

MINISTRY OF EDUCATION AND TRAINING
QUY NHON UNIVERSITY

UNDERGRADUATE PROGRAM

Level	:	Undergraduate
Major	:	Agronomy
Code	:	7620109
Mode of Study	:	Full-time

Binh Dinh, 2022

UNDERGRADUATE PROGRAM

*(Issued together with Decision No. 2904/QĐ-DHQN dated September 23, 2022
of the Rector of Quy Nhon University)*

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1. OBJECTIVES

1.1. General Objective

The program aims to train agronomy engineers with strong political awareness, high ethical qualities, and good health; equipped with solid professional knowledge and occupational skills in crop production, animal husbandry, and aquaculture; and the ability to engage in research and management activities in the agricultural sector.

1.2. Specific Objectives

The specific objectives of the Agronomy Engineering program are designed the learners to achieve the following program outcomes (abbreviated as POs):

Knowledge and Professional Competence

+ **PO1:** Demonstrate a basic understanding political, legal, and social foundations, including the principles of Marxism-Leninism, Ho Chi Minh Ideology, and the policies of the Communist Party of Vietnam, while fostering patriotism, professional responsibility, and a commitment to contributing to national development and society.

+ **PO2:** Obtain and apply foundational knowledge in mathematics, chemistry, and biology to professional practice; demonstrate solid specialized knowledge in agricultural sciences to address practical problems in agriculture, develop new knowledge, and pursue higher-level education; and effectively apply knowledge of management, administration, legal regulations, and environmental protection to enhance the productivity and quality of crops and livestock while minimizing environmental pollution.

Skills

+ **PO3:** Perform professional activities in the fields of crop production, animal husbandry, and aquaculture; demonstrate the ability to detect, evaluate, and explain practical situations related to crop, livestock, and aquatic production systems.

+ **PO4:** Demonstrate skills in managing and operating agricultural production; identify, analyze, and propose appropriate solutions to problems arising in agricultural practice.

+ **PO5:** Demonstrate effective communication, teamwork, and problem-solving skills; show the ability to deliver presentations, lead group discussions, and effectively use professional support tools.

+ **PO6:** Meet the current national standards for basic information technology competency as regulated by the Ministry of Information and Communications; apply information technology effectively in professional tasks; demonstrate basic English communication skills, including the ability to read, search for information, and write simple reports on agricultural topics.

Autonomy and Responsibility

+ **PO7:** Demonstrate self-confidence, enthusiasm, professional commitment, and adaptability to diverse working conditions; understand professional culture and ethics; comply with occupational safety principles; and show a sense of individual and civic responsibility towards society and the environment.

+ **PO8:** Exhibit a professional and efficient working style; demonstrate proactiveness and flexibility in planning and task implementation; and continuously update knowledge to improve professional effectiveness.

2. EMPLOYMENT OPPORTUNITIES AND FURTHER STUDY PROSPECTS

Graduates of the Agronomy program may pursue careers in:

- Research and teaching positions at universities, colleges, research institutes, and research centers.
- Government agencies related to agriculture, including commune-level agricultural boards, district agricultural divisions, Departments of Agriculture and Rural Development, Departments of Science and Technology, agricultural extension agencies, crop cultivation plant protection agencies, and veterinary service centers.
- Agricultural cooperatives, crop and livestock farms, agricultural extension centers, and research centers for food crops, industrial crops, and food production.
- Domestic and international companies involved in agricultural production, business, and providing technical services.
- An Agronomy major also prepares students for Graduate school to pursue postgraduate studies (Master's and Ph.D.) in related fields such as crop science, animal science, food technology, and aquaculture.

3. LEARNING OUTCOMES

Upon graduation, students should be able to achieve the following Program Learning Outcomes (PLOs):

Levels of competency assessment for each learning outcome (according to Bloom's Taxonomy)					
1	2	3	4	5	6
Remember	Understand	Apply	Analyze	Evaluate	Create

3.1. Knowledge

PLO1: Demonstrate fundamental knowledge of natural sciences as a theoretical and practical foundation for the agricultural sciences.

PLO2: Apply knowledge of physical education, national defense and security, social sciences and humanities, state and law, and the revolutionary ideology and ethics of the Communist Party of Vietnam and Ho Chi Minh Ideology in professional practice and daily life.

PLO3: Integrate knowledge of life sciences and major's fundamental knowledge to agricultural practices.

PLO4: Utilize major's specialized knowledge in agricultural fields such as crop production, animal husbandry, and aquaculture.

