



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

Agriculture 2nd cycle

Structure of studies - second cycle studies in the field of agriculture cover three semesters. Two majors can be chosen- agronomy and agribusiness and environmental management. The total number of classes and lectures to be completed is 800 hours, 50% of which are subjects in the major field of study.

Qualifications to be acquired - You can acquire skills needed to perform experiments and analyze the results of experimental tests, engage into creative cooperation and take adequate decisions. The process of education provides professional knowledge of ecological issues involved in the development of rural areas and functioning of agricultural infrastructure. You can learn how to methodologically conduct agricultural experiments and process data with the use of modern information technologies and according to the rules of continuing education and occupational development.

Your potential job - after graduating from the second cycle studies You will be qualified to work in specialist agricultural farms, research institutes, research development centres and agricultural advisory centres.

Your skills and competences in the field of basic curricula including:

- **eco philosophy - use of teaching content for performance and analysis of scientific experiments, exploration of ecological phenomena that occur in rural areas, planning of rural areas ecodevelopment;**

- **agrophysics** – performance of measurements of basic physical quantities and calculations, description of physical processes occurring in the soil and plants;
- **instrumental analysis** - doing research with the use of instrumental analysis methods, assessment of the measurement and calculation error, preparation of measurement sets and planning of the analytical process.

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

- **agricultural biotechnology** – use of basic methods employed in biotechnology, in vitro culture breeding in laboratory conditions, transgenesis in plants by vector and non- vector methods, selection and characteristics of transformants;
- **environmental management** – management and protection of landscape, planning and using ecological sites for enhancement of ecological stability of biocenosis;
- **agricultural research method** – planning of research projects, choice of a method for research, verification and interpretation of tests results, providing a probabilistic description and statistical inference in the case of natural phenomena;
- **biological progress** – evaluation of different technologies for crop cultivation and implementation of the newest technological achievements into agricultural practice, use of legal regulations connected with agricultural systems, fertilization technology and plant cultivation and protection.