Transilvania University of Braşov, Romania

Study program: MSc European Forestry

Faculty: Silviculture and Forest Engineering

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Forest Management and Chain of Custody Certification	FMC	6	1	-	2	-

Course description (Syllabus): the course covers the introduction to forest management and chain of custody certification, forest certification schemes, the main certification schemes in Europe, chain of custody certification and product tracking, practical aspects of certification, impact, costs and benefits of certification, evolution of forest management and chain of custody in Romania and worldwide, forest certification in the wider context of sustainable forest management. Laboratory activities consist of case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Forest Based Bio-economy (O1)	FBB	5	1	-	2	-

Course description (Syllabus): the course covers the origin of bioeconomy and forest-based bioeconomy perspective, review of economics of the forest sector, forest resources from bioeconomic perspective, competing demand in forest-based bioeconomy, unpriced forest values, bioeconomy-based strategies of business, policy and governance issues in forest-based bioeconomy. Laboratory consists of discussions and case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Management of Research Projects (O1)	MRP	5	1	-	2	-

Course description (Syllabus): the course covers the generalities regarding the scientific research, research projects objectives and risks, resource identification, allocation and management, activities, implementation, quality management, financing. The laboratory consists of discussions and case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Decision-Support Systems in Forest Ecosystem Management (O2)	SSFM	5	1	-	1	-

Course description (Syllabus): the discipline covers the following topics: decision; decision-making process; systems analysis tools relevant to silvicultural decision-making and their use; decision-support systems and artificial intelligence; expert systems; the use of silvicultural decision-support systems/tools in forest ecosystem management. The practical activities consist of case studies and individual work.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Energy Procurement from Woody Biomass (O2)	WPWB	5	1	-	1	-

Course description (Syllabus): the discipline covers resources of energy wood, traditional & short rotation coppice silviculture of energy wood, supply chains for energy wood procurement, delivery systems & logistics, operational performance in establishment, harvesting & transport operations, economic & environmental performance, biofuels, woody biofuels and conversion technologies. The laboratory consists of case studies, individual work and field trips.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Strategy and Marketing of Forest Products	SMFP	4	1	-	1	-

Course description (Syllabus): the course covers an introduction, processes used for the elaboration of policies and strategies, legal determinants of forest policies and strategies, forest policies and strategies, supply and demand, price formation and markets, marketing techniques for wood and non-timber forest products. The laboratory consists of discussions and case studies.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Silviculture and Yield of Forest Ecosystems	SYFE	4	1	-	1	-

Course description (Syllabus): the discipline covers the following topics: forest (stand) dynamics, growth and yield; primary production, growth and harvestable yield; stand structures; growing space and competitive situation of individual trees; growth relationships and their biometric formulation; stand structure and yield (even-aged vs. uneven-aged stands); stand density control and yield; species composition and yield (pure vs. mixed stands). The practical activities consist of case-studies, individual work and field trips.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Life Cycle Assessment in Forestry (O3)	LCAF	6	1	-	2	-

Course description (Syllabus): the discipline covers an introduction to LCA, management of LCA projects, goal & scope definition, inventory analysis, impact assessment and interpretation. The laboratory includes case studies on how to use databases, design flows, analyze processes, use impact analysis methods and analyze & interpret results.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Business Process Management in Forestry (O3)	BPMF	6	1	-	2	-

Course description (Syllabus): the discipline covers an introduction to Business Process Management, basics of process modelling, mapping the supply chain, analyzing the supply chain, reengineering of supply chain. The laboratory includes individual & collective work to reengineer a supply chain based on mapping and critical analysis.

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Research Activity	RES	20	-	-	-	-

Course title	Code	No. of credits	Number of hours per week			
			course	seminar	laboratory	project
Elaboration of MSc Thesis	DIS	10	-	-	-	-