PLO5: Apply knowledge of agricultural project development and management, as well as different forms of agricultural business.

PLO6: Use information technology to meet job requirements and use foreign languages in professional activities.

3.2. Skills

PLO7: Develop research ideas, design research proposals, organize research implementation, and present research results.

PLO8: Demonstrate autonomy and responsibility in performing professional tasks.

PLO9: Demonstrate effective presentation, discussion, independent working, and teamwork skills.

PLO10: Plan and implement professional activities in the agricultural sector; design and establish demonstration models.

PLO11: Apply technical measures and solve technical problems in crop production, animal husbandry, and aquaculture.

PLO12: Organize and supervise crop and livestock production activities.

PLO13: Initiate and develop entrepreneurial activities in agricultural production.

3.3. Attitudes and Professional Ethics

PLO14: Demonstrate compliance with legal regulations in professional practice; uphold good professional ethics; and promote environmental protection in professional activities and daily life.

PLO15: Continuously update professional knowledge and skills related to agronomy; present and defend personal viewpoints in discussions; and analyze, evaluate, improve, and manage agronomic activities at a medium operational scale.

4. PROGRAM DURATION AND TOTAL ACADEMIC WORKLOAD

4.1. **Program Duration:** 4,5 years

4.2. **Total academic workload:** 150 credits (excluding Physical Education and National Defense and Security Education courses).

Program structure	Credits
General Knowledge	24
Professional Knowledge	126
- Fundamental knowledge	35
- Specialized knowledge (if any)	51
- Supplementary Knowledge	32
- Graduation thesis, Alternative courses	8
Total	150

5. ADMISSION REQUIREMENTS

Applicants are admitted in accordance with the current admission regulations of Quy Nhon University.

6. MODE OF STUDY AND GRADUATION REQUIREMENTS

6.1. **Mode of study:** Credit-based education system.

6.2. **Graduation Requirements:** (including academic requirements, prerequisite courses, foreign language, and information technology standards)

- Accumulate all required courses and credits of the training program.
- Achieve a cumulative grade point average (GPA) of 2.00 or higher for the entire program.
- Complete the Physical Education (PE) courses and obtain a National Defense and Security Education certificate.
- Meet the foreign language and information technology proficiency standards as required by the University.

7. ASSESSMENT METHODS AND GRADING SCALES

***Grading Scale**

A 10-point grading scale is used for all assessment components within each course.

*** Format, Evaluation Criteria, and Scoring system**

a. Theoretical courses

No.	Format	Evaluation Criteria	Weighting
1	Progress Assessment	- Level of initiative, preparation, and active participation in class activities. - Attendance in required classes; absences must not exceed 20% of the total class hours. *Individual test: Each student completes one individual test. - Evaluation criteria for the test are specified by the instructor. *Group reports, seminars, or major assignments as required by the instructor. - Evaluation criteria for reports, seminars, or assignments are specified by the instructor.	40%
2	Final Exam	Final course examination. Examination format: written/oral/other forms as specified. - Evaluation of the exam is based on the instructor's marking scheme. - Evaluation criteria for reports or seminars may include level of preparation, knowledge content, and presentation skills.	60%

b. Laboratory and Practical Courses

Students are required to attend all lab and practical sessions. The course grade for practical courses is calculated as the average score of all practical exercises during the semester, rounded to one decimal place.

c. Course Project

40% progress assessment; 60% project performance and Presentation

d. Graduation Thesis

The implementation and evaluation of the graduation thesis shall comply with the Undergraduate Training Regulations issued together with Decision No. 1487/QĐ-ĐHQN dated July 1, 2021, of Quy Nhon University.

*** Assessment Methods**

The assessment methods used in the Agronomy training program are classified into two main types: Formative assessment and Summative assessment.

Explanation of the evaluation methods as described in the table

Mapping of Assessment methods and Program Learning Outcomes (PLOs) as follows:

Assessment Methods	Program Learning Outcomes (PLOs)														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
I. Formative Assessment															
1. Attendance assessment							x		x		x	x	x	x	x
2. Assignment assessment					x	X					x				
3. Presentation assessment									x	x	x				
II. Summative Assessment															
4. Written examination	x	x	X	x	x		x							x	x
5. Multiple-choice test	x	x	X	x	x	X	x	x						x	x
6. Defense and oral examination	x	x	X	x	x	X	x	x			x			x	x
7. Report	x	x	X	x	x		x	x	x	x		x			x
8. Presentation assessment	x	x	X	x	x	X	x	x	x	x	x				x
9. Group work assessment									x			x			x

