

Specialization1: Land Management

Specialization 2: cadastral Technology

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

### **1.1. Program objective**

The Land Management program trains staff with professional ethics, professional competence, the ability to work independently and apply learned knowledge to solve practical problems in the field of Land Management.

#### **Specific objectives**

Graduated student in the field of Land Management become:

**Program objective 1 (PO1):** Managers and people working in management, technology and business in the land sector are highly professional.

**Program objective 2 (PO2):** Solving practical problems in the field of Land 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, environment, politics, society and humanities in the field of land management;
<b>Professional knowledage</b>	ELO2: Analyze the influence of policies and laws on land use and management, real estate management;
	ELO3: Assessment of land use and management, real estate management to serve socio-economic development goals;
	ELO4: Make planning and plan on the use of land resources to meet the requirements of sustainable development of Vietnam and the world.

<b>General skills</b>	ELO5: Applying critical and creative thinking to solving research and technology transfer problems in the Land Management industry effectively;
	ELO6: Communicate effectively orally, in writing, and in multimedia with stakeholders in a diverse, multicultural environment and fluently in English;
	ELO7: Team work and lead the team to achieve set goals;
<b>Professional skills</b>	ELO8: Coordinated application of information technology and modern equipment to effectively serve the measurement, cadastral mapping, thematic maps and land information system;
	ELO9: Apply skills of investigation, collection and processing of information to serve solving problems in the field of land management.
	ELO10: Proficiently performing administrative and legal operations related to the field of land 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**

### **\* Career field**

Land Management

### **\* Working position**

Graduates from the field of Land Management can take 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, Ministry of Finance;
- + General Department of Land Management, Research Institute of Land Management, Institute of Geodesy and Cartography, Institute of Agricultural Planning and Design, Institute of Agrochemical Soil, Vietnam Association of Surveying and Mapping;

National Remote Sensing Department; Vietnam Department of Survey, Map and Geographic Information; Soil Science Association; Institute of Urban and Rural Planning...

- + Departments of Natural Resources and Environment, Departments of Agriculture and Rural Development, Departments of Construction of provinces and cities, Departments of Finance;
- + Division of Natural Resources and Environment, Division of Urban Management of districts, Department of Finance of districts and towns;
- + Cadastral - Construction Agency, Construction Inspector in communes, wards and townships;
- + Corporation of Natural Resources and Environment, surveying and mapping companies;
- + Banks and credit institutions;
- + Consulting center for planning, land use plan, construction planning;
- + Land valuation center, real estate brokerage, real estate trading floor;
- + Lecturer of Land Management, Cadastral at universities, colleges and intermediate schools.

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

Graduated students from the field of Land Management can continue to study to improve their qualifications at home and abroad in the following disciplines and majors:

- + Master program of Land Management;
- + Master program in Natural Resource Management;
- + Master program in Geodetic and Cartographic Techniques, Cartography - Remote Sensing and GIS;
- + Doctor program of Land Management;
- + Doctor program of Natural Resources Management;
- + Doctor program in Geodetic Engineering, Cartography - Remote Sensing and GIS.

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

##### 4.1 Land Management

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
<b>TOTAL GENERAL COURSES</b>				<b>40</b>					
1	1		Maxism – Lennism + Foreign Languages	16					
1	1	TH01009	<i>Basics of Informatics</i>	2	1	1	x		
2	1	QL01014	<i>Water Resources Management</i>	2	1.5	0.5	x		
3	1	KT02003	<i>Principles of Economics</i>	3	3	0	x		
4	1	ML01009	<i>Foundation law</i>	2	2	0	x		
5	1	QL02008	<i>General Pedology</i>	2	1.5	0.5	x		
6	1	QL02021	<i>Global Positioning System</i>	2	1	1	x	<i>Geodesy 1</i>	QL02026
7	1	QL02029	<i>Remote sensing</i>	2	1.5	0.5	x		
8	1	QL02026	<i>Geodesy 1</i>	3	2	1	x		
9	1	QL02009	<i>Specialized Pedology</i>	2	1.5	0.5	x	<i>General Pedology</i>	QL02008
10	1	SN01016	<i>Basic psychocology</i>	2	2	0			
11	1	TH01011	<i>Higher mathematics</i>	3	3	0			
12	1	QL01017	<i>Hydrology in Water Resources</i>	2	1.5	0.5			
13	1	QL01012	<i>Topographical Map</i>	2	1.5	0.5			
<b>TOTAL BASED MAJOR COURSES</b>				<b>21</b>					
14	2	QL02017	<i>Cartography</i>	2	1.5	0.5			

