

UNIVERSITATEA TEHNICĂ DE CONSTRUCȚII BUCUREȘTI

FACULTATEA DE INGINERIE ÎN LIMBI STRĂINE

DOMENIUL: INGINERIE CIVILĂ ȘI INSTALAȚII

*SPECIALIZAREA: AQUATIC ENVIRONMENT
ENGINEERING AND SCIENCE*

TIP PROGRAM: Master

COD : U02.07.ICV.IZ.M32

Study Plan

1st Semester

No	Name of the course	Code of the course	C	S	L	P	Pr	IS	TH	CR	Exam Form
	Compulsory Courses										
1	Hydrology and Geomorphology	1.DD.OB.01	2	2		1		5	10	8	E
2	Geology and Hydrogeology	1.DD.OB.02	2	2		1		5	10	8	E
3	Chemical / physical and biological processes for Water Resources	1.DD.OB.03	2		3			3	8	7	E
	Ethics and Academic Integrity		1					1	2	1	C
	Optional Courses										
4.a	Data acquisition in Water Resources Engineering	1.DS.OP.01	2	2				6	10	5	C
4.b	Applied Mathematics and Statistics in Water Resources	1.DS.OP.02									
	Total number of hours per week (13 weeks)		9	6	3	2		20	40	29	3E+1C
5	Practical applications – 1 week stage	1.DS.OB.04					30			1	C
	Total number of hours per semester		104	78	52	26	30	260	550	30	3E+2C
	Facultative Courses										
6	English for water resources	1.DC.FC. 01	2	2				4	8	5	C

2nd Semester

No	Name of the course	Code of the course	C	S	L	P		IS	TH	CR	Exam Form
	Compulsory Courses										
1	GIS for Water Resources	2.DD.OB.05	1		2	2		5	9	6	E
2	Risk and Vulnerability in water management	2.DD.OB.06	2	1				3	6	4	C
3	Water Resources Management and Legislation	2.DS..OB.07	2	1				3	6	4	C
	Optional Courses										
4.a	Advanced Hydrology - Fluvial Hydraulics	2.DS.OP.03	2		2	1		5	10	7	E
4.b	Applied Hydrogeology - Water abstraction	2.DS.OP.04									
5.a	Coastal Engineering	2.DS.OP.05	1		2	1		5	9	6	E
5.b	Groundwater Modeling	2.DS.OP.06									
	Total number of hours per week (12 weeks)		8	2	6	4		20	40	27	3E+2C
6	Practical applications – 2 weeks stage	2.DS.OB.08					60			3	C
	Total number of hours per semester		96	24	72	48	60	260	540	30	3E+3C
	Facultative Courses										
7	Watershed Modelling	2.DC.FC. 02	2		2	1		5	10	8	E

3rd Semester

No	Name of the course	Code of the course	C	S	L	P	Pr	IS	TH	CR	Exam Form
Compulsory Courses											
1	Remote Sensing in water engineering	3.DD.OB.09	2		2			4	8	6	E
2	Aquatic Ecosystems / Aquatic Ecology	3.DS.OB.10	2	1				3	6	5	E
3	Urban Water	3.DS.OB.11	2	1				3	6	3	C
Optional Courses											
4.a	Advanced Hydrology - Urban Hydrology	3.DS.OP.07	2		2	1		5	10	8	E
4.b	Applied Hydrogeology - Urban Hydrogeology	3.DS.OP.08									
5.a	Groundwater Contamination and Remediation	3.DS.OP.09	2		2	1		5	10	8	E
5.b	Surface water quality and remediation	3.DS.OP.10									
Total number of hours per week (14 weeks)			10	2	6	2		20	40	30	4E+1C
Total number of hours per semester			140	28	84	28		280	560	30	4E+1C
Facultative Courses											
6	Numerical Modeling in water engineering	3.DC.FC. 03	2	3				5	10	8	E

4th Semester

No	Name of the course	Code of the course	C	S	L	P	IS	Pr	TH	CR	Exam Form
Compulsory Courses											
1	Design and research activities: (1). Hydrological processes modeling; (2). Aquatic environment remediation (3). Integrated assessment for urban waters (4). Surface and groundwater monitoring and assessment.	4.DS.OB.12				4	16		20	15	C
2	Practical stage for dissertation preparation	4.DS.OB.13					15	5	20	15	C
Total number of hours per week (14 weeks)						4	31	5	40	30	2C
Total number of hours per semester						56	434	70	560	30	2C
Dissertation defense										10	

F.I.L.S. Dean,
S.l. dr. ing. Daniela ȚĂPUȘI