

**Division:** *School of Medical Biology*

**Academic programme:** *19.04.01 Biotechnology, Industrial and Environmental Biotechnology*

**Mode of study:** *full-time*

**Programme length:** *2 years*

**Programme level:** *Master's degree*

**Language of instruction:** *English*

**Programme description:** *The Master's degree programme is designed to provide the development of necessary competencies and practical skills, ensuring the demand for highly qualified specialists in a growing global sector of biological sciences. Knowledge and practical experience, obtained in the course of the programme, will be applied in a wide spectrum of professions.*

*The programme is aimed at forming basic competencies in the field of biotechnology and professional competencies in the field of industrial and environmental biotechnology with an opportunity of implementing research project on one of these fields.*

*The programme is built according to modules and covers the main topics of modern industrial biotechnology and laboratory practice. It is possible to create an individual educational trajectory while mastering the programme.*

*Key advantages of the programme:*

- *Full-time study*
- *International team of teaching staff-leading scientists*
- *High-tech laboratories with state-of-the-art equipment*
- *Opportunity to implement an individual research project*
- *Skills of solving industry problems and managing projects*
- *Promising employment and dynamic career development of graduates*

*The programme is specifically designed to equip you with skills and knowledge necessary for career growth in the field of biotechnology. Our graduates are able to apply their professional competencies in companies of biotechnology industry, where they effectively participate in research projects of industrial, agricultural and medical biotechnology. They can also work as part of research teams in contract research organizations or academic departments of universities.*

**Main programme-specific classes:**

- *Industrial Microbiology in Environmental Biotechnology*
- *Industrial Biosafety and Human Ecology*
- *Industrial Waste Management*
- *Monitoring of Biotechnological Production Processes Using Methods of Artificial Intelligence*
- *Diagnostic Sensors for Environmental Safety Monitoring*
- *Bioremediation for Low Carbon Biotechnology*
- *Molecular Modelling of Biotechnological Processes*
- *Sonochemistry for Industrial and Environmental Biotechnology*
- *Bioengineering Technologies in Resource Management*
- *Bioconversion Technologies in Environmental Management*

**Programme manager:** *Irina Yu. Potoroko, Doctor of Sciences (Engineering), Professor, Director of the School of Medical Biology*