycle studies in the field of biotechnology cover 3 semesters. Two majors are offered: agricultural biotechnology and biotechnology in animal production. The total number of hours to be completed is approximately 900, 50% of which are devoted to courses in the major field of study.

Qualifications to be acquired - the theoretical knowledge You will acquire will allow to explain the processes and phenomena that occur in the natural environment and everyday life. You will be prepared for: use of your knowledge in analysis and optimization of biotechnological processes; design and implementation of processes aimed at providing products with desired properties; planning and carrying out experiments and research in the field of biotechnology. You will acquire skills to increase awareness of ecological, economic and social aspects of biotechnology, being able to evaluate benefits and risks involved in application of biotechnology, use of systems for quality management in biotechnology.

Your potential job - after graduation from second cycle studies You will be qualified to work in research & development units in biotechnological industry and related industries, research supervising and diagnostic laboratories as well as in design teams involved in biotechnological processes, etc.

Your skills and competences in the field basic curricula including:

- **methodology of experimental tests performance, planning of experiments, optimization of experimental technologies, analysis and verification of experimental data, preparation of data to be published,**
- **planning and carrying out experimental tasks.**

Your skills and competences in the major field of study including:

- **ecological, social and economic aspects of biotechnology,**
- **complexity of connections in ecosystems,**
- **assessment of benefits and threats involved in release of genetically modified organisms into the environment,**
- **ethical aspects of genetic and cellular engineering,**
- **forms and procedures of intellectual and industrial property protection in the field of biotechnology,**
- **quality management systems in biotechnology and related industries,**
- **economic and structural issues of biotechnology.**