

Study programme: **Land and Environmental Engineering**

Type of study: **double degree master programme**

Study form: **full time form of study**

Guarantor: **prof. RNDr. Dana Komíneková, Ph.D.**

St. year: 1	Code	Compulsory subjects	1st Semester winter						2nd Semester summer						Guarantee
			Le	Pr	FE	ECTS	Cr	Ex	Le	Pr	FE	ECTS	Cr	Ex	
			2	2	-	6	cr	-							
		Aquatic Ecosystem Restoration	2	2	-	6	cr	-							Mgr. M. Bílý, Ph.D.
		Environmental Economics	2	1	-	5	cr	Ex							doc. Ing. M. Hájek, Ph.D.
		Landscape and Ecological Applications	2	2	1	6	cr	ex							Ing. M.Sc. L. Wimmerová, Ph.D.
		Landscape Architecture	2	2	2	6	cr	ex							doc. P. Kumble, Ph.D.
		Landscape Planning	2	1	1	6	cr	ex							doc. Ing. K. Janečková, Ph.D.
		Strategic Planning and Assessment	2	1	-	4	cr	ex							Ing. Z. Kekeň, Ph.D.
		Climate Change Adaptation							2	2	-	5	cr	Ex	prof. Ing. M. Hanel, Ph.D.
		Water Resources Protection							2	2	1	6	cr	ex	prof. RNDr. D. Komíneková, Ph.D.
		Workshop 1 - Global Environmental Issues *							1	0	-	2	cr	-	Ing. V. Zdražil, Ph.D.
		Optional subjects													
Σ			12	9	4	33	6	5	5	4	1	13	3	2	46

A student who completed the subject Workshop 1 - Global Environmental Issues in the bachelor's degree must enroll in an optional subject from the list of optional subjects to supplement the required number of credits.

Le = lecture

Pr = practical lecture

FE = field excursions (days)

ECTS = credits

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			Le	Pr	FE	ECTS	Cr	Ex	Le	Pr	FE	ECTS	Cr	Ex	
		Air Pollution	2	2	-	6	cr	ex							Mgr. M. Martíková, Ph.D.
		Applied Statistics for Ecologists	2	2	-	5	cr	ex							doc. Ing. K. Berchová, Ph.D.
		Bioeconomy	2	1	-	4	cr	ex							doc. Ing. M. Hájek, Ph.D.
		Drinking and Waste Water Treatment	2	2	1	5	cr	ex							prof. RNDr. D. Komíková
		Emerging Pollutants in the Environment	2	2	-	5	cr	ex							A. Sochacki, Ph.D.
		Environmental Hydrology	2	2	-	6	cr	ex							doc. Ing. P. Máca, Ph.D.
		Forest Ecology and Management	2	1	1	5	cr	ex							prof. Ing. M. Svoboda, Ph.D.
		GIS I	2	2	-	5	cr	ex							doc. Ing. V. Moudrý, Ph.D.
		Land Management	2	2	1	6	cr	ex							doc. Ing. K. Janečková, Ph.D.
		Landscape Planning Studio	2	2	-	3	cr	ex							doc. P. Kumble, Ph.D.
		Land Reclamation	2	1	-	5	cr	ex							Ing. M. Hendrychová, Ph.D.
		Physico-chemical Aspects of Processes in the Environment	2		-	4	cr	ex							doc. Mgr. M. Vach, Ph.D.
		Spatial Planning	2	2	-	6	cr	ex							doc. P. Kumble, Ph.D.
		Ecological Restoration and Ecology							2	1	-	5	cr	ex	Ing. M. Hendrychová, Ph.D.
		Ecosystems Conservation and Management							2	1	1	6	cr	ex	Ing. P. Zasadil, Ph.D.
		Global Change and Water Resources							2	1	-	5	cr	ex	Mgr. M. Martíková, Ph.D.
		Hydrological Modeling							2	2	-	5	cr	ex	doc. Ing. P. Máca, Ph.D.
		Hydrodynamics in Porous Media							2	2	-	6	cr	ex	doc. Ing. M. Kuráž, Ph.D.
		Landscape Ecology							2	2	-	5	cr	ex	doc. P. Kumble, Ph.D.
		Landscape Planning Studio Workshop										3	cr		doc. P. Kumble, Ph.D.
		Management of Invasive and Non-native Species							2	1	-	4	cr	ex	doc. Ing. K. Berchová, Ph.D.
		Nature Based Solutions							2	2	1	6	cr	ex	prof. RNDr. D. Komíková,
		Numerical Methods							2	2	-	6	cr	ex	doc. Ing. M. Kuráž, Ph.D.
		Radioecology							2	-	-	3	cr	ex	Ing. J. Hůlka, CSc. (externista SURO)
		Valuation of Natural Resources							2	1		5	cr	ex	doc. Ing. M. Hájek, Ph.D.

