

## Module 2. Biotechnology for waste utilization

# Course 2: The Applied Aspects of Using Biotechnological Methods for Waste Utilization, 3 ECTS

## aim of the course

apply biotechnological methods for waste treatment to prevent environmental contamination

## competences

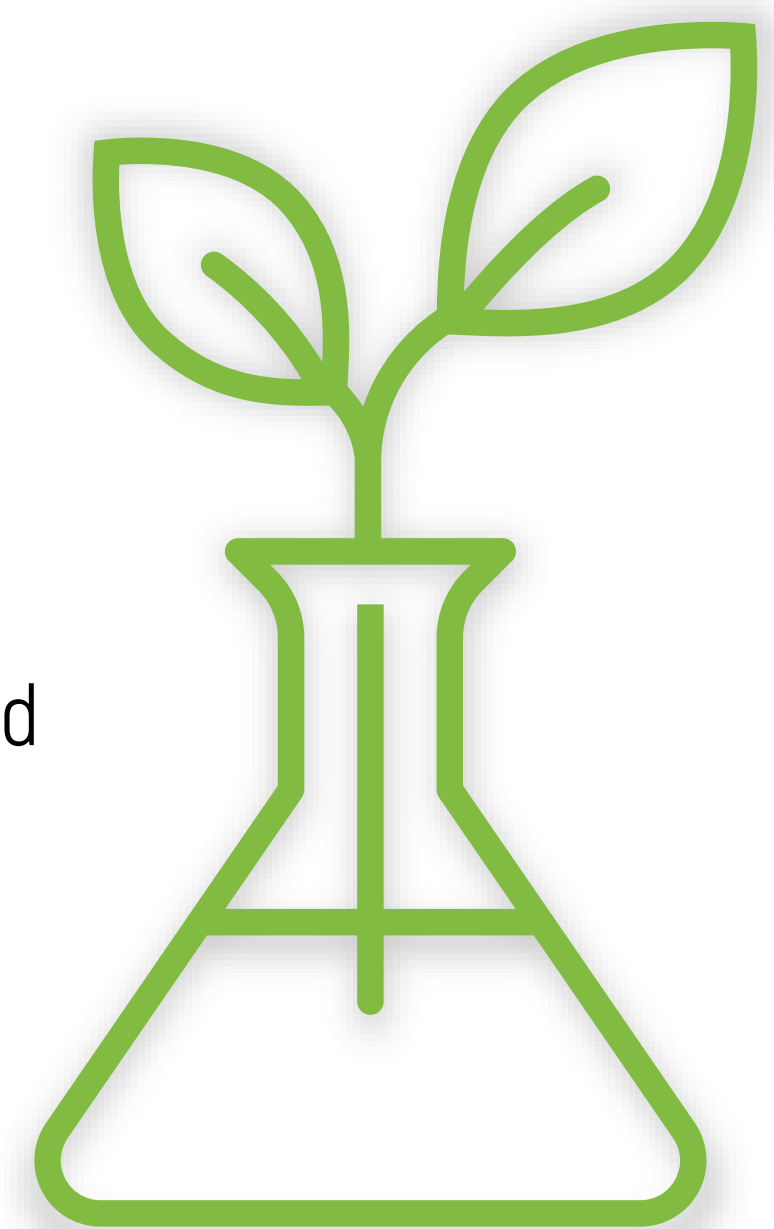
obtained by students

to use terminology of bioremediation, biodegradation and bioconversion of natural and xenobiotic compounds; phytoremediation; biotechnology for the protection of environment; use biological methods for treatment; argue and assess the possibility of using biological methods for pollutants treatment

## learning outcomes

after this course students will be able to

- have knowledge and practical skills in application of the classical and most up-to-date biotechnologies
- present an overview of important environmental biotechnologies involved in biotransformation of pollutants and generation of energy
- use theoretical and practical knowledge to conduct research of water purification and biodegradation of a wide range of contaminants



## course content

- environmental biotechnology and its role in environmental protection
- wastewater and treatment methods
- biotesting and bioindication bioremediation
- bio conversion of plant materials
- biofuels