

MINISTRY OF EDUCATION AND TRAINING  
**QUY NHON UNIVERSITY**

**UNDERGRADUATE PROGRAM**

Level of education:      **Undergraduate**  
Major:                      **Agronomy**  
Speciality (if any):      .....  
Code:                        **7620109**  
Type of education:       **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)*

Level of Education: Undergraduate

Major: Agronomy

Program Code: 7620109

English Name: Agronomy

Mode of Study: Full-time

### 1. PROGRAM 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
<b>Remember</b>	<b>Understand</b>	<b>Apply</b>	<b>Analyze</b>	<b>Evaluate</b>	<b>Create</b>

#### 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 CREDITS**

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

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

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

## **5. ADMISSION REQUIREMENTS**

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

## **6. TRAINING METHOD, GRADUATION REQUIREMENTS**

**6.1. Training Method:** 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	<b>Progress Assessment</b>	<ul style="list-style-type: none"><li>- Level of initiative, preparation, and active participation in class activities.</li><li>- Attendance in required classes; absences must not exceed 20% of the total class hours.</li><li>*Individual test: Each student completes one individual test.</li><li>- Evaluation criteria for the test are specified by the instructor.</li><li>*Group reports, seminars, or major assignments as required by the instructor.</li><li>- Evaluation criteria for reports, seminars, or assignments are specified by the instructor.</li></ul>	40%
2	<b>Final Exam</b>	<p>Final course examination. Examination format: written/oral/other forms as specified.</p> <ul style="list-style-type: none"><li>- Evaluation of the exam is based on the instructor's marking scheme.</li><li>- Evaluation criteria for reports or seminars may include level of preparation, knowledge content, and presentation skills.</li></ul>	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
<b>I. Formative Assessment</b>															
1. Attendance assessment							x		x		x	x	x	x	x
2. Assignment assessment					x	x					x				
3. Presentation assessment									x	x	x				
<b>II. Summative Assessment</b>															
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	Semester	Number of credits	Class Duration			Lab/Practical	Others	Self-Study Hours	Prerequisite Course Code	Managing Faculty	Note
					Theory	Practice	Tests						
<b>I. General Knowledge</b>				24	<i>Excluding 9 credits of National Defense and Security Education and 3 credits of Physical Education</i>								
<b>Compulsory</b>													
<b>1.1. Political Science and Law</b>				13									
1	1130299	Philosophy of marxism and leninism	1	3	40		10			85		Faculty of Political Theory, Law and Public Administration	
2	1130300	Political economics of marxism and leninism	2	2	27		6			57	1130299	Faculty of Political Theory, Law and Public Administration	
3	1130049	General Law	2	2	27		6			57		Faculty of Political Theory, Law and Public Administration	
4	1130301	Scientific Socialism	3	2	27		6			57	1130300	Faculty of Political Theory, Law and Public Administration	
5	1130302	History of Vietnamese Communist Party	4	2	27		6			57	1130301	Faculty of Political Theory, Law and Public Administration	
6	1130091	Ho Chi Minh Thought	5	2	27		6			57	1130302	Faculty of Political Theory, Law	



		(*)										Physical Education and National Defense
20	1120181	<i>Physical Education 1 (Badminton 1) (*)</i>	1	1	4			26		21		Faculty of Physical Education and National Defense
21	1120182	<i>Physical Education 2 (Badminton 2) (*)</i>	2	1	4			26		21	1120181	Faculty of Physical Education and National Defense
22	1120183	<i>Physical Education 3 (Badminton 3) (*)</i>	3	1	4			26		21	1120182	Faculty of Physical Education and National Defense
23	1120184	<i>Physical Education 1 (Vietnamese Traditional Martial Arts 1) (*)</i>	1	1	4			26		21		Faculty of Physical Education and National Defense
24	1120185	<i>Physical Education 2 (Vietnamese Traditional Martial Arts 2) (*)</i>	2	1	4			26		21	1120184	Faculty of Physical Education and National Defense
25	1120186	<i>Physical Education 3 (Vietnamese Traditional Martial Arts 3) (*)</i>	3	1	4			26		21	1120185	Faculty of Physical Education and National Defense
26	1120187	<i>Physical Education 1 (Taekwondo 1) (*)</i>	1	1	4			26		21		Faculty of Physical Education and National Defense
27	1120188	<i>Physical Education 2 (Taekwondo 2) (*)</i>	2	1	4			26		21	1120187	Faculty of Physical Education and National Defense
28	1120189	<i>Physical Education 3 (Taekwondo 3) (*)</i>	3	1	4			26		21	1120188	Faculty of Physical Education and National Defense
29	1120190	<i>Physical Education 1 (Karatedo 1) (*)</i>	1	1	4			26		21		Faculty of Physical Education and National Defense
30	1120191	<i>Physical Education 2 (Karatedo 2) (*)</i>	2	1	4			26		21	1120190	Faculty of Physical Education and National Defense
31	1120192	<i>Physical Education 3 (Karatedo 3) (*)</i>	3	1	4			26		21	1120191	Faculty of Physical Education and National Defense
<b>I.3. Foreign Language</b>				7								
32	1090061	English 1	1	3	30	15				90		Faculty of Foreign