It is allowed to choose an optional subject if it was not completed in the bachelor's degree.

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St. year: 2		Code	Compulsory subjects	3rd Semester winter						4th Semester summer						Guarantee	
Le	Pr			FE	ECTS	Cr	Ex	Le	Pr	FE	ECTS	Cr	Ex				
				3	3	-	9	-	Ex								
			Environmental Hydraulics	3	3	-	9	-	Ex							Assoc. Prof. M.Sc. C. Gualtieri, Ph.D.	
			Plants for the Treatment of Aeriform Effluents	4	2	2	9	-	Ex							prof. A. Lancia, Ph.D.	
			Advanced Applied Engineering Mathematics							3	3	-	9	Cr	Ex	M.Sc. MR. Mattei, Ph.D.	
			Diploma Thesis Assignment							-	-	-	5	Cr	-	Supervisor	
			Energy Management							4	2	-	9	-	Ex	Assoc. Prof. Eng. F. Calise, Ph.D.	
			Safety In Chemical Processes							2	2	-	9	-	Ex	prof. R. Andreozzi Ph.D.	
			Waste to Energy and Circular Economy							4	2	2	9	Cr	Ex	prof. M.Sc. M. Fabbricino, Ph.D.	
Σ				7	5	2	18	0	2	13	9	2	41	3	4		59

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St. year: 2		Optional subjects II	1st Semester winter						2nd Semester summer						Guarantee
Code			Le	Pr	FE	ECTS	Cr	Ex	Le	Pr	FE	ECTS	Cr	Ex	
	Geographic Information Systems		3	3		9	cr	ex							M.Sc. G. Carpentieri, Ph.D.
	Hydraulics for System Ecodesign		4	2	2	9	cr	ex							prof. M.Sc. A. Caravetta, Ph.D.
	River Hydraulics		4	3	1	9		ex							prof. M.Sc. C. Di Cristo, Ph.D.
	Technologies for a Sustainable Energetic		4	2		9		ex							Assoc. Prof. M.A. A. Erto, Ph.D.
	Wastewater Treatment Plants		4	2	2	9		ex							Assoc. Prof. M.Sc. G. Esposito, Ph.D.
	Applied Environmental Geology								4	2		9	cr	ex	prof. M.Sc. D. Ducci, Ph.D.
	Advanced Technologies for Hydrological Monitoring								3	1	1	6		ex	prof. Eng. S. Manfreda, Ph.D.
	Built Environment								3	2		6	cr	ex	M.Sc. L. Diana, Ph.D.
	Circular Bioeconomy for Ecological Transition								3	1		6	cr	ex	Assoc. Prof. M.Sc. G. Esposito, Ph.D. / M.Sc.
	Coastal Engineering								5	1		9		ex	Eng. M. Buccino, Ph.D.
	Environmental Assessment and Authorisations								4	2		9		ex	prof. M.Sc. A. Cesaro, Ph.D.
	Environmental Monitoring and Air Quality Management								3	1	1	9	cr	ex	Assoc. Prof. Eng. F. Murena, Ph.D.
	Geotechnical Risks in Urban Areas								3	1		6		ex	Assoc. Prof. M.Sc. A. D'Onofrio, Ph.D.
	Laboratory for Road Safety								1	3		6		ex	Eng. F. Galante, Ph.D.
	Mitigation Of Climate Change								5	2		9	cr	ex	M.Sc. S. Papirio, Ph.D.
	Resilience of Geotechnical Systems								3	1		6		ex	Eng. F. De Silva, Ph.D.
	Smart Urban Design								1	3		6	cr	ex	Assoc. Prof. M.Arch. L. Stendardo, Ph.D.
	Smart, Resilient and Sustainable City								3	3		6	cr	ex	Assoc. Prof. M.Sc. R. La Rocca, Ph.D. / M.Sc. F.
	Transport Planning and Appraisal								4	2	2	9	cr	ex	Assoc. Prof. M.Sc. F. Pagliara, Ph.D.

St. year: 3		Compulsory subjects	5th Semester winter												Guarantee
Code			Le	Pr	FE	ECTS	Cr	Ex							
	Thesis Preparation		-	-	-	15	cr	-							Supervisor
	Optional subjects														
Σ			0	0	0	15	0	0							15