

## **I. PROGRAM OBJECTIVES AND EXPECTED LEARNING OUTCOME (ELO)**

### **1.1. Program objective**

The Environmental and Resource Management program trains staff with professional ethics, professional competence, ability to work independently and apply learned knowledge to solve practical problems. in Environmental and Resource Management.

#### **Specific objectives**

Graduated student in the field of Natural Resource Management and Environmen become:

**Program objective 1 (PO1):** Managers and people working in the field of environmental and resource management are highly professional;

**Program objective 2 (PO2):** Solve practical problems in the field of environmental and natural resource management and related fields, contributing to the development of the Industry and the sustainable development of Vietnam;

**Program objective 3 (PO3):** Love the job, be responsible at work, respect colleagues and have professional ethics.

### **1.2. Expected Learning Outcome (ELO)**

Upon completion of the training program, students have the following knowledge, skills, attitude:

<b>Content</b>	<b>Expected Learning Outcome (ELO)</b>
<b>General knowledge</b>	ELO1: Apply knowledge of mathematics, natural sciences, economics, politics, society and humanities in the field of natural resource and environmental management
<b>Professional knowledge</b>	ELO2: Analyze the influence of policies and laws on natural resources and environment management
	ELO3: Assess the management of natural resources and environment to serve the goal of sustainable development
	ELO4: Making planning and plans for the use of natural resources and the environment to meet the requirements of sustainable development in Vietnam and globally;
<b>General skills</b>	ELO5: Applying critical and creative thinking to effectively solve research and technology transfer problems in the field of natural resource and environmental management

	ELO6: Communicate effectively orally, in writing, and in multimedia with stakeholders in a diverse, multicultural environment and fluently in English
	ELO7: Working in a team and leading the team to achieve the set goals
<b>Professional skills</b>	ELO8: Combined application of information technology and modern equipment to effectively serve the management of natural resources and the environment
	ELO9: Applying skills to investigate, collect and process information to serve solving problems in the field of natural resource and environmental management
	ELO10: Proficiently performing administrative and legal operations related to natural resources and environment management
<b>Attitude</b>	ELO11: Complying with the law, respecting the culture of the organization, professional ethical standards, responsibility in the management and use of land for sustainable development
	ELO12: Figure out a clear future orientation, passion for career and a sense of lifelong learning

## II. CAREER ORIENTATION AFTER GRADUATION

Occupation field: Land management, resource management, environment

### **Job position:**

After graduating from the Department of Natural Resources and Environment Management, students can take up positions such as leaders, lecturers, consultants and experts.

Workplace:

+ Ministry of Natural Resources and Environment, Ministry of Agriculture and Rural Development, Ministry of Science and Technology;

- + Training institutions on land management, natural resources and environment management.
- + Consulting center for planning, land use planning, construction planning, forest planning, environmental planning;
- + General Department of Environment, General Department of Land Management, Forest Protection Department, Department of Biodiversity Conservation, General Department of Forestry, National Remote Sensing Department; Vietnam Department of Survey, Map and Geographic Information;
- + Departments of Natural Resources and Environment, Departments of Agriculture and Rural Development of provinces and cities;
- + Department of Natural Resources and Environment, Department of Agriculture.
- + Cadastral, environmental and construction officials at commune level
- + Land Management Research Institute, Agricultural Planning and Design Institute, Soil Science Association; Vietnam Academy of Forestry Science; Institute of Ecology and Biological Resources; Institute of Soil Agro-Chemical, Research Institute of Strategy, Policy of Natural Resources and Environment; Department of Science, Technology and Environment...
- + Natural Resources and Environment Corporation, Vietnam Forestry Corporation, companies in Natural Resources and Environment Management; Special-use forest management agencies: National Park, Nature Reserve, Biosphere Reserve, RAMSAR...
- + Government organizations, non-governmental organizations and businesses with activities related to natural resources and environment:, WWF, ENV, Birdlife, IUCN, SNV, FFI,...

### **III. ORIENTATION FOR ADVANCED LEARNING AFTER GRADUATION**

Graduated students from the field of Natural Resources Management and Environment can continue to study to improve their qualifications at home country or abroad in the following disciplines and specialties:

- + Master program in Land Management;
- + Master program in Environment, Environmental Science;
- + Master program in Natural Resources Management and Environment;
- + Master program in Soil Science;
- + Master program in Water Resources Engineering;
- + Doctor program in Land Management;

- + Doctor program in Soil Science;
- + Doctorate program in Natural Resources Management and Environment;
- + Doctor program in Environmental Engineering;
- + Doctor program in Water Resources Engineering.