												Languages	
33	1090166	English 2	2	4	40	20				120	1090061	Faculty of Languages	
<b>I.4. Social Sciences/Mathematics, Natural Sciences Environment, Management Sciences</b>				<b>4</b>									
34	2030003	Communication Skills	2	2	18			20	4	48		Faculty of Social Sciences and Humanities	
35	1150422	Entrepreneurship	5	2	20	5	10			55		Faculty of Finance, Banking and Business Administration	
<b>II. Professional Knowledge Courses</b>				<b>126</b>									
<b>II.1. Foundation Courses for the Major and Discipline</b>				<b>35</b>									
36	2020243	Nutrition, Health and Environment, Human	1	2	30					60		Faculty of Natural Sciences	
37	2020327	Mineral Nutrition	6	2	25			10		55	2020331	Faculty of Natural Sciences	
38	2020304	General Chemistry	1	2	24	6				60	2020304	Faculty of Natural Sciences	
39	2020305	General Chemistry Laboratory	2	1				30		15	2020304	Faculty of Natural Sciences	
40	2020307	Agricultural Mechanics	3	2	25			10		55		Faculty of Natural Sciences	
41	1050240	Fundamentals of Informatics	1	3	30			30		75		Faculty of Information Technology	
42	2020306	Laboratory Techniques and Safety	1	2	20			20		50		Faculty of Natural Sciences	
43	2020308	Agroecology	2	2	30					60	2020243	Faculty of Natural Sciences	
44	2020247	Cell Biology and Developmental Biology	1	2	30					60		Faculty of Natural Sciences	
45	2020248	Cell and Developmental Biology Laboratory	2	1				30		15	2020247	Faculty of Natural Sciences	
46	2020309	Zoology	2	2	30					60	2020247	Faculty of Natural Sciences	
47	2020310	Zoology Laboratory	3	1				30		15	2020309	Faculty of Natural Sciences	
48	2020311	Botany	2	2	28			4		58	2020247	Faculty of Natural Sciences	
49	2020312	Botany Laboratory	3	1				30		15	2020311	Faculty of Natural Sciences	
50	2020313	Biochemistry	3	2	30					60		Faculty of Natural Sciences	
51	2020314	Biochemistry Laboratory	4	1				30		15	2020313	Faculty of Natural Sciences	
52	2020317	Agricultural Microbiology	3	2	30					60	2020247	Faculty of Natural Sciences	
53	2020318	Agricultural Microbiology Laboratory	4	1				30		15	2020317	Faculty of Natural	

												Sciences	
54	2020352	GIS and Remote Sensing in Agriculture	6	2	21			18		51		Faculty of Natural Sciences	
55	2020319	Agricultural Plant Taxonomy	3	2	28		4			58	2020311	Faculty of Natural Sciences	
<b>II.2. Specialized knowledge</b>													
<b>II.2.1. Major knowledge</b>													
<b>II.2.1a. Compulsory (19.0 credits)</b>													
56	2020329	Physiology of livestock and aquatic animals	5	2	30					60	2020309	Faculty of Natural Sciences	
57	2020330	Animal-aquaculture physiology Laboratory	6	1				30		15	2020329	Faculty of Natural Sciences	
58	2020331	Crop Physiology	5	2	30					60	2020247 2020313	Faculty of Natural Sciences	
59	2020332	Crop Physiology Laboratory	6	1				30		15	2020331	Faculty of Natural Sciences	
60	2020540	Supply chain Management and Traceability for agricultural products	5	2	28		4			58		Faculty of Economics and Accounting	
61	2020541	Application of Global Positioning System (GPS) in Agriculture	6	1	5			20		20		Faculty of Natural Sciences	
62	2020315	Pedology and Agro-Chemistry	4	2	28		4			58	2020304	Faculty of Natural Sciences	
63	2020316	Pedology and Agro-Chemistry Laboratory	5	1				30		15	2020315	Faculty of Natural Sciences	
64	2020542	Applied Genetics in Agriculture	4	2	28		4			58	2020247	Faculty of Natural Sciences	
65	2020338	Plant Protection	6	2	28		4			58	2020317 2020331	Faculty of Natural Sciences	
66	2020339	Plant Protection Laboratory	7	1				30		15	2020338	Faculty of Natural Sciences	
67	2020321	Good Agricultural Practices (GAP) and Organic Agriculture	6	2	28		4			58	2020315	Faculty of Natural Sciences	
<b>II.2.1b. Elective (6.0 crs) (Choose 3 out of 8 courses)</b>													
68	2020322	Plant Growth Regulators	4	2	30					60	2020313	Faculty of Natural Sciences	
69	2020323	Organic Farming	4	2	28		4			58	2020308	Faculty of Natural Sciences	
70	2020325	Environmental and Natural Resource Management in Agriculture	4	2	28		4			58	2020308	Faculty of Natural Sciences	
71	2020326	Agroforestry System	4	2	30					60		Faculty of Natural Sciences	
72	2020337	Biostatistics and Field Experiments	7	2	24			12		54	2020336	Faculty of Natural Sciences	
73	2020328	High Technology Applications in Plant Cultivation	7	2	24			12		54	2020321 2020331	Faculty of Natural Sciences	

