Course Unit Descriptor

Study Programme: Environmental Engineering			
Course Unit Title: Mechanical Engineering in Environmental Engineering			
Course Unit Code: Z207A			
Name of Lecturer(s): Igor Budak			
Type and Level of Studies: Bachelor level			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): summer			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 7			
Prerequisites: None			
Course Aims: Acquisition of basic knowledge in the field of mechanical engineering with a special emphasis on the environmental protection aspects.			
Learning Outcomes: Ability to recognizes, prevent and repair problems related to the environmental protection within mechanical engineering..			
Syllabus: The objective, purpose and organization of the course; System conflict between the living environment and the needs of civilization; Critical environmental fields of industrial production; Mechanical engineering and the living environment (mechanical plants, atmosphere pollution, waste, noise and the living environment, ecologization technology); Evaluation methodology of the impact activities on the living environment; Systems of environmental management (purpose, origin, implementation, functions, assessment); Methodology of environmental evaluation and product marking; Multicriteria evaluation of the environmental pollution; Ecological technologies and systems of the future.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours: 6	**Lectures: 3**	**Practical work: 3**	
Teaching Methods: Lectures are interactive in the form of lectures, auditory, laboratory and computer practice. During the lectures theoretical part of the course is presented followed by typical examples for better understanding. During the auditory practice typical problems are solved and the knowledge is deepened. During laboratory practice acquired knowledge is practically applied on the available laboratory equipment. During computer practice the use of information communication technologies is performed in mastering knowledge of the observed field. Besides lectures and practice, consultations are held on a regular basis.			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	**Final exam**	points
Group Assignment		Examination Assignment	
Exercises			

Test			
Test			
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			