

# EUROACADEMY

## Faculty of Environmental Protection

<b>1. Name of the Curriculum</b>	<b>KESKKONNAKAITSE SPETSIALIST</b>
<b>2. Name of the Curriculum in English</b>	<b>ENVIRONMENTAL SPECIALIST</b>
<b>3. Higher education level</b>	<i>Professional higher education</i>
<b>4. Study form(s)</b>	<i>Full-time study and part-time study</i>
<b>5. Educational establishment</b>	<i>EuroAcademy</i>
<b>6. Volume of Curriculum (ECTS)</b>	<i>180 ECTS</i>
<b>7. Nominal duration of studies</b>	<i>3 years</i>
<b>8. Curriculum group</b>	<i>Environmental conservation</i>
<b>9. Curriculum code in Estonian Education Information System (EHIS)</b>	<i>137077</i>
<b>10. Language(s) of instruction</b>	<i>English</i>
<b>11. Other languages needed for achieving the study outcomes</b>	
<b>12. First registration of the Curriculum</b>	<i>05.01.2012</i>
<b>13. Date of approval of the curriculum version in the educational establishment</b>	<i>25.08.2015 by EuroAcademy's Senate 25.08.2015 the NPO Eesti Euroinfo Ühing Managing Board</i>
<b>14. Admission requirements</b>	<i>Secondary education or corresponding foreign qualifications; above average grades at the state examinations of natural sciences or on the graduation certificate; motivational discussion in the Admission Commission; command of language of instruction B2 (intermediate level).</i>
<b>15. Curriculum's major speciality (or specialities) and their volume (ECTS)</b>	<i>Environmental protection (180 ECTS)</i>
<b>16. Minor(s), other possible specializations and their volume (ECTS)</b>	<i>-----</i>
<b>17. Goals of the Curriculum</b>	<i>To prepare specialists with environmental education having practical skills who can work in the fields of environmental protection, nature protection, environmental management, specialists for strategic environmental assessment and environmental impact assessment, plan analysis, employment in the field of environmental conservation, nature conservation and environmental protection in the respective agencies, authorities and companies processing natural resources. To acquire knowledge and competencies required in order to continue studies in Master's study.</i>

<b>18. Outcomes of study</b>	<p><i>The following is acquired while completing the curriculum of environmental protection specialist:</i></p> <ul style="list-style-type: none"> <li>• basics of ecology and environmental sciences;</li> <li>• theoretical basis of environmental protection, incl. basis of sustainable development, incl. basis of environmental economics and environmental law;</li> <li>• basics of management, incl. competencies related to project management;</li> <li>• data processing software for statistical analysis of data describing environmental components;</li> <li>• GIS software and basics of GPS- applications;</li> <li>• competencies in collecting and storing environmental information, skills for detecting and using databases;</li> <li>• methodological basis of environmental research;</li> <li>• scientific world outlook;</li> <li>• EIA and SEA Methods and other methods for assessing environmental condition;</li> <li>• foreign languages in the extent required for communication related to the specific specialties and professional terminology;</li> <li>• skills to use instruments and apparatus for determining environmental conditions, methods and standards for determining contaminants;</li> <li>• knowledge and competencies for continuing studies in Master's studies.</li> </ul>
<b>19. Name of diploma or academic degree(s) upon graduation</b>	<p>Diploma of professional higher education Environmental protection specialist Environmental specialist</p>
<b>20. Documents issued upon graduation</b>	<p>Diploma of professional higher education, Transcript of records, Diploma Supplement in English</p>
<b>21. Short description of the Curriculum structure</b>	<p>The curriculum comprises the following modules:</p> <p><b>Main subject</b></p> <ul style="list-style-type: none"> <li>- Research methodology and methods (16 ECTS)</li> <li>- Natural sciences (40 ECTS)</li> <li>- Fundamentals of Environmental Science and Techno-ecology (17.5 ECTS)</li> <li>- Environmental management (21.5 ECTS)</li> <li>- Elective subjects Block of specialty-related elective subjects (59 ECTS), select 12 ECTS</li> <li>- Practical training and course paper (31 ECTS)</li> </ul> <p><b>Secondary subject</b></p> <ul style="list-style-type: none"> <li>- General subjects (20 ECTS)</li> <li>- Language study (6 ECTS)</li> </ul> <p><b>Optional subjects (6 ECTS)</b></p> <p><b>Graduation thesis (10 ECTS)</b></p>
<b>22. Options for completing the Curriculum</b>	<p>-----</p>
<b>23. Graduation requirements</b>	<p>For graduation, the student has to complete the programme in the given work, incl. defend the graduation thesis that comprises an applied research work on the topic and in the extent approved by the faculty.</p>
<b>24. Additional information</b>	<p>EuroAcademy, Faculty of Environmental Protection Dean Jüri Martin, DSc Phone 611 5804 E-mail: <a href="mailto:jmartin@euroakadeemia.ee">jmartin@euroakadeemia.ee</a> ; <a href="http://www.euroakadeemia.ee">www.euroakadeemia.ee</a></p>

## CURRICULUM MODULES, THEIR GOALS AND STUDY OUTCOMES

<b>Name of Module: Research methodology and methods</b>		<b>Volume: 16.0 ECTS</b>
<b>Goals</b>	To provide basics and general knowledge on the research methodology and methods, most widely used statistical methods for data processing, to provide basic knowledge of the geographical information systems.	

