University Politehnica Timisoara Faculty of Engineering Hunedoara

Bachelor studies program: WASTE MANAGEMENT ENGINEERING Domain of study: ENVIRONMENTAL ENGINEERING

Mission of the Waste Management Engineering qualification is part of the overall mission of the Faculty of Engineering Hunedoara, which is to train specialists with higher education in technical, economic and managerial engineering fields, particularly for any commercial company that generated/generates waste on their current process streams, i.e. pollutants at air-ground-water level. The qualification mission is reflected by curriculum structure which comprises: fundamental subjects aiming to ensuring engineering educational base, specific subjects related to recovery technologies, neutralizing or waste storage and subjects of analysis and design techniques, technologies and operational equipments used to capitalize, treatment or recovery of industrial and municipal waste.

Curriculum objectives have the goal to train environmental engineers able to practice in industry, administration or academia, to obtain a license diploma and to demonstrate their ability to solve problems regarding designing and taking decisions in waste management field.

The qualification is included in the National nomenclature of license programs and responds to a real need identified on the market labor for specialists in environmental engineering, taking into account that in Romania there are large amounts of waste stored on heaps and ponds that do not fully comply with European environment rules and must comply with the legislation.

Professional competences:

- Explaining the mechanisms and effects of processes of origin anthropogenic or natural, which determine and influence environmental pollution
- Managing and solving specific environmental sustainable development.
- Analysis of the technical solutions needed to reduce and eliminate pollution.
- Identify best available techniques (BAT) by analyzing BREF on waste treatment.
- Coordination of activities and processes based technical specifications.
- Cooperation with institutions with responsibilities in monitoring and environmental management.

Cross- disciplinary competences:

- Identifying and compliance with ethics and deontology professional responsibilities for decisions and risks.
- Identifying roles and responsibilities in a team multidisciplinary and application techniques and labor relations effective within the team.
- Effective use of information sources and resources communication and training assistance (portals, internet, software specialized applications, databases, online courses) both Romanian language and an international language.