74	2020343	Medicinal Plants	4	2	28		4			58	2020311	Faculty of Natural Sciences	
75	2020342	Food Crops and Fruit Crops	4	2	28		4			58	2020311	Faculty of Natural Sciences	
<b>II.2.2. Specialized Knowledge</b>			<b>26</b>										
<i>II.2.2a. Compulsory (20.0 crs)</i>													
76	2020353	Basic Veterinary	8	2	24				12	54	2020330	Faculty of Natural Sciences	
77	2020354	Preservation of agricultural products	7	2	24				12	54	2020317 2020331	Faculty of Natural Sciences	
78	2020340	Livestock and Poultry Husbandry	6	3	35				20	80	2020329	Faculty of Natural Sciences	
79	2020335	Aquaculture	5	3	30				30	75	2020308	Faculty of Natural Sciences	
80	2020543	Genetics and Plant Breeding	7	2	24				12	54	2020542	Faculty of Natural Sciences	
81	2020544	Genetics and Livestock Breeding	6	2	24				12	54	2020542	Faculty of Natural Sciences	
82	2020341	Animal Nutrition and Feed	7	2	24				12	54	2020340	Faculty of Natural Sciences	
83	1040197	Plant Pathology	7	2	24				12	54	2020338	Faculty of Natural Sciences	
84	1040172	Farming Systems and Agricultural Extension Methods	6	2	30					60	2020335	Faculty of Natural Sciences	
<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	Faculty of Natural Sciences	
86	2020324	Biological Control Methods	7	2	28		4			58	2020308 2020338	Faculty of Natural Sciences	
87	2020344	Contagious Diseases of Livestock and Poultry	7	2	30					60	2020329	Faculty of Natural Sciences	
88	2020345	Animal Feed Manufacturing Technology	7	2	25		10			55	2020329	Faculty of Natural Sciences	
89	2020346	Floriculture and Ornamental Plants	4	2	28		4			58	2020319	Faculty of Natural Sciences	
90	1040199	Artificial Reproduction in Aquaculture	7	2	20				20	50	2020308 2020329	Faculty of Natural Sciences	
91	2020347	Marine Fish Culture	7	2	30					60	2020335	Faculty of Natural Sciences	
92	2020545	Basic Fertilizer Production Technology	7	2	24				12	54		Faculty of Natural Sciences	
93	2020349	Integrated Pest Management (IPM)	7	2	28		4			58	2020308 2020338	Faculty of Natural Sciences	
<b>II.3. Supplementary Knowledge</b>			<b>32</b>										
<i>Compulsory (8.0 crs)</i>													
94	1040302	English for Agronomy	7	2	15	10	10			55	1090166	Faculty of	

