## Description of Intended Learning Outcomes (ILO) Master Program of Forestry (MPF) Regular Program

### **Knowledge and Understanding**

**ILO-1**: Applying scientific ethics, norms, and values of professionalism

#### **Engineering Analysis**

**ILO-2**: Mastering specialized knowledge, skills and techniques in the field of forestry and tropical environment and being able to develop innovative theories, models and methods in their field.

#### **Investigation**

**ILO-3**: Able to analyze current problems and issues, and assess the ecological, social, and economic impacts of implementing programs in the forestry and tropical environmental sectors.

#### **Engineering Design and Practice**

**ILO-4**: Develop research schemes based on inter or multidisciplinary approaches to tropical forestry and the environment, and communicate the results to the public.

#### **Social Competences**

**ILO-5**: Lead, work in a team, and be responsible for achieving group work results.

# Relationship between Intended Learning Outcomes (ILO) and Courses at the Master Program of Forestry (MPF) Regular Program

Code of Course	Course Name	I	Intended Learning Outcomes (ILO)					
		ILO1	ILO2	ILO3	ILO4	ILO5		
COMPULSORY CO	DURSES							
190401802W005	Philosophy of Science	3	-	3	2	2		
190401802W006	Research Methodology and Scientific Publication	3	2	1	3	-		
190401802W009	Forest Resource Economics and Finance	2	2	3	-	2		
190401802W008	Silviculture of Tropical Forest	2	2	3	-	2		
190401802W010	Trends in Forest and Nature Conservation	2	3	3	-	-		
190401802W007	Advance on Processing of Forest Product	2	3	3	-	-		
Studi interest in Fo	rest Management							
190401802P030	Measurement and Improvement Forest Stand Quality	-	3	2	2	2		
190401802P031	On-site Forest Planning and Inventory	-	3	2	2	3		
190401802P032	Low Emission Harvesting	-	3	3	2	-		
Study interest in Tr	ropical Silviculture							
190401802P020	Forest Protection in Tropical Rainforest	-	3	3	2	-		
190401802P021	Formulation of Silvicultural System	-	3	3	2	2		
190401802P022	Evaluation of Land Productivity and Suitability	-	3	3	2	3		
Study interest in Fo	orest Resources Conservation and Ecotourism							
190401802P011	Conservation, Environment and Forestry	-	2	3	-	3		
190401802P012	Ecology of Specific Ecosystems	-	3	2	3	-		
190401802P013	Wild Animals Management	-	3	3	2	2		
Study interest in Fo	orest Product Technology							
190401802P040	Improvement of Wood Quality	-	3	2	2	2		
190401802P041	Fiber Processing and Renewable Energy	-	3	2	3	-		
190401802P042	Technology of Extractive	-	3	2	3	-		
190401801W050	Research Proposal Qualification	3	2	2	3	-		
190401801W051	Research Proposal Seminar	2	2	2	3	-		
250401801W002	National Seminar	1	2	2	2	2		

Code of Course	Course Name	Intended Learning Outcomes (ILO)					
		ILO1	ILO2	ILO3	ILO4	ILO5	
190401801W052	Research Result Seminar	2	3	3	2	-	
190401801W053	Scientific Publication [Indexed National Publication (Sinta 1-4)/Indexed	3	2	2	3	2	
	International proceeding (Q3-Q4]				<u> </u>		
250401801W003	Thesis Exam and Comprehensive	-	2	3	-	-	
190401801W054	Thesis/Reputable International Publication (Q1-Q2)/Student Project	3	3	3	-	-	
ELECTIVE COURS	ES .						
Studi interest in Fo							
190401802P033	Forest Spatial Analysis	-	3	3	3	-	
190401802P034	Landscape Analysis	-	3	3	2	-	
190401802P035	Forest Sociology	-	2	3	3	2	
190401802P036	Forest and Environmental Economics	2	2	3	2	-	
190401802P037	Forest Policy	2	2	3	2	-	
190401802P038	Social Forestry	2	2	3	-	3	
190401802P039	Timber Legality and Verification Systems	3	2	3	-	-	
Study interest in Tr	opical Silviculture						
190401802P023	Silviculture of Urban Forest	2	2	3	-	2	
190401802P024	Advance on Agroforestry	2	3	3	-	2	
190401802P025	Silvofishery	2	3	3	-	2	
190401802P026	Insect Biodiversity and The Utilization	-	3	2	3	-	
190401802P027	Fertilization and Soil Fertility	-	3	2	3	-	
190401802P028	Advanced on Climate Change	-	2	3	3	-	
190401802P029	Advance on Biochar	-	3	2	3	-	
Study interest in Fo	rest Resources Conservation and Ecotourism						
190401802P014	Integrated Watershed Management	2	3	3	-	2	
190401802P015	Environmental Microclimatology	-	2	3	3	-	
190401802P016	Computing and Programming Environment Databases	-	3	2	3	-	
190401802P017	Conservation Engineering and Land Capability Evaluation	1	3	3	2	-	
190401802P018	Tourism Target-area Plan and Management	-	3	3	2	3	
190401802P019	Weather Modification Technology	-	3	2	3	-	
Study interest in Fo	rest Product Technology						

Code of Course	Course Name	Intended Learning Outcomes (ILO)					
		ILO1	ILO2	ILO3	ILO4	ILO5	
190401802P043	Technology of Wood-Based Panel	1	3	3	2	1	
190401802P044	Eco-efficiency in Wood Industry	2	3	3	-	2	
190401802P045	Biodeterioration of Wood	-	2	3	3	i	
190401802P046	Tree Care and Maintenance	1	3	-	2	2	
190401802P047	Wood Drying and Preservation	-	2	3	3	ı	
190401802P048	Chemical Biomass Conversion	-	3	3	3	-	
190401802P049	Technology of Exudate Utilization	-	3	2	3	-	

<sup>1 =</sup> Low; 2 = Medium; 3 = High