**IV. PROGRAM CONTENT (NAME AND VOLUME OF MODULES):**

No	Year	Code	English name	Total	Theory	Practice	Compulsory	Previous Course	Code
TOTAL GENERAL COURSES									
	1		Maxism – Lennism + Foreign Languages	16			x		
1	1	ML01009	Introduction to laws	2	2	0	x		
2	1	TH01007	Probability and statistics	3	3	0	x		
3	1	MT01001	Basic chemistry	2	1.5	0.5	x		
4	1	TH01009	Introductions to Informatics	2	1.5	0.5	x		
5	1	ML01007	Introduction to Sociology 1	2	2	0	x		
6	1	MT01016	Basic Ecology	2	2	0	x		
7	1	QL02008	General Pedology	2	1.5	0.5	x		
8	1	QL02017	Cartography	2	1.5	0.5	x		
9	1	MT02043	Meteorology and Climatology	2	1.5	0.5	x		
10	1	QL02026	Geodesy 1	3	2	1			
11	1	QL01013	Geographic map	2	1.5	0.5			
12	1	QL01017	Hydrology in Water Resources	2	1.5	0.5			
13	1	MT01011	Biodiversity	2	2	0			
TOTAL BASED MAJOR COURSES									

No	Year	Code	English name	Total	Theory	Practice	Compulsory	Previous Course	Code
14	2	QL02019	Geographic Information System (GIS)	2	2.0	0.0	x		
15	2	QL02020	Geographic Information System Practice	1	0.0	1.0	x	Geographic Information System (GIS)	QL02019
16	2	MT02007	Forest resources	2	2.0	0.0	x		
17	2	QL02029	Remote sensing	2	1.5	0.5	x		
18	2	MT02011	Environmental management	2	2	0	x		
19	2	QL02006	Environmental geology	2	2	0	x	General Pedology	QL02008
20	2	QL02009	Specialized Pedology	2	1.5	0.5	x	General Pedology	QL02008
21	2	KT02006	Principles of Economic Statistics	3	3	0	x		
22	2	MT02001	Environmental pollution	2	2.0	0.0	x	Basic Ecology	MT01016
23	2	QL03056	Watershed management	2	2	0	x		
24	2	MT03022	Climate change	2	1.5	0.5			
25	2	QL02021	Global Positioning System	2	1	1			
TOTAL MAJOR COURSES									

No	Year	Code	English name	Total	Theory	Practice	Compulsory	Previous Course	Code
26	3	SN03016	English for NREM	2	2	0	x		
27	3	KT03007	Natural Resource Economics	2	2	0	x		
28	3	KT03008	Environmental Economics	2	2	0	x		
29	3	QL03028	Land Administration	2	2	0	x		
30	3	QL03084	Mineral resources management	2	2	0	x		
31	3	QL03096	Natural resources and Environment Information System	3	2	1	x	Geographic Information System (GIS)	QL02019
32	3	QL03099	Policy of Natural Resources Management	3	3	0	x		
33	3	MT03004	Environmental impact Assessment	2	2	0	x	Environmental monitoring	MT03008
34	3	QL03088	Land registration and statistics	2	1.5	0.5	x	Land Administration	QL03028
35	3	QL03087	Land use planning	2	1.5	0.5	x		
36	3	QL03104	Marine resources and environmental Management	3	3	0	x		

No	Year	Code	English name	Total	Theory	Practice	Compulsory	Previous Course	Code
37	3	MT03008	Environmental monitoring	2	2	0	x	Environmental pollution	MT02001
38	3	QL03008	Principles of water Resources management	2	2	0	x		
39	3	QL03014	Land Evaluation	2	2.0	0.0	x	Specialized Pedology	QL02009
40	3	MT04002	Fieldtrips 1 of NREM	8	0	8	x		
41	3	QL04020	Fieldtrips 2 of NREM	12	0	12	x	Land Administration	QL03028
42	4	QL04993	Thesis of NREM	10	0	10	x	Fieldtrips 1,2 of NREM	MT04002, MT04020
43	4	QL03053	Applied informatics in mapping	2	1	1			
44	4	QL03047	Biological indicators for environment	2	2	0			
45	4	QL03034	Environmental Planning	2	2	0			
46	4	QL03015	Sloping land and soil erosion	2	2.0	0.0		Specialized Pedology	QL02009



No	Year	Code	English name	Total	Theory	Practice	Compulsory	Previous Course	Code
47	4	MT03013	System analysis in Environmental studies	2	1	1			
48	4	QL03090	Land Valuation	2	1.5	0.5			
49	4	QL03081	Community- based Natural resources and environmental management	2	2	0			