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
15	2	QL02019	<i>Geographic Information System (GIS)</i>	2	2	0	x		
16	2	QL02020	<i>Geographic Information System Practice</i>	1	0	1	x		
17	2	QL02027	<i>Geodesy2</i>	2	1.5	0.5	x	<i>Geodesy 1</i>	QL02026
18	2	QL03090	<i>Land Evaluation</i>	2	2	0	x	<i>Specialized Pedology</i>	QL02009
19	2	QL03039	<i>Master Planning</i>	2	2	0	x		
20	2	ML03025	<i>Land Law</i>	2	2	0	x		
21	2	QL03053	<i>Applied informatics in mapping</i>	2	1	1	x	<i>Geodesy 1</i>	QL02026
22	2	QL02024	<i>Photogrammetry</i>	2	1.5	0.5	x	<i>Geodesy 1</i>	QL02026
23	2	QL02016	<i>Cadastral Map</i>	2	1.5	0.5	x		
24	2	QL01013	<i>Geographical map</i>	2	1.5	0.5			
25	2	QL02025	<i>Topographical meaure</i>	2	1.5	0.5		<i>Geodesy 1</i>	QL02026
<b>TOTAL MAJOR COURSES</b>				<b>69</b>					
26	3	SN03054	<i>English for Land Management</i>	2	2	0	x		
27	3	QL03052	<i>Land Information System (LIS)</i>	2	1.5	0.5	x	<i>Geographic Information System (GIS)</i>	QL02019
28	3	QL03087	<i>Land Use Planning</i>	2	2	0	x		

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
29	3	QL03028	<i>Land Administration</i>	2	2	0	X	<i>Land Law</i>	ML03025
30	3	QL03088	<i>Land registration and statistics</i>	2	1.5	0.5	X	<i>Land Administration</i>	QL03028
31	3	QL03035	<i>Rural Development Planning</i>	2	1.5	0.5	X		
32	3	QL03089	<i>Urban and rural residentail Planning</i>	2	2	0	X		
33	3	QL03090	<i>Land Valuation</i>	2	1.5	0.5	X		
34	3	QL03029	<i>Land Inspection</i>	2	1.5	0.5	X	<i>Land Administration</i>	QL03028
35	3	QL03041	<i>Real Estate market</i>	2	2	0	X		
36	3	QL03034	<i>Environmental Planning</i>	2	2	0	X		
37	3	KT03011	<i>Land Economics</i>	2	2	0	X		
38	3	QL02022	<i>Land DataBase</i>	2	1.5	0.5	X		
39	3	QL03032	<i>Landscape planning</i>	2	1.5	0.5	X		
40	3	QL03091	<i>Land Allocation and Reclaime</i>	3	2	1	X	<i>Land Law</i>	ML03025
41	3	QL04010	<i>Fieldtrips 1</i>	6		6	X	<i>Geodesy 1</i>	QL02026
42	3	QL04011	<i>Fieldtrips 2</i>	4		4	X	<i>Applied informatics in mapping</i>	QL03053
43	4	QL04012	<i>Fieldtrips 3</i>	5		5	X	<i>Land Use Planning</i>	QL03087
44	4	QL04013	<i>Fieldtrips 4</i>	5		5	X	<i>Land Administration</i>	QL03028

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
45	4	QL04998	<i>Thesis</i>	10		10	<b>x</b>	<i>Fieldtrips</i> 1,2,3,4	QL04010, QL04011, QL04012, QL04013
46	4	QL03077	<i>Real Estate Trade Center Management</i>	2	2	0		Land Valuation	QL03090
47	4	QL03050	<i>Community based land management</i>	2	2	0			
48	4	QL03040	<i>Regional Planning</i>	2	2	0			
49	4	QL03015	<i>Sloping land and soil erosion</i>	2	2	0			
50	4	QL03036	<i>Agricultural planning</i>	2	1.5	0.5			
51	4	QL03031	<i>Forecasting methods in land use planning</i>	2	1.5	0.5		<i>Land Use Planning</i>	QL03087
52	4	QL03046	<i>Real Estate Information system</i>	2	1.5	0.5		<i>Geographic Information System (GIS)</i>	QL02019
53	4	QL03042	<i>Investment project design methods</i>	2	1.5	0.5			
54	4	QL03030	<i>Real Estate Tax</i>	2	1.5	0.5			

## 4.2 Cadastral Technology

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
	<b>TOTAL GENERAL COURSES</b>			<b>40</b>					
	<b>1</b>			16			<b>X</b>		
1	1	TH01009	<i>Basics of Informatics</i>	2	1	1	X		
2	1	KT02003	<i>Principles of Economics</i>	3	3	0	X		
3	1	ML01009	<i>Foundation law</i>	2	2	0	X		
4	1	QL02008	<i>General Pedology</i>	2	1.5	0.5	<b>X</b>		
5	1	QL02029	<i>Remote sensing</i>	2	1.5	0.5	<b>X</b>		
6	1	QL02026	<i>Geodesy 1</i>	3	2	1	<b>X</b>		
7	1	QL02021	<i>Global Positioning System</i>	2	1	1	<b>X</b>	<i>Geodesy 1</i>	QL02026
8	1	QL02009	<i>Specialized Pedology</i>	2	1.5	0.5	<b>X</b>	Thủ nhưỡng đại cương	QL02008
9	1	QL01012	<i>Topographical Map</i>	2	1.5	0.5	<b>X</b>		
10	1	QL01014	<i>Water Resources Management</i>	2	1.5	0.5			
11	1	SN01016	<i>Basic psychocology</i>	2	2	0			
12	1	TH01011	<i>Higher mathematics</i>	3	3	0			
13	1	QL01017	<i>Hydrology in Water Resources</i>	2	1.5	0.5			
	<b>TOTAL BASED MAJOR COURSES</b>			<b>20</b>					



