

TRAINING PROGRAM FOR MASTER DEGREE

SOIL SCIENCE

(RESEARCH ORIENTATION)

Code: 8 62 01 03

1. OBJECTIVES

1.1. General objectives

To help master students understanding theory, high level of practice, ability to work independently, creativity and ability to detect and solve problems in the field of soil science.

Training Master of Soil Science to supplement and improve knowledge and skills in soil science and interdisciplinary knowledge in the field of natural resources and environment to help learners perform effectively and efficiently in expertise, scientific research in soil science.

1.2. Specific objectives

Knowledge: Helps learners understanding theories, methodologies and new issues in the field of soil science and related sciences.

Skills: Helps master students cultivate professional skills in soil science, combines soil science with other related specializations in the field of environmental resources.

Other objectives (learning attitudes): Improving the capacity of practical activities in organizing the implementation of professional work, scientific research and training.

2. TRAINING SUBJECTS AND RESOURCES

2.1. Training subjects

Engineers, bachelors graduated from the University in Soil Science, Pedology - Agrochemistry, Agriculture Chemistry and other branches, in particular:

2.2. Enrollment sources

The most suitable majors: soil science, Pedology - Agrochemistry, soil, agro-chemistry.

Near Field:

Group I: Irrigation engineering.

Group II: Land Management, Agronomy, Irrigation and soil reclamation, Environment (Environmental Science), Technical environment, Plant protection, forestry, irrigation, geography, cadastral, Natural resources management, Real estate management.

2.3. Examination subjects and graduation conditions

2.3.1. Examination subjects

Pedology, Analytical Chemistry, English.

2.3.2. Subjects should be complementary to those in the near field

Additional courses for candidates entering the master degree in Soil Science:

No.	Subject	No. of credit	Group 1	Group 2
1	General Pedology	2		X
2	Advanced Pedology	2	x	X
3	Land evaluation	2	x	X
4	Fertilizer	2	x	X
5	Soil fertility	2		X

2.3.3. Graduation conditions

According to the regulations of master training of the Ministry of Education and Training, the current regulations on training master's degree of Vietnam National University of Agriculture.

3. TRAINING PROGRAM

3.1. Minimum amount of training and training time

Total 60 credits, training time: 1.5 - 2 years

3.2. Program structure

No.	ID Course	Courses	No. of Credits
I	Compulsory courses		30
1	ML06001	Philosophy	3
2	SN06003	English	2
3	QL06004	Advanced Soil Chemistry	3
4	QL06005	Advanced Soil Physics	2
5	QL06006	Land Information Systems	2
6	QL06028	Soil organic matter	2

No.	ID Course	Courses	No. of Credits
7	MT07023	Microbial technology for soil improvement	2
8	QL07024	Advanced Land Evaluation	2
9	QL07025	Modelling in the Pedology	2
10	QL07026	Land use and environment	2
11	QL07027	Integrated Soil Management	2
12	QL07028	Principles of Soil and plant relations	2
13	QL07036	Fertilizers with soil	2
14	KT07066	Applied Resources and Environmental Economics	2
II	Selective courses (18 credits)		18
15	MT07029	Toxicology of soil environment	2
16	QL07030	Applied Remote Sensing for Soil studies	2
17	MT06007	Agro-ecology and environmental protection	2
18	QL07031	Irrigation and drainage in Agriculture	2
19	QL07032	Advanced Data Processing	2
20	QL07033	Agricultural Planning	2
21	NH07066	Agricultural system	2
22	QL07034	Advanced soil classification and soil map	3
23	QL07035	Soil erosion and controled methods (Seminar)	1
24	MT06009	Climate Change and Land Use	2
25	NH06018	Advanced Bio-statistics	2
26	QL07060	Integrated watershed management	3
27	QL07086	Reclamation contamination soil	2
28	KQ07024	Advanced Agricultural Marketing	2
III	Graduation thesis		12
29	QL07994	Graduation thesis	12
		Total	60