8. PROGRAM CONTENT

No.	Course Code	Course Name	Seme ster	Nu mb er of credits	In-class hours			Expe riment/ Prac tice	Others	Self-Stud y Hour s	Prerequisi te Course Code	Department in charge	Not e
					Theo ry	Assig hment	Disc ussion						
I. General Knowledge				24	Excluding 9 credits of National Defense and Security Education and 3 credits of Physical Education								
Compulsory													
I.1. Political Science and Law				13									
1	1130299	Marxist-Leninist Philosophy	1	3	40		10			85		DPSLM	
2	1130300	Marxist-Leninist Political Economy	2	2	27		6			57	1130299	DPSLM	
3	1130049	Introduction to Law	2	2	27		6			57		DPSLM	
4	1130301	Scientific Socialism	3	2	27		6			57	1130300	DPSLM	
5	1130302	History of the Communist Party of Vietnam	4	2	27		6			57	1130301	DPSLM	
6	1130091	Ho Chi Minh Thought	5	2	27		6			57	1130302	DPSLM	
I.2. National Defense Education – Physical Education													
I.2.1. National Defense and Security Education				9									
7	1120168	National Defense and Security Education 1 (*)	4	3	37		16			82		CNDSE	
8	1120169	National Defense and Security Education 2 (*)	4	2	22		16			52		CNDSE	
9	1120170	National Defense and Security Education 3 (*)	4	2	14			32		44		CNDSE	
10	1120171	National Defense and Security Education 4 (*)	4	2	4			56		36		CNDSE	
I.2.2. Physical Education (Choose 1 of the following 7 groups):				3									
11	1120172	Physical Education 1 (Football 1) (*)	1	1	4			26		21		DPE	
12	1120173	Physical Education 2 (Football 2) (*)	2	1	4			26		21	1120172	DPE	
13	1120174	Physical Education 3 (Footbal 3) (*)	3	1	4			26		21	1120173	DPE	
14	1120175	Physical Education 1 (Volleyball 1) (*)	1	1	4			26		21		DPE	
15	1120176	Physical Education 2 (Volleyball 2)	2	1	4			26		21	1120175	DPE	

		(*)											
16	1120177	Physical Education 3 (Volleyball 3) (*)	3	1	4			26		21	1120176	DPE	
17	1120178	Physical Education 1 (Basketball 1) (*)	1	1	4			26		21		DPE	
18	1120179	Physical Education 2 (Basketball 2) (*)	2	1	4			26		21	1120178	DPE	
19	1120180	Physical Education 3 (Basketball 3) (*)	3	1	4			26		21	1120179	DPE	
20	1120181	Physical Education 1 (Badminton 1) (*)	1	1	4			26		21		DPE	
21	1120182	Physical Education 2 (Badminton 2) (*)	2	1	4			26		21	1120181	DPE	
22	1120183	Physical Education 3 (Badminton 3) (*)	3	1	4			26		21	1120182	DPE	
23	1120184	Physical Education 1 (Vietnamese Traditional Martial Arts 1) (*)	1	1	4			26		21		DPE	
24	1120185	Physical Education 2 (Vietnamese Traditional Martial Arts 2) (*)	2	1	4			26		21	1120184	DPE	
25	1120186	Physical Education 3 (Vietnamese Traditional Martial Arts 3) (*)	3	1	4			26		21	1120185	DPE	
26	1120187	Physical Education 1 (Taekwondo 1) (*)	1	1	4			26		21		DPE	
27	1120188	Physical Education 2 (Taekwondo 2) (*)	2	1	4			26		21	1120187	DPE	
28	1120189	Physical Education 3 (Taekwondo 3) (*)	3	1	4			26		21	1120188	DPE	
29	1120190	Physical Education 1 (Karatedo 1) (*)	1	1	4			26		21		DPE	
30	1120191	Physical Education 2 (Karatedo 2) (*)	2	1	4			26		21	1120190	DPE	
31	1120192	Physical Education 3 (Karatedo 3) (*)	3	1	4			26		21	1120191	DPE	
I.3. Foreign Language			7										
32	1090061	English 1	1	3	30	15				90		DFL	
33	1090166	English 2	2	4	40	20				120	1090061	DFL	
I.4. Social Sciences/Mathematics, Natural Sciences – Environment, Management Sciences			4										
34	2030003	Communication Skills	2	2	18		20	4		48		DSSH	
35	1150422	Entrepreneurship	5	2	20	5	10			55		DFBA	
II. Professional Knowledge Courses			126										
II.1. Foundation Courses for the Major and Discipline			35										
36	2020243	Nutrition, Health and Environment, Human	1	2	30					60		DNS	
37	2020327	Mineral Nutrition	6	2	25			10		55	2020331	DNS	
38	2020304	General Chemistry	1	2	24	6				60	2020304	DNS	
39	2020305	General Chemistry Laboratory	2	1				30		15	2020304	DNS	
40	2020307	Agricultural Mechanics	3	2	25		10			55		DNS	
41	1050240	Fundamentals of Informatics	1	3	30			30		75		DNS	
42	2020306	Laboratory Techniques and Safety	1	2	20			20		50		DNS	
43	2020308	Agroecology	2	2	30					60	2020243	DNS	
44	2020247	Cell Biology and Developmental Biology	1	2	30					60		DNS	
45	2020248	Cell and Developmental Biology Laboratory	2	1				30		15	2020247	DNS	
46	2020309	Zoology	2	2	30					60	2020247	DNS	
47	2020310	Zoology Laboratory	3	1				30		15	2020309	DNS	
48	2020311	Botany	2	2	28		4			58	2020247	DNS	
49	2020312	Botany Laboratory	3	1				30		15	2020311	DNS	
50	2020313	Biochemistry	3	2	30					60		DNS	
51	2020314	Biochemistry Laboratory	4	1				30		15	2020313	DNS	
52	2020317	Agricultural Microbiology	3	2	30					60	2020247	DNS	
53	2020318	Agricultural Microbiology Laboratory	4	1				30		15	2020317	DNS	

