Matrix of Expected Learning Outcomes (ELOs) and Courses at the Master Program of Forestry

Code of Course	Course Name	Intended Learning Outcomes (ILO)								
		ELO1	ELO2	ELO3	ELO4	ELO5	ELO6	ELO7	ELO8	ELO9
190401802W005	Philosophy of Science	3	-	-	3	2	2	-	-	-
190401802W006	Research Methodology and Scientific Publication	3	-	-	3	2	-	-	-	-
190401802W007	Advance on Processing of Forest Product	-	3	3	-	-	2	1	-	-
190401802W008	Silviculture of Tropical Forest	-	3	3	-	-	2	1	-	-
190401802W009	Forest Resource Economics and Finance	-	3	3	-	-	2	1	-	-
190401802W010	Trends in Forest and Nature Conservation	-	3	3	-	-	2	1	-	-
Study interest in Forest Resources Conservation and Ecotourism										
190401802P011	Conservation, Environment and Forestry	3	-	-	-	2	2	-	2	3
190401802P012	Ecology of Specific Ecosystems	-	3	3	3	-	-	2	-	-
190401802P013	Wild Animals Management	-	-	-	-	2	2	-	3	3
Study interest in Tropical Silviculture										
190401802P020	Forest Protection in Tropical Rainforest	-	3	3	-	2	-	2	-	-
190401802P021	Formulation of Silvicultural System	3	-	-	-	-	2	3	3	3
190401802P022	Evaluation of Land Productivity and Suitability	-	-	-	2	2	3	-	2	3
Studi interest in Forest Management										
190401802P030	Measurement and Improvement Forest Stand Quality	3	-	-	-	-	2	3	-	3
190401802P031	On-site Forest Planning and Inventory	-	-	-	-	2	3	2	3	2
190401802P032	Low Emission Harvesting	-	-	-	2	2	-	-	3	3
Study interest in Forest Product Technology										

Code of Course	Course Name	Intended Learning Outcomes (ILO)								
		ELO1	ELO2	ELO3	ELO4	ELO5	ELO6	ELO7	ELO8	ELO9
190401802P040	Improvement of Wood Quality	-	-	-		-	3	3	2	3
190401802P041	Fiber Processing and Renewable Energy	3	-	-	2	2	-	-	3	3
190401802P042	Technology of Extractive	-	-	-	-	2	-	2	3	-
190401801W050	Research Proposal Qualification	2	2	2	2	-	-	-	-	-
190401801W051	Research Proposal Seminar	2	2	2	2	-	-	-	-	-
190401801W052	Research Result Seminar	3	3	3	3	3	-	3	-	-
190401801W053	Scientific Publication	3	3	3	3	3	-	3	-	-
190401801W054	Thesis Exam	3	3	3	3	3	-	3	3	3
ELECTIVE COURSES										
Study interest in Forest Resources Conservation and Ecotourism										
190401802P014	Integrated Watershed Management	-	-	-	2	-	3	3	-	3
190401802P015	Environmental Microclimatology	-	2	-	3	2	-	-	-	-
190401802P016	Computing and Programming Environment Databases	-	2	-	-	-	-	2	3	-
190401802P017	Conservation Engineering and Land Capability Evaluation	3	-	-	-	-	3	-	-	3
190401802P018	Tourism Target-area Plan and Management	-	-	-	-	2	2	2	3	-
190401802P019	Weather Modification Technology	-	2	3	-	-	-	-	2	-
Study interest in Tropical Silviculture										
190401802P023	Silviculture of Urban Forest	3	-	-	-	-	3	-	3	-
190401802P024	Advance on Agroforestry	3	-	-	-	-	-	2	-	3
190401802P025	Sylvofishery	-	-	-	3	-	-	3	-	2
190401802P026	Insect Biodiversity and The Utilization	-	2	-	3	2	-	-	-	-
190401802P027	Fertilization and Soil Fertility	-	2	3	-	-	-	2	3	-
190401802P028	Advanced on Climate Change	-	-	3	2	2	-	-	-	-
190401802P029	Advance on Biochar	-	2	-	-	-	-	-	2	3

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		ELO1	ELO2	ELO3	ELO4	ELO5	ELO6	ELO7	ELO8	ELO9
Studi interest in Forest Management										
190401802P033	Forest Spatial Analysis	3	2	-	-	-	-	3	-	-
190401802P034	Regional Landscape Analysis	-	-	2	3	2	-	3	-	-
190401802P035	Forest Sociology	-	-	3	-	-	3	-	-	3
190401802P036	Forest and Environmental Economics	3	2	-	3	-	-	-	-	-
190401802P037	Forest Policy	-	-	2	-	-	3	-	3	-
190401802P038	Social Forestry	-	-	-	-	2	3	-	-	3
190401802P039	Timber Lagaility and Verification System	-	-	-	-	-	2	-	3	2
Study interest in Forest Product Technology										
190401802P043	Technology of Wood-Based Panel	-	-	3	-	-	-	2	-	3
190401802P044	Eco-eficiency in Wood Industry	3	-	-	-	-	-	-	3	2
190401802P045	Bio-deterioration of Wood	-	2	-	3	-	-	2	-	-
190401802P046	Tree Care and Maintenance	2	2	-	-	3	2	2	-	-
190401802P047	Wood Drying and Preservation	-	2	-	2	2	-	3	-	-
190401802P048	Chemical Biomass Conversion	-	-	-	3	2	-	2	-	3
190401802P049	Technology of Exudate Utilization	-	-	-	2	3	-	3	-	-

Classification of the Modules Contibutions: 1 = Low, 2 = Medium, 3 = High

Description of Expected Learning Outcomes (ELO):

ELO1: Internalize scientific values, norms and ethics with responsible performance of work in the field of forestry expertise and the tropical forest environment

ELO2: Have knowledge, in-depth understanding and particular specialization in the field of forestry and tropical forest environments

ELO3: Able to identify, analyze and develop solutions to actual issues and problems in the forestry and tropical forest environment

ELO4: Able to apply logical, critical, systematic and innovative thinking in preparing research and work schemes in the field of forestry and the tropical forest environment

ELO5: Able to position scientific concepts and descriptions resulting from ideas into a research map developed through an inter- or multidisciplinary approach, and can disseminate and communicate them through various media and forums to a wider audience

ELO6: Able to lead, collaborate in a team and be responsible for achieving group work results as well as evaluating and supervising the completion of work under his/her responsibility

ELO7: Able to develop theories, models, techniques and methods that can be applied in the field of forestry and tropical forest environments

ELO8: Able to analyze and evaluate system performance, then make decisions and implement them with more innovative methods

ELO9: Able to recognize and assess the ecological, social and economic implications of the application and implementation of initiatives, approaches, methods and programs in the forestry sector and tropical forest environment