Semester 1 Master: Geotechnics

Teaching unit	Materials Titled	Created said	Coefficient	Hourly volume weekly Tutorial course		TP	Volume Hourly Biannual (15 weeks)	Work Complementary in consultation (15 weeks)	Assessment method Control Continuous	Exam
Fundamental EU Code: UEF 1.1.1 Credits: 8 Coefficients: 4	Mechanics of continuous media	4 2		1h30	1h30		45h00	55h00	40%	60%
	Advanced Soil Mechanics	4 2		1h30	1h30		45h00	55h00	40%	60%
Fundamental EU Code: UEF 1.1.2 Credits: 10 Coefficients: 5	Slopes and supports	4 2		1h30	1h30		45h00	55h00	40%	60%
	Foundations	4 2		1h30	1h30		45h00	55h00	40%	60%
	Applied geophysics	2	1	1h30			10:30 p.m.	27:30		100%
Methodological EU Code: UEM 1.1 Credits: 9 Coefficients: 5	Programming supplement	3	2	1h30		1 hour	37h300	37h30	40%	60%
	Experimental methods	2	1	1h30			10:30 p.m.	27:30		100%
	Geotechnical tests and Site recognition1	4 2		1h30		1h30	45h00	55h00	40%	60%
EU Discovery Code: UED 1.1 Credits: 2 Coefficients: 2	*subject of choice*	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Subject of your choice	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 1.1 Credits: 1 Coefficients: 1	Technical English and Terminology	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 1		**30 17**	**4:30 p**	**m. 6:00 a.m.**	**2:30 a.m.**		**375 hours**	**375 hours**		

Semester 2 Master: Geotechnics

Teaching unit	Materials Titled	Created said		Hourly volume weekly Tutorial course		TP	Volume Hourly Biannual (15 weeks)	Work Complementary in consultation (15 weeks)	Assessment method Control Continuous	Exam
Fundamental EU Code: UEF 1.2.1 Credits: 8 Coefficients: 4	Mechanics of deformable solids	4	2	1h30	1h30		45h00	55h00	40%	60%
	Soil dynamics	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental EU Code: UEF 1.2.2 Credits: 10 Coefficients: 5	Soil rheology	4	2	1h30	1h30		45h00	55h00	40%	60%
	Geostatistics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Earth dams	2	1	1h30			10:30 p.m.	27:30		100%
Methodological EU Code: UEM 1.2 Credits: 9 Coefficients: 5	Finite element method	5	3	1h30	1h00 1h30		60h00	65h00	40%	60%
	Geotechnical tests and Site reconnaissance 2	4	2	1h30		1h30	45h00	55h00	40%	60%
EU Discovery Code: UED 1.2 Credits: 2 Coefficients: 2	*Subject of your choice*	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Subject of your choice	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 1.2 Credits: 1 Coefficients: 1	Compliance with standards and rules of ethics and integrity	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 2		**30 17 3:00 p.m.**			**7:00 a.m.**	**3:00 a.m.**	**375 hours**	**375 hours**		

Semester 3 Master: Geotechnics

Teaching unit	Materials	Credits	Coefficient	Hourly volume weekly			Volume Hourly Biannual (15 weeks)	Work Complementary in consultation (15 weeks)	Assessment method	
	Titled			Course	TD	TP			Control Continuous	Exam
Fundamental EU Code: UEF 2.1.1 Credits: 8 Coefficients: 4	Dynamics of geotechnical structures	4	2	1h30	1h30		45h00	55h00	40%	60%
	Failure calculation and limit analysis	4	2	1h30	1h30		45h00	55h00	40%	60%
Fundamental EU Code: UEF 2.1.2 Credits: 10 Coefficients: 5	Rock mechanics	4	2	1h30	1h30		45h00	55h00	40%	60%
	Tunnels and underground structures	4	2	1h30	1h30		45h00	55h00	40%	60%
	Road geotechnics	2	1	1h30			10:30 p.m.	27:30		100%
Methodological EU Code: UEM 2.1 Credits: 9 Coefficients: 5	Soil improvement	4	2	1h30		1h30	45h00	55h00	40%	60%
	Modeling of geotechnical structures	2	1			1h30	10:30 p.m.	27:30	100%	
	Information Systems Geographical	3	2	1h30		1 hour	37h30	37h30	40%	100%
EU Discovery Code: UED 2.1 Credits: 2 Coefficients: 2	*Subject of your choice*	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
	Subject of your choice	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Transversal EU Code: UET 2.1 Credits: 1 Coefficients: 1	Documentary research and memory design	1	1	1h30			10:30 p.m.	2:30 a.m.		100%
Total semester 3		**30**	**17**	**3:00 p.m.**	**6:00 a.m.**	**4:00 a.m.**	**375 p.m.**	**375 hours**		

Discovery EU subject basket *(S1, S2, S3):* *1.*

Hydrogeology 2.

Geotechnical hazards and risks 3. Finite

difference method 4. Discrete element
method 5. Construction site organization 6.

Pathology of geotechnical structures

7. Contracts code 8. Geotechnical standards 9.
Construction law 10. PGC

of geotechnical structures 11.
Concepts on civil and industrial

constructions 12. Concepts on roads and civil
engineering structures 13. Concepts on hydrotechnical structures

Semester 4

Internship in a company or in a research laboratory leading to a dissertation and a defense (this table is given for information purposes only).

	VHS	Coefficient	Credits
Personal Work	550	09	18
Internship in a company or laboratory	100	04	06
Seminars	50	02	03
Other (Supervision)	50	02	03
Total Semester 4	750	17	30

This table is given for information purposes only.

Evaluation of the End of Master's Cycle Project

- Scientific value (Jury assessment) /6
- Writing the Dissertation (Jury's Assessment) /4
- Presentation and answer to questions (Jury assessment) /4
- Assessment of the supervisor /3
- Presentation of the internship report (Jury assessment) /3