54	2020352	GIS and Remote Sensing in Agriculture	6	2	21			18		51		DNS	
55	2020319	Agricultural Plant Taxonomy	3	2	28		4			58	2020311	DNS	
II.2. Specialized knowledge				51									
II.2.1. Major knowledge				25									
<i>II.2.1a. Compulsory (19.0 credits)</i>													
56	2020329	Physiology of livestock and aquatic animals	5	2	30					60	2020309	DNS	
57	2020330	Animal-aquaculture physiology Laboratory	6	1				30		15	2020329	DNS	
58	2020331	Crop Physiology	5	2	30					60	2020247 2020313	DNS	
59	2020332	Crop Physiology Laboratory	6	1				30		15	2020331	DNS	
60	2020540	Supply chain Management and Traceability for agricultural products	5	2	28		4			58		DNS	
61	2020541	Application of Global Positioning System (GPS) in Agriculture	6	1	5			20		20		DNS	
62	2020315	Pedology and Agro-Chemistry	4	2	28		4			58	2020304	DNS	
63	2020316	Pedology and Agro-Chemistry Laboratory	5	1				30		15	2020315	DNS	
64	2020542	Applied Genetics in Agriculture	4	2	28		4			58	2020247	DNS	
65	2020338	Plant Protection	6	2	28		4			58	2020317 2020331	DNS	
66	2020339	Plant Protection Laboratory	7	1				30		15	2020338	DNS	
67	2020321	Good Agricultural Practices (GAP) and Organic Agriculture	6	2	28		4			58	2020315	DNS	
<i>II.2.1b. Elective (6.0 crs) (Choose 3 out of 8 courses)</i>													
68	2020322	Plant Growth Regulators	4	2	30					60	2020313	DNS	
69	2020323	Organic Farming	4	2	28		4			58	2020308	DNS	
70	2020325	Environmental and Natural Resource Management in Agriculture	4	2	28		4			58	2020308	DNS	
71	2020326	Agroforestry System	4	2	30					60		DNS	
72	2020337	Biostatistics and Field Experiments	7	2	24			12		54	2020336	DNS	
73	2020328	High Technology Applications in Plant Cultivation	7	2	24			12		54	2020321 2020331	DNS	
74	2020343	Medicinal Plants	4	2	28		4			58	2020311	DNS	
75	2020342	Food Crops and Fruit Crops	4	2	28		4			58	2020311	DNS	
II.2.2. Specialized Knowledge				26									
<i>II.2.2a. Compulsory (20.0 crs)</i>													
76	2020353	Basic Veterinary	8	2	24			12		54	2020330	DNS	
77	2020354	Preservation of agricultural products	7	2	24			12		54	2020317 2020331	DNS	
78	2020340	Livestock and Poultry Husbandry	6	3	35			20		80	2020329	DNS	
79	2020335	Aquaculture	5	3	30			30		75	2020308	DNS	
80	2020543	Genetics and Plant Breeding	7	2	24			12		54	2020542	DNS	
81	2020544	Genetics and Livestock Breeding	6	2	24			12		54	2020542	DNS	
82	2020341	Animal Nutrition and Feed	7	2	24			12		54	2020340	DNS	
83	1040197	Plant Pathology	7	2	24			12		54	2020338	DNS	
84	1040172	Farming Systems and Agricultural Extension Methods	6	2	30					60	2020335	DNS	
<i>II.2.2b. Elective (6.0 crs) (Choose 3 out of 9 courses)</i>													
85	1040176	Agricultural Entomology	4	2	28		4			58	2020309	DNS	
86	2020324	Biological Control Methods	7	2	28		4			58	2020308 2020338	DNS	
87	2020344	Contagious Diseases of Livestock and Poultry	7	2	30					60	2020329	DNS	
88	2020345	Animal Feed Manufacturing Technology	7	2	25		10			55	2020329	DNS	
89	2020346	Floriculture and Ornamental Plants	4	2	28		4			58	2020319	DNS	
90	1040199	Artificial Reproduction in Aquaculture	7	2	20			20		50	2020308 2020329	DNS	
91	2020347	Marine Fish Culture	7	2	30					60	2020335	DNS	

