

Main subjects

Specialization subjects



**MS Environmental Engineering  
Waste management specialisation**

sem.	course code	course	Institute	ECTS	lect.	pract.	assign
1	AKKEM6010M	Analytical chemistry	Institute of Chemistry	4	2	2	E
1	MFFTT710008	Environmental geology	Institute of Mineralogy and Geology	4	2	1	E
1	MFEET710005	Basics of environmental processing	Institute of Raw Material Preparation and Environmental Processing	2	1	1	P
1	MFKHT710009	Ecology and nature protection	Institute of Environmental Management	3	1	2	P
1	MFKFT710011	Soil and water chemistry	Institute of Geography and Geoinformatics	4	2	2	E
1	GEMAK713M	Computer science for engineers	Institute of Mathematics	2	0	2	P
1	GEMAK712M	Numerical methods and optimization	Institute of Mathematics	2	1	1	E
1	MFEET730016	Chemical technologies in environmental protection	Institute of Raw Material Preparation and Environmental Processing	2	1	1	P
1	MFETT710010	Basics of waste management	Institute of Raw Material Preparation and Environmental Processing	3	2	1	E
1	MFEET710009	Handling of processing and biodegradable wastes	Institute of Raw Material Preparation and Environmental Processing	3	2	1	E
				<b>29</b>			
2	AKKEM6008M	Applied physical chemistry	Institute of Chemistry	3	2	1	E
2	GTERG204MKMA	Environmental economics	Institute of World and Regional Economics	2	2	0	E
2	MFKHT720040	Waste disposal, landfill operation and reclamation	Institute of Environmental Management	4	2	1	E
2	MFGFT720018	Environmental and engineering geophysics	Institute of Geophysics and Geoinformatics	4	2	2	E
2	MFKHT720023	Water quality protection	Institute of Environmental Management	3	1	1	E
2	MFEET720015	Mechanical, - and biological treatment of municipal solid waste	Institute of Raw Material Preparation and Environmental Processing	4	1	2	E
2	MFEET720016	Sampling and qualification of waste	Institute of Raw Material Preparation and Environmental Processing	2	1	1	P
2	MFEET720017	Treatment and processing of construction, industrial- and glass	Institute of Raw Material Preparation and Environmental Processing	3	1	1	E
2	MFEET720018	Design fundamentals of waste preparation technological processes	Institute of Raw Material Preparation and Environmental Processing	5	2	2	E
				<b>30</b>			
3	AJAMU04MF1N	Environmental and waste management law	Institute of Civil Sciences	2	2	0	E
3	MFKHT730013	Methods of environmental assessment	Institute of Environmental Management	2	0	2	P
3	GTVVE7002MA	Quality management	Institute of Management Science	2	2	0	E
3	MAKETT730018	Waste incineration and air quality protection	Institute of Energy and Quality	4	2	1	E
3	MFEET730001A	Water and waste water treatment	Institute of Raw Material Preparation and Environmental Processing	2	1	1	E
3	MFEET730018	Recycling of metallic and rubber wastes	Institute of Raw Material Preparation and Environmental Processing	3	2	3	P
3	MFEET730019	Recycling of plastic and paper wastes	Institute of Raw Material Preparation and Environmental Processing	3	2	3	P
3	MFEET730020	Waste processing machines and their operation	Institute of Raw Material Preparation and Environmental Processing	5	2	5	E

3	MFEET730045	Thesis work 1	Institute of Raw Material Preparation and Environmental Processing	6	0	0	R
3		<i>Elective course 1</i>		3			
				<b>32</b>			
4	MFKHT740025	Occupational health and safety	Institute of Environmental Management	2	2	0	E
4	MFKHT740035	Thesis work 2	Institute of Environmental Management	24	0	0	R
4		<i>Elective course 2</i>		3			
				<b>29</b>			

<b>Required number of credits</b>	120
<b>Number of semesters</b>	4
<b>Field practice</b>	4 weeks (160 working hours)
<b>Leader of the specialisation</b>	Institute of Raw Material Preparation and Environmental Processing
<b>Subjects of the final examination</b>	<b>Waste management, Waste incineration</b> <b>Environmental processing: Process engineering, Design of waste processing technologies</b>

<b>The overall result of the final examination (ZV)</b>	$ZV = ((A1 + A2) / 2 + D) / 2$ <p style="text-align: center;">where</p> <p style="text-align: center;">D = the result of the thesis defense</p> <p style="text-align: center;">A1 = the result of oral examination (<i>Waste management, Waste incineration</i>)</p> <p style="text-align: center;">A2 = the result of oral examination (<i>Environmental processing: Process engineering, Design of waste processing technologies</i>)</p>
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Specialization subjects



