

Year	Sem	Subject name	Weekly number of hours				ECTS
			Lecture	Tutorial	Lab work	Project	
Mandatory Subjects							
1	1	Secondary Raw Materials and Circular Economy	2	2	0	0	5
1	1	Compositional Analysis & Secondary Raw Materials Identification	2	0	2	0	5
1	1	Kinetic and thermodynamic aspects of SRMs recovery	2	0	1	0	5
1	1	Phase diagrams and phase equilibria in solid state	1	0	2	0	5
1	1	Research Practice 1	0	0	0	12	10
1	2	Recovery of metals from industrial waste/end-of-life products	2	0	1	0	5
1	2	Biotechnologies for minerals and critical raw materials recovery	1	0	0	1	4
1	2	Electrochemical recovery (ER) technologies of metals vs conventional processes	2	0	1	0	4
1	2	Advanced technologies for polymers recycling and reusing	2	0	2	0	5
1	2	Research Practice 2	0	0	0	12	10
Elective Subjects							
1	2	Conversion of biomass	1	0	1	0	2
1	2	Innovative approaches for plastics reused in electronics and construction	1	0	1	0	2
Mandatory Subjects							
2	1	Ethics and Academic integrity	1	0	0	0	2
2	1	Secondary raw materials: Process flow diagrams and case studies	0	0	0	1	2
2	1	Conversion of food waste to high-value chemicals	1	0	1	0	3
2	1	Eco-friendly hybrid strategies	2	0	2	0	4
2	1	Economic and energy costs of the recovery of secondary raw materials	1	0	0	1	3

2	1	Research Practice 3	0	0	0	12	10
Elective Subjects							
2	1	Recovery of nanomaterials	1	0	1	0	3
2	1	Supercritical extraction technology	1	0	1	0	3
2	1	Waste valorization in constructions materials	1	0	1	0	3
2	1	Glass and ceramics recycling	1	0	1	0	3
Mandatory Subjects							
2	2	Scientific research, research practice and prepare dissertation	0	0	0	26	30