92	2020545	Basic Fertilizer Production Technology	7	2	24			12		54		DNS	
93	2020349	Integrated Pest Management (IPM)	7	2	28		4			58	2020308 2020338	DNS	
II.3. Supplementary Knowledge			32										
<i>Compulsory (8.0 crs)</i>													
94	1040302	English for Agronomy	7	2	15	10	10			55	1090166	DNS	
95	2020336	Research Methods in Agricultural Science	5	2	25		10			55		DNS	
96	2020350	Biosafety in Agriculture	3	2	28		4			58	2020308	DNS	
97	2020355	Agricultural Project Management	8	2	30					60		DNS	
<i>II.3.1. Professional Training (17.0 crs)</i>													
98	2020146	Critical Thinking and Problem-Solving Skills	3	2	15	10	10			55		DNS	
99	2020147	Time Management and Teamwork Skills	4	2	21			18		51		DNS	
100	1040254	Plant Tissue and Cell Culture	5	2	15			30		45	2020311	DNS	
101	1040258	Hydroponic Cultivation and Safe Vegetable Production	8	2	15			30		45	2020327	DNS	
102	2020356	Mushroom Cultivation Techniques	8	3	25			40		70	2020317	DNS	
103	2020351	Shrimp Farming Techniques	8	2	15			30		45	2020335	DNS	
104	2020357	Good Animal Husbandry Practices (GAHP)	8	2	15			30		45	2020329 2020341	DNS	
105	2020358	Farm Management	8	2	22	4	8			56	2020540	DEA	
<i>II.3.2. Orientation internship, Graduation Internship(7.0 crs)</i>													
106	2020359	Cognitive Internship	8	2					Inter ship			DNS	
107	2020360	Graduation Internship	9	5					Graduation intership			DNS	
II.4. Graduation Thesis			8										
108	2020361	Capstone Project	9	8					Graduation Thesis			DNS	

9. TENTATIVE TEACHING PLAN

No.	Course Code	Course Name	Number of credits	In-class hours			Experiment/ Practice	Others	Self-Study Hours	Prerequisite Course Code	Department in charge	Note
				Theory	Assignment	Discussion						
Semester 1: 18.0 credits (17 compulsory, 0 elective, 01 PE)												
Compulsory (17.0 crs)												
1	1130299	Marxist–Leninist Philosophy	3	40	0	10	0	0	85	0	DPSLM	
2	1090061	English 1	3	30	15	0	0	0	90	0	DFL	
3	2020243	Nutrition, Health and Environment, Human	2	30	0	0	0	0	60	0	DNS	
4	2020304	General Chemistry	2	24	6	0	0	0	60	0	DNS	
5	1050240	Fundamentals of Informatics	3	30	0	0	30	0	75	0	DIT	
6	2020306	Laboratory Techniques and Safety	2	20	0	0	20	0	50	0	DNS	
7	2020247	Cell Biology and Developmental Biology	2	30	0	0	0	0	60	0	DNS	
Elective (0.0 tín chỉ)												