MS Environmental Engineering Remediation and environmental geotechnics specialisation							
sem.	course code	course	Institute	ECTS	lect.	pract.	assign
1	AKKEM6010M	Analytical chemistry	Institute of Chemistry	4	2	2	E
1	MFFTT710008	Environmental geology	Institute of Mineralogy and Geology	4	2	1	E
1	MFEET710005	Basics of environmental processing	Institute of Raw Material Preparation and Environmental Processing	2	1	1	P
1	MFKHT710009	Ecology and nature protection	Institute of Environmental Management	3	1	2	P
1	MFKFT710011	Soil and water chemistry	Institute of Geography and Geoinformatics	4	2	2	E
1	GEMAK713M	Computer science for engineers	Institute of Mathematics	2	0	2	P
1	GEMAK712M	Numerical methods and optimization	Institute of Mathematics	2	1	1	E
1	MFEET730016	Chemical technologies in environmental protection	Institute of Raw Material Preparation and Environmental Processing	2	1	1	P
1	MFETT710010	Basics of waste management	Institute of Raw Material Preparation and Environmental Processing	3	2	1	E
1	MFKHT710017	Hydrogeology	Institute of Environmental Management	5	2	2	E
				<b>31</b>			
2	AKKEM6008M	Applied physical chemistry	Institute of Chemistry	3	2	1	E
2	GTERG204MKMA	Environmental economics	Institute of World and Regional Economics	2	2	0	E
2	MFKHT720040	Waste disposal, landfill operation and reclamation	Institute of Environmental Management	4	2	1	E
2	MFGFT720018	Environmental and engineering geophysics	Institute of Geophysics and Geoinformatics	4	2	2	E
2	MFKHT720023	Water quality protection	Institute of Environmental Management	3	1	1	E
2	MFKHT7200061	Groundwater flow and contaminant transport modelling	Institute of Environmental Management	5	2	2	E
2	MFKHT720025	Geotechnical engineering	Institute of Environmental Management	4	2	1	E
2	MFKHT720030	Contaminated site remediation	Institute of Environmental Management	4	2	1	E
				<b>29</b>			
3	AJAMU04MF1N	Environmental and waste management law	Institute of Civil Sciences	2	2	0	E
3	MFKHT730013	Methods of environmental assessment	Institute of Environmental Management	2	0	2	P
3	GTVVE7002MA	Quality management	Institute of Management Science	2	2	0	E
3	MAKETT730018	Waste incineration and air quality protection	Institute of Energy and Quality	4	2	1	E
3	MFEET730001A	Water and waste water treatment	Institute of Raw Material Preparation and Environmental Processing	2	1	1	E
3	MFKHT730045	Thesis work 1	Institute of Environmental Management	6	0	0	R
3	MFKHT730030	Environmental geotechnics	Institute of Environmental Management	2	1	1	E
3	MFFAT730009	Environmental geochemistry	Institute of Mineralogy and Geology	2	2	0	E
3	MFKHT730026	Environmental risk assessment and remediation	Institute of Environmental Management	3	2	0	E
3	MFKFT730012	Geographic information system	Institute of Geography and Geoinformatics	3	2	1	E
3		<i>Elective course</i>		3			

Main subjects

Specialization subjects



## MS Environmental Engineering

## Remediation and environmental geotechnics specialisation

sem.	course code	course	Institute	ECTS	lect.	pract.	assign
				31			
4	MFKHT740025	Occupational health and safety	Institute of Environmental Management	2	2	0	E
4	MFKHT740035	Thesis work 2	Institute of Environmental Management	24	0	0	R
4		<i>Elective course</i>		3			
				29			

Required number of credits	120
Number of semesters	4
Field practice	4 weeks (160 working hours)
Leader of the specialisation	Institute of Environmental Management
Subjects of the final examination	Waste management, Waste incineration Remediation of contaminated sites (Water chemistry, Soil chemistry, Remediation, Risk assessment)

The overall result of the final examination (ZV)	$ZV = \frac{(A1 + A2) / 2 + D}{2}$ <p>where D = the result of the thesis defense A1 = the result of oral examination (<i>Waste management, Waste incineration</i>) A2 = the result of oral examination (<i>Remediation of contaminated sites</i>)</p>
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