<b>Study outcomes</b>	Students obtain knowledge in the methodological basis of research, competencies in the field of most widely used statistical methods for data processing, skills required for using ArcGis-9 applications for the analysis of spatial data and GPS-devices, skills for using literature.	
<b>Assessment of module:</b> based on tests and pass-fail examinations according to subjects.		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
GPEN6090	Fundamentals of Research	3.0
GPEN6050	Methods of Statistics	3.0
EPEN1010	ORD – 6 software for analysing ecological data	2.0
EPEN1020	Geographical information systems	4.0
EPEN1030	Methods of environmental research	4.0

Principles of selection: compulsory module

<b>Name of module: Natural sciences</b>		<b>Volume: 40.0 ECTS</b>
<b>Goals</b>	To provide basic knowledge in the major environmental components on the basis of natural systems.	
<b>Study outcomes</b>	Basic knowledge in geography, general physics, general and environmental chemistry, limnology and hydrology, meteorology and climatology, geology, general biology, biological diversity.	
<b>Assessment of module</b> based on tests, graded and pass-fail examinations according to subjects.		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
EPEN1040	History of natural sciences and nature protection in Estonia	3.0
EPEN1050	General Biology	4.0
EPEN1060	Geography	3.0
EPEN1070	General and environmental physics	4.0
EPEN1080	General and environmental chemistry	5.0
EPEN1090	Limnology and hydrology	5.0
EPEN1100	Meteorology and climatology	4.0
EPEN1110	Estonian geology and mineral resources	4.0
EPEN1120	Plant diversity	4.0

Principles of selection: compulsory module

<b>Name of module: Ecology and basics of environmental science</b>		<b>Volume: 17.5 ECTS</b>
<b>Goals</b>	To provide basic knowledge in systematic approach to the functioning of nature, substance and energy cycles, ecology as one of the basic sciences of environmental protection, to explain the essence and laws governing different ecosystems, the essence of human impact, anthropogenic processes and possibilities to mitigate harmful impact on nature.	
<b>Study outcomes</b>	An understanding of systematic approach and of the functioning of the nature as a whole, ecological bases of environmental protection, the nature of human impact and options to measure it, knowledge in the strategic environmental impact assessment, understanding of the essence of large systems on the basis of various binomes.	
<b>Assessment of module</b> based on tests, graded and pass-fail examinations according to subjects.		
<b>Subjects</b>		

Code	Name of subject	Volume ECTS
GPEN6100	Fundamentals of Ecology and Environmental Protection	3.0
EPEN1140	Population ecology (natural protection ecology)	3.0
EPEN1150	Fundamentals of Environmental Science and Technoecology	4.0
EPEN1160	Anthropogenic Ecosystems	2.5
EPEN1170	Marine ecology	2.5
EPEN1180	Forest ecology	2.5

Principles of selection: compulsory module

<b>Name of module: Environmental management</b>		<b>Volume: 21.5 ECTS</b>
<b>Goals</b>	To provide basic knowledge in the operation of environmental policy and environmental economics, principles of environmental law, sustainable use of natural resources, basics of environmental education.	
<b>Study outcomes</b>	Knowledge in the international socioeconomic essence, structure, institutions and application of environmental protection.	
<b>Assessment of module</b> based on tests, graded and pass-fail examinations according to subjects.		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
GPEN6180	Ecological security of the European Union	3.0
EPEN1190	Environmental Law	3.5
EPEN1200	Fundamentals of Environmental Economics	4.0
EPEN1210	Environmental Management and Nature Protection, EIA and SEA Methods	6.0
EPEN1220	Environmental Damage: Assessment and Treatment	3.0
EPEN1230	Seminars on Environmental Policy and Development	2.0

Principles of selection: compulsory module

<b>Name of module: Elective subjects</b>		<b>Volume: 59.0 ECTS (select at least 12.0 ECTS)</b>
<b>Goals</b>	To provide additional information for the line of research chosen by the student for the preparation of course paper and graduation thesis	
<b>Study outcomes</b>	In compliance with the topics selected	
<b>Assessment of module</b> based on tests, graded and pass-fail examinations according to subjects.		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
<b>Natural sciences</b>		
EPEN3010	Geophysics and dynamic geology	3.0
EPEN3020	Wetlands Ecology	3.0
EPEN3030	Climate change	3.0
<b>Environmental management</b>		
EPEN3040	Protection of the Baltic Sea	3.0
EPEN3050	Forestry	3.0
EPEN3060	Bio-indication	3.0
BPEN3090	Occupational safety and Occupational health	3.0