Group 1 (1.0 cr): Physical Education (Choose 1 of the following 7 modules)::												
8	1120172	Physical Education 1 (Football 1) (*)	1	4	0	0	26	0	21	0	DPE	
9	1120175	Physical Education 1 (Volleyball 1) (*)	1	4	0	0	26	0	21	0	DPE	
10	1120178	Physical Education 1 (Basketball 1) (*)	1	4	0	0	26	0	21	0	DPE	
11	1120181	Physical Education 1 (Badminton 1) (*)	1	4	0	0	26	0	21	0	DPE	
12	1120184	Physical Education 1 (Vietnamese Traditional Martial Arts 1) (*)	1	4	0	0	26	0	21	0	DPE	
13	1120187	Physical Education 1 (Taekwondo 1) (*)	1	4	0	0	26	0	21	0	DPE	
14	1120190	Physical Education 1 (Karatedo 1) (*)	1	4	0	0	26	0	21	0	DPE	
Semester 2: 19.0 credits (18 compulsory, 0 elective, 01 PE)												
Compulsory (18.0 crs)												
1	1130300	Marxist–Leninist Political Economy	2	27	0	6	0	0	57	1130299	DPSLM	
2	1130049	Introduction to Law	2	27	0	6	0	0	57	0	DPSLM	
3	1090166	English 2	4	40	20	0	0	0	120	1090061	DFL	
4	2030003	Communication Skills	2	18	0	20	4	0	48	0	DSSH	
5	2020305	General Chemistry Laboratory	1	0	0	0	30	0	15	2020304	DNS	
6	2020308	Agroecology	2	30	0	0	0	0	60	2020243	DNS	
7	2020248	Cell and Developmental Biology Laboratory	1	0	0	0	30	0	15	2020247	DNS	
8	2020309	Zoology	2	30	0	0	0	0	60	2020247	DNS	
9	2020311	Botany	2	28	0	4	0	0	58	2020247	DNS	
Elective (0.0 credit)												
Group 2 (1.0 cr): Physical Education (Choose 1 of the following 7 modules)::												
13	1120173	Physical Education 2 (Football 2) (*)	1	4	0	0	26	0	21	1120172	DPE	
14	1120176	Physical Education 2 (Volleyball 2) (*)	1	4	0	0	26	0	21	1120175	DPE	
15	1120179	Physical Education 2 (Basketball 2) (*)	1	4	0	0	26	0	21	1120178	DPE	
16	1120182	Physical Education 2 (Badminton 2) (*)	1	4	0	0	26	0	21	1120181	DPE	
17	1120185	Physical Education 2 (Vietnamese Traditional Martial Arts 2) (*)	1	4	0	0	26	0	21	1120184	DPE	
18	1120188	Physical Education 2 (Taekwondo 2) (*)	1	4	0	0	26	0	21	1120187	DPE	
19	1120191	Physical Education 2 (Karatedo 2) (*)	1	4	0	0	26	0	21	1120190	DPE	
Semester 3: 16.0 credits (16 compulsory, 0 elective, 01 PE)												
Compulsory (16.0 crs)												
1	1130301	Scientific Socialism	2	27	0	6	0	0	57	1130300	DPSLM	
2	2020307	Agricultural Mechanics	2	25	0	10	0	0	55	0	DNS	
3	2020310	Zoology Laboratory	1	0	0	0	30	0	15	2020309	DNS	
4	2020312	Botany Laboratory	1	0	0	0	30	0	15	2020311	DNS	
5	2020313	Biochemistry	2	30	0	0	0	0	60	0	DNS	
6	2020317	Agricultural Microbiology	2	30	0	0	0	0	60	2020	DNS	

