

## COURSE DESCRIPTION CARD – SPECIMEN

Faculty of Civil Engineering and Environmental Sciences									
Field of study								Degree level and programme type	
Specialization/ diploma path								Study profile	Academic profile
Course name	Environmental management system in the organisation							Course code	IS-FCEE-00263W
								Course type	Erasmus
Forms and number of hours of tuition	L	C	LC	P	SW	FW	S	Semester	winter
	15			15				No. of ECTS credits	4
Entry requirements	Environmental protection								
Course objectives	The aim of education is to get the students theoretical knowledge of the environmental management system according to DIN EN ISO 14001 and preparation, in the framework of project activities, to implement such a system in local government units and other organizations								
Course content	Characteristics of management systems according to international standards organization ISO. Elements of an environmental management system (EMS) in accordance with the requirements of ISO 14001 and the EU regulation 761/2001 EMAS. Identification of environmental aspects, as an essential element of planning environmental management system. Rules for the implementation of environmental management system in local government units and other organizations. Procedures for environmental management system audit according to ISO 19011. Documentation system. The costs and benefits associated with the implementation and operation of the environmental management system. The procedure for certification of ems. Methods and indicators for assessing the environmental activities - operational and investment. Methods and principles of integration of management systems: quality management system, environmental management system and occupational health and safety management system.								
Teaching methods	problem lecture, case study, project preparation								
Assessment method	oral exam, project assessment								
Symbol of learning outcome	Learning outcomes							Reference to the learning outcomes for the field of study	
L01	Student has knowledge regarding the environmental management system							K_W05	
L02	Student knows the rules and procedures related to the EMS							K_W13	
L03	Student is able to identify risks to the environment and use effective tools to protect it							K_U08	

L04	Student can make use of appropriate tools and procedures relating to environmental management and economics	K_U12	
L05	Student is aware of the importance and understanding of the non-technical aspects and effects of engineering activities, including its impact on the environment and the associated responsibility for decisions	K_K02	
L06	Student is able to contribute to the preparation of social projects, taking into account environmental, legal and economic aspects	K_K05	
<b>Symbol of learning outcome</b>	<b>Methods of assessing the learning outcomes</b>	<b>Type of tuition during which the outcome is assessed</b>	
L01	oral exam, project assessment	L, P	
L02	oral exam, project assessment	L, P	
L03	project assessment	P	
L04	project assessment	P	
L05	project assessment	P	
L06	project assessment	P	
<b>Student workload (in hours)</b>		<b>No. of hours</b>	
<b>Calculation</b>	lecture attendance	15	
	participation in classes, laboratory classes, etc.	15	
	preparation for classes	45	
	participation in student-teacher sessions related to the classes	1	
	preparation for and participation in exams	6	
	<b>TOTAL:</b>	<b>82</b>	
<b>Quantitative indicators</b>		<b>HOURS</b>	<b>No. of ECTS credits</b>
<b>Student workload – activities that require direct teacher participation</b>		32	1,2
<b>Student workload – practical activities</b>		67	2,6
<b>Basic references</b>	1. Standard ISO 14001:2015 Environmental management systems. Requirements with guidance for use 2. Standard ISO 14004:2016 Environmental management systems. General guidelines on implementation 3. ISO 19011:2018 Guidelines for auditing management systems		
<b>Supplementary references</b>	A Model Environmental Management System for Local Governments, Ed. by TCEQ, 2007.		
<b>Organisational unit conducting the course</b>	<b>Department of Energy – Efficient Construction and Geodesy</b>	<b>Date of issuing the programme</b>	
<b>Author of the programme</b>	<b>PhD. Eng. Elzbieta Broniewicz, Assoc. Professor</b>	<b>02.02.2022</b>	

L – lecture, C – classes, LC – laboratory classes, P – project, SW – specialization workshop, FW - field work, S – seminar