EPEN3080	Real right in environmental protection	3.0
EPEN3090	Environmental action plan. Strategy of the environmental education	2.0
<b>General subjects</b>		
GPEN6120	Psychology	3.0
GPEN6140	Sociology	3.0
GPEN6130	Cultural Studies	3.0
RPEN1040	International organisations	3.0
GPEN6160	Basics of management	3.0
GPEN6210	Project management	3.0
BPEN1210	Labour law	3.0
GPEN6170	Protection of intellectual property	3.0
BPEN1090	Personnel management	3.0
<b>Foreign language 2 (select one language)</b>		
K001	Estonian	6.0
K002	Russian	6.0
K051-K052	French (A1)	6.0
K061-K062	Italian (A1)	6.0
K071-K072	German (A1)	6.0
K081-K082	Spanish (A1)	6.0

Principles of selection: 59.0 ECTC, select minimum 12.0 ECTC in compliance with the subject of the research work.

<b>Name of module: Practical training and course paper</b>		<b>Volume: 31.0 ECTS</b>
<b>Goals</b>	To provide competencies for practical activities for establishing various environmental issues and use of respective devices and instruments and application of methodologies.	
<b>Study outcomes</b>	Ability to describe the condition of the environment, incl. the health of forest ecosystems; to conduct measurements in order to establish the quality of marine and freshwater quality, to use devices aimed at establishing the ambient air quality, apply methods of bio-indication for the assessment of various components of the environment, to apply methods of assessment of environmental impact. <b>Course paper</b> is a completed report on the subject of environmental research selected.	
<b>Assessment of module</b> defence of reports on practical tasks conducted, pass-fail examination according to subjects.		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
EPEN4050	<b>Course paper</b>	<b>4.0</b>
	<b>Field practice, incl.:</b>	<b>10.0</b>
EPEN4011	Practical training in forestry	2.0
EPEN4012	Practical marine training	2.5
EPEN4013	Practical training in bio-indication	1.5
EPEN4014	Practical training in hydrology	2.0
EPEN4015	Regional environmental management (practical training)	2.0
	<b>Laboratory training, incl.:</b>	<b>6.0</b>

EPEN4021	Practical training on water analysis	
EPEN4022	Practical training on air pollution	2.0
EPEN4023	Practical training on GPS	0.5
EPEN4024	Processing and analysis of field data, preparation of reports	1.5
EPEN4030	<b>Practical introduction</b>	<b>5.0</b>
EPEN4040	<b>Practical training in the specialty</b>	<b>6.0</b>

Principles of selection: compulsory module

<b>Name of module: General subjects</b>		<b>Volume: 20.0 ECTS</b>
<b>Goals</b>	To shape scientific world outlook and academic approach to the various phenomena of the society in the students.	
<b>Study outcomes</b>	Acquiring scientific world outlook, understanding the operation of the legal and economic mechanisms of the European Union.	
<b>Assessment of module</b> based on the general assessment system according to subjects		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
GPEN6010	Philosophy	3.0
GPEN6020	Law Fundamentals	3.0
GPEN6030	Innovatics	3.0
GPEN6110	EU Fundamentals and Institutions	3.0
GPEN6060	Computer studies	3.0
GPEN6070	Fundamentals of Economics	3.0
GPEN6080	Office Work Management	2.0

Principles of selection: compulsory module

<b>Name of module: Language studies</b>		<b>Volume 6.0 ECTS</b>
<b>Goals</b>	To acquire the foreign language on the level providing the ability to understand the professional texts and communicate on the professional level	
<b>Study outcomes</b>	To acquire the terminology pertaining to the specialty in the areas of ecology and environmental protection.	
<b>Assessment of module</b> based on the general assessment system according to subjects		
<b>Subjects</b>		
Code	Name of subject	Volume ECTS
K025-K026	Professional terminology of environmental protection in English	6.0

Principles of selection: It is obligatory to complete the course of specialty-related English in the extent of 6 ECTS. Other languages may be learned as elective or optional subjects.

<b>Optional subjects</b>		<b>Volume at least 6.0 ECTS</b>
<b>Goals</b>	To allow students to supplement and develop the prerequisites established by this curriculum in accordance with the student's interests and the objectives of the student's graduation paper or the prospective professional work.	
<b>Study outcomes</b>	Knowledge and competencies according to the selected subjects.	
<b>Assessment</b>	Based on the general assessment system according to subjects	

Principles of selection: pursuant to the topics of the research work: from other curricula of EuroAcademy, curricula of other Estonian or foreign establishments of higher education.

<b>Graduation thesis EPEN7000</b>		<b>Volume: 10.0 ECTS</b>
<b>Goals</b>	To acquire experience in research work, collection and processing of scientific information and presenting the results	
<b>Study outcomes</b>	The graduation paper forms an entire and complete research work, conducted independently, complying with the requirements for a research work, and respective traditions.	
<b>EPEN7000</b>	Graduation thesis	10.0
<b>Assessment</b>	Grade given at the defence A, B, C, D, E according to the established criteria	

Principles of selection: compulsory module

Faculty of Environmental Protection, Dean J. Martin