										247		
7	2020146	Critical Thinking and Problem-Solving Skills	2	15	10	10	0	0	55	0	DNS	
8	2020319	Agricultural Plant Taxonomy	2	28	0	4	0	0	58	2020311	DNS	
9	2020350	Biosafety in Agriculture	2	28	0	4	0	0	58	2020308	DNS	
Elective (0.0 cr)												
Group 3 (1.0 cr): Physical Education (Choose 1 of the following 7 modules):												
10	1120174	Physical Education 3 (Football 3) (*)	1	4	0	0	26	0	21	1120173	DPE	
11	1120177	Physical Education 3 (Volleyball 3) (*)	1	4	0	0	26	0	21	1120176	DPE	
12	1120180	Physical Education 3 (Basketball 3) (*)	1	4	0	0	26	0	21	1120179	DPE	
13	1120183	Physical Education 3 (Badminton 3) (*)	1	4	0	0	26	0	21	1120182	DPE	
14	1120186	Physical Education 3 (Vietnamese Traditional Martial Arts 3) (*)	1	4	0	0	26	0	21	1120185	DPE	
15	1120189	Physical Education 3 (Võ Taekwondo 3) (*)	1	4	0	0	26	0	21	1120188	DPE	
16	1120192	Physical Education 3 (Karatedo 3) (*)	1	4	0	0	26	0	21	1120191	DPE	
Semester 4 (25.0 credits) (10 compulsory, 06 elective, 09 National Defense and Security Education)												
Compulsory (10.0 crs)												
1	1130302	History of the Communist Party of Vietnam	2	27	0	6	0	0	57	1130301	DPSLM	
2	2020314	Biochemistry Laboratory	1	0	0	0	30	0	15	2020313	DNS	
3	2020315	Pedology and Agro-Chemistry	2	28	0	4	0	0	58	2020304	DNS	
4	2020318	Agricultural Microbiology Laboratory	1	0	0	0	30	0	15	2020317	DNS	
5	2020542	Applied Genetics in Agriculture	2	28	0	4	0	0	58	2020247	DNS	
6	2020147	Time Management and Teamwork Skills	2	21	0	0	18	0	51	0	DNS	
7	1120168	National Defense and Security Education 1 (*)	3	37	0	16	0	0	82	0	CNDSE	
8	1120169	National Defense and Security Education 2 (*)	2	22	0	16	0	0	52	0	CNDSE	
9	1120170	National Defense and Security Education 3 (*)	2	14	0	0	32	0	44	0	CNDSE	
10	1120171	National Defense and Security Education 4 (*)	2	4	0	0	56	0	36	0	CNDSE	
Elective (6.0 crs): Choose 3 of the following 8 modules):												
11	2020343	Medicinal Plants	2	28	0	4	0	0	58	2020311	DNS	
12	2020322	Plant Growth Regulators	2	30	0	0	0	0	60	2020313	DNS	
13	2020323	Organic Farming	2	28	0	4	0	0	58	2020308	DNS	
14	2020342	Food Crops and Fruit Crops	2	28	0	4	0	0	58	2020311	DNS	
15	2020325	Environmental and Natural Resource Management in Agriculture	2	28	0	4	0	0	58	2020308	DNS	
16	2020326	Agroforestry System	2	30	0	0	0	0	60	0	DNS	
17	1040176	Agricultural Entomology	2	28		4	0	0	58	2020309	DNS	
18	2020346	Floriculture and Ornamental Plants	2	28		4	0	0	58	2020319	DNS	

Semester 5 (18.0 credits)												
Compulsory Courses (18.0 crs)												
1	1130091	Ho Chi Minh Thought	2	27	0	6	0	0	57	1130 302	DPSLM	
2	1150422	Entrepreneurship	2	20	5	10	0	0	55	0	DFBA	
3	2020316	Pedology and Agro-Chemistry Laboratory	5	1	0	0	0	30	15	2020 315	DNS	
4	2020329	Physiology of livestock and aquatic animals	2	30	0	0	0	0	60	2020 309	DNS	
5	2020331	Crop Physiology	2	30	0	0	0	0	60	2020 247 2020 313	DNS	
6	2020540	Supply chain Management and Traceability for agricultural products	2	28	0	4	0	0	58	0	DEA	
7	2020335	Aquaculture	3	30	0	0	30	0	75	2020 308	DNS	
8	2020336	Research Methods in Agricultural Science	2	25	0	10	0	0	55	0	DNS	
9	1040254	Plant Tissue and Cell Culture	2	15	0	0	30	0	45	2020 311	DNS	
Semester 6 (18.0 credits)												
Compulsory Courses (18.0 crs)												
1	2020327	Mineral Nutrition	2	25	0	0	10	0	55	202033	DNS	
2	2020330	Animal-aquaculture physiology Laboratory	1	0	0	0	30	0	15	2020 329	DNS	
3	2020332	Crop Physiology Laboratory	1	0	0	0	30	0	15	2020 331	DNS	
4	2020541	Application of Global Positioning System (GPS) in Agriculture	1	5	0	0	20	0	20	0	DNS	
5	2020338	Plant Protection	2	28	0	4	0	0	58	2020 317 2020 331	DNS	
6	2020340	Livestock and Poultry Husbandry	3	35	0	0	20	0	80	2020 329	DNS	
7	2020544	Genetics and Livestock Breeding	2	24	0	0	12	0	54	2020 542	DNS	
8	1040172	Farming Systems and Agricultural Extension Methods	2	30	0	0	0	0	60	2020 335	DNS	
9	2020352	GIS and Remote Sensing in Agriculture	2	21	0	0	18	0	51	0	DNS	
10	2020321	Good Agricultural Assighments (GAP) and Organic Agriculture	2	28	0	4	0	0	58	2020 315	DNS	
Semester 7 (17.0 credits)												
Compulsory (11.0 crs)												
1	2020339	Plant Protection Labratory	1	0	0	0	30	0	15	2020 338	DNS	
2	2020354	Preservation of agricultural products	2	24	0	0	12	0	54	2020 317 2020 331	DNS	
3	2020543	Genetics and Plant Breeding	2	24	0	0	12	0	54	2020 542	DNS	
4	2020341	Animal Nutrition and Feed	2	24	0	0	12	0	54	2020 340	DNS	
5	1040197	Plant Pathology	2	24	0	0	12	0	54	2020 338	DNS	
6	1040302	English for Agronomy	2	15	10	10	0	0	55	1090	DNS	