No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
14	2	QL02017	<i>Cartography</i>	2	1.5	0.5	<b>X</b>		
15	2	QL02019	<i>Geographic Information System (GIS)</i>	2	1.5	0.5	<b>X</b>		
16	2	QL02020	<i>Geographic Information System Practice</i>	1	0	1	<b>X</b>		
17	2	QL02027	<i>Geodesy2</i>	2	1.5	0.5	<b>X</b>	<i>Geodesy 1</i>	QL02026
18	2	ML03025	<i>Land Law</i>	2	2	0	<b>X</b>		
19	2	QL03053	<i>Applied informatics in mapping</i>	2	1	1	<b>X</b>	<i>Geodesy 1</i>	QL02026
20	2	QL02024	<i>Photogrammetry</i>	2	1.5	0.5	<b>X</b>	<i>Geodesy 1</i>	QL02026
21	2	QL02022	<i>Land DataBase</i>	2	1.5	0.5	<b>X</b>		
23	2	QL02048	<i>Technology in Cadastral Surveying</i>	3	2	1	<b>X</b>	<i>Geodesy 1</i>	QL02026
24	2	QL01013	<i>Geographic map</i>	2	1.5	0.5			
25	2	QL03035	<i>Rural Development Planning</i>	2	1.5	0.5			
	<b>TOTAL MAJOR COURSES</b>			<b>70</b>					
26	3	SN03054	<i>English for Land Management</i>	2	2	0	<b>X</b>		
27	3	QL03052	<i>Land Information System (LIS)</i>	2	1.5	0.5	<b>X</b>	<i>Geographic Information System (GIS)</i>	QL02019

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
28	3	QL03028	<i>Land Administration</i>	2	2	0	<b>X</b>		
29	3	QL03088	<i>Land registration and statistics</i>	2	1.5	0.5	<b>X</b>	<i>Land Administrati on</i>	QL03028
30	3	QL03087	<i>Land Use Planning</i>	2	2	0	<b>X</b>		
31	3	QL03090	<i>Land Valuation</i>	2	1.5	0.5	<b>X</b>		
32	3	KT03011	<i>Land Economics</i>	2	2	0	<b>X</b>		
33	3	QL03039	<i>Master Planning</i>	2	2	0	<b>X</b>		
34	3	QL03082	<i>Web mapping technology</i>	2	1.0	1.0	<b>X</b>	<i>Topographic al Map</i>	QL01012
35	3	QL03083	<i>Digital photogrammetry technology</i>	2	1.5	0.5	<b>X</b>		
36	3	TH03109	<i>Web application development</i>	3	2.0	1.0	<b>X</b>		
37	3	QL03085	<i>Geodetic data Analysis</i>	3	1.5	1.5	<b>X</b>	<i>Geodesy 2</i>	QL02027
38	3	QL03086	<i>Modelling in Mapping</i>	2	1.0	1.0	<b>X</b>		
39	3	QL02016	<i>Cadastral Map</i>	2	1.5	0.5	<b>X</b>		
40	3	QL03034	<i>Environmental Planning</i>	2	2	0	<b>X</b>		

No	Year	code	English name	Total	Theor y	Practice	Compulsory	Previous Course	code
41	4	QL04011	<i>Fieldtrips 2</i>	4		4	<b>X</b>	<i>Applied informatics in mapping</i>	QL03053
42	4	QL04012	<i>Fieldtrips 3</i>	5		5	<b>X</b>	<i>Land Use Planning</i>	QL03087
43	4	QL04013	<i>Fieldtrips 4</i>	5		5	<b>X</b>	<i>Land Administrati on</i>	QL03028
44	4	QL04019	<i>Fieldtrips 6</i>	6		6	<b>X</b>	<i>Geodesy 1</i>	QL02026
45	4	QL04994	<i>Thesis</i>	10		<b>10</b>	<b>X</b>	<i>Fieldtrips 2,3,4,6</i>	QL04011, QL04012, QL04013, QL04019
46	4	QL03029	<i>Land Inspection</i>	2	1.5	0.5		<i>Land Administrati on</i>	QL03028
47	4	QL03032	<i>Landscape planning</i>	2	1.5	0.5			
48	4	QL03089	Urban and rural residentail Planning	2	2	0			
49	4	QL03050	<i>Community based land management</i>	2	2	0			
50	4	QL03042	<i>Investment project design methods</i>	2	2	0			
51	4	QL03036	<i>Agricultural planning</i>	2	1.5	0.5			

<b>No</b>	<b>Year</b>	<b>code</b>	<b>English name</b>	<b>Total</b>	<b>Theor y</b>	<b>Practice</b>	<b>Compulsory</b>	<b>Previous Course</b>	<b>code</b>
52	4	QL03014	<i>Land Evaluation</i>	2	2	0		<i>Specialized Pedology</i>	QL02009
53	4	QL03046	<i>Real Estate Information system</i>	2	1.5	0.5		<i>Geographic Information System (GIS)</i>	QL02019