



RTU Course "Environmental Audit"

11509 Vides aizsardzības un siltuma sistēmu katedra

General data

Code	EAS505
Course title	Environmental Audit
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Post-graduate Studies
Course type	Academic
Field of study	Environmental Engineering and Management
Responsible instructor	Andra Blumberga
Academic staff	Dagnija Blumberga
Volume of the course: parts and credits points	1 part, 2.0 Credit Points, 3.0 ECTS credits
Language of instruction	LV, EN, RU
Possibility of distance learning	Not planned
Maximum auditorium capacity	50
Maximum number of students per semester	50
Abstract	In the scope of course Environmental audit student receives basic knowledge that is needed to carry out environmental audit that is based on energy audit, water audit, air quality audit, material audit, waste audit, noise and transport audits. During classes student obtains knowledge and skills about resource use analysis, resource use efficiency and possibilities to increase it in different types of enterprises and buildings based on data collection, processing and analysis methods.
Goals and objectives of the course in terms of competences and skills	To obtain knowledge and skills about environmental audit types and goals, sequence of audit steps, data collection, processing and analysis methods as well as preparation and analysis of proposed improvements.
Structure and tasks of independent studies	The main goal of students individual course work is to perform simple environmental audit in selected facility, including analysis of existing situation and preparation of improvement proposal. Student is required to use data collection, processing and analysis methods during audit process. Audit results are presented during one class.
Recommended literature	1.J.Smith, P.Smith, Environmental Modelling, Oxford University Press, 2007. 2.C.Beggs, Energy: Management, Supply and Conservation, Butterworth-Heinemann, 2002. 3.P.O'Callaghan, Energy Management, McGraw-Hill, 1993. 4.Environmental Auditing, Environmental training package E04, IChE, 1998.
Course prerequisites	none

Course outline

Theme	Hours
Introduction. Environmental audit, sequence of audit steps, monitoring	4
Energy, noise, air pollution and transport audits	4
Water, waste and material audits	4
Measurement equipment and measurement methods	4
Data collection, processing and analysis methods	12
Presentation of course work	4

Learning outcomes and assessment

Learning outcomes	Assessment methods
Is able to perform data collection, processing and analysis	Examination: practical work, individual course work, test Criteria: Student performs data collection, processing and analysis
Is able to perform simple environmental audit	Examination: individual course work Criteria: Student performs simple environmental audit.
Is able to explain the main principles and steps of environmental audit, use proper measurement and monitoring tools in order to describe existing situation and propose improvements.	Examination: practical work, individual course work, test Criteria: Student performs simple environmental audit.

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	2.0	3.0	1.0	1.0	0.0	*		