										166		
Elective (6.0 crs): Choose 3 of the following 9 modules:												
7	2020337	Biostatistics and Field Experiments	2	24			12		54	2020336	DNS	
8	2020324	Biological Control Methods	2	28	0	4	0	0	58	2020308 2020338	DNS	
9	2020344	Contagious Diseases of Livestock and Poultry	2	30	0	0	0	0	60	2020329	DNS	
10	2020345	Animal Feed Manufacturing Technology	2	25	0	10	0	0	55	2020329	DNS	
11	2020328	High Technology Applications in Plant Cultivation	2	24			12		54	2020321 2020331	DNS	
12	1040199	Artificial Reproduction in Aquaculture	2	20	0	0	20	0	50	2020308 2020329	DNS	
13	2020347	Marine Fish Culture	2	30	0	0	0	0	60	2020335	DNS	
14	2020545	Basic Fertilizer Production Technology	2	24	0	0	12	0	54	0	DNS	
15	2020349	Integrated Pest Management (IPM)	2	28	0	4	0	0	58	2020308 2020338	DNS	
Semester 8 (17.0 credits)												
Compulsory Courses (17.0 crs)												
1	2020353	Basic Veterinary	2	24	0	0	12	0	54	2020330	DNS	
2	2020355	Agricultural Project Management	2	30	0	0	0	0	60	0	DNS	
3	1040258	Hydroponic Cultivation and Safe Vegetable Production	2	15	0	0	30	0	45	2020327	DNS	
4	2020356	Mushroom Cultivation Techniques	3	25	0	0	40	0	70	2020317	DNS	
5	2020351	Shrimp Farming Techniques	2	15	0	0	30	0	45	2020335	DNS	
6	2020357	Good Animal Husbandry Practices (GAHP)	2	15	0	0	30	0	45	2020329 2020341	DNS	
7	2020358	Farm Management	2	22	4	8	0	0	56	0	DEA	
8	2020359	Cognitive Internship	2	0	0	0	0	Internship	0	0	DNS	
Semester 9 (13.0 credits)												
Compulsory Courses (13.0 crs)												
1	2020360	Graduation Internship	5	0	0	0	0	GI	0	0	DNS	
2	2020361	Capstone Project	8	0	0	0	0	GT	0	0	DNS	

11. GUIDELINES FOR TRAINING PROGRAM IMPLEMENTATION

- This training program is applied to students enrolled in the Agronomy program starting from the 2022 admission cohort.

- The training process is based on the designed curriculum, training objectives, target learners, workforce demands, and specific training requirements. For elective courses, depending on actual conditions, development trends, and social needs, the faculty will advise students in selecting appropriate courses.

- The Dean of the Faculty is responsible for organizing and providing guidance on the principles for developing detailed course syllabi to ensure that the program objectives, contents, and requirements are met, while also satisfying the needs of learners and society.

- The training program is reviewed and updated every two years to meet the development of the Agronomy major and to align with socio-economic development needs.

Binh Dinh, September 23, 2022

DEAN OF FACULTY

**HEAD OF TRAINING
OFFICE**

RECTOR

Dr. Ngo Anh Tu

Dr. Le Xuan Vinh

Assoc. Prof. Dr. Do Ngoc My