												Natural Sciences	
95	2020336	Research Methods in Agricultural Science	5	2	25		10			55		Faculty of Natural Sciences	
96	2020350	Biosafety in Agriculture	3	2	28		4			58	2020308	Faculty of Natural Sciences	
97	2020355	Agricultural Project Management	8	2	30					60		Faculty of Natural Sciences	
<b>II.3.1. Professional Training (17.0 crs)</b>													
98	2020146	Critical Thinking and Problem-Solving Skills	3	2	15	10	10			55		Faculty of Natural Sciences	
99	2020147	Time Management and Teamwork Skills	4	2	21			18		51		Faculty of Natural Sciences	
100	1040254	Plant Tissue and Cell Culture	5	2	15			30		45	2020311	Faculty of Natural Sciences	
101	1040258	Hydroponic Cultivation and Safe Vegetable Production	8	2	15			30		45	2020327	Faculty of Natural Sciences	
102	2020356	Mushroom Cultivation Techniques	8	3	25			40		70	2020317	Faculty of Natural Sciences	
103	2020351	Shrimp Farming Techniques	8	2	15			30		45	2020335	Faculty of Natural Sciences	
104	2020357	Good Animal Husbandry Practices (GAHP)	8	2	15			30		45	2020329 2020341	Faculty of Natural Sciences	
105	2020358	Farm Management	8	2	22	4	8			56	2020540	Faculty of Economics and Accounting	
<b>II.3.2. Orientation internship, Graduation Internship(7.0 crs)</b>													
106	2020359	Cognitive Internship	8	2					Inter ship			Faculty of Natural Sciences	
107	2020360	Graduation Internship	9	5					Graduation intership			Faculty of Natural Sciences	
<b>II.4. Graduation Thesis</b>													
108	2020361	Graduation Thesis	9	8					Graduation Thesis			Faculty of Natural Sciences	

## 9. TENTATIVE TEACHING PLAN

No.	Course Code	Course name	Number of credits	Class Duration			Lab/Practical	Others	Self-Study Hours	Prerequisite Course Code	Managing Faculty	Note
				Theory	Practice	Tests						
<b>Semester 1: 18.0 credits (17 compulsory, 0 elective, 01 PE)</b>												
<b>Compulsory (17.0 crs)</b>												
1	1130299	Philosophy of marxism and	3	40	0	10	0	0	85	0	Faculty of	

		leninism										Political Theory, Law and Public Administration
2	1090061	English 1	3	30	15	0	0	0	90	0	Faculty of Foreign Languages	
3	2020243	Nutrition, Health and Environment, Human	2	30	0	0	0	0	60	0	Faculty of Natural Sciences	
4	2020304	General Chemistry	2	24	6	0	0	0	60	0	Faculty of Natural Sciences	
5	1050240	Fundamentals of Informatics	3	30	0	0	30	0	75	0	Faculty of Information Technology	
6	2020306	Laboratory Techniques and Safety	2	20	0	0	20	0	50	0	Faculty of Natural Sciences	
7	2020247	Cell Biology and Developmental Biology	2	30	0	0	0	0	60	0	Faculty of Natural Sciences	
<b>Elective (0.0 tín chỉ)</b>												
<b>Group 1 (1.0 cr): Physical Education (Choose 1 of the following 7 modules)::</b>												
8	1120172	Physical Education 1 (Football 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
9	1120175	Physical Education 1 (Volleyball 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
10	1120178	Physical Education 1 (Basketball 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
11	1120181	Physical Education 1 (Badminton 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
12	1120184	Physical Education 1 (Vietnamese Traditional Martial Arts 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
13	1120187	Physical Education 1 (Taekwondo 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
14	1120190	Physical Education 1 (Karatedo 1) (*)	1	4	0	0	26	0	21	0	Faculty of Physical Education and National Defense	
<b>Semester 2: 19.0 credits (18 compulsory, 0 elective, 01 PE)</b>												
<b>Compulsory (18.0 crs)</b>												
1	1130300	Political economics of marxism and leninism	2	27	0	6	0	0	57	1130299	Faculty of Political Theory, Law	

												and Public Administration	
2	1130049	General Law	2	27	0	6	0	0	57	0		Faculty of Political Theory, Law and Public Administration	
3	1090166	English 2	4	40	20	0	0	0	120	1090061		Faculty of Foreign Languages	
4	2030003	Communication Skills	2	18	0	20	4	0	48	0		Faculty of Social Sciences and Humanities	
5	2020305	General Chemistry Laboratory	1	0	0	0	30	0	15	2020304		Faculty of Natural Sciences	
6	2020308	Agroecology	2	30	0	0	0	0	60	2020243		Faculty of Natural Sciences	
7	2020248	Cell and Developmental Biology Laboratory	1	0	0	0	30	0	15	2020247		Faculty of Natural Sciences	
8	2020309	Zoology	2	30	0	0	0	0	60	2020247		Faculty of Natural Sciences	
9	2020311	Botany	2	28	0	4	0	0	58	2020247		Faculty of Natural Sciences	
<b>Elective (0.0 credit)</b>													
<b>Group 2 (1.0 cr): Physical Education (Choose 1 of the following 7 modules)::</b>													
13	1120173	Physical Education 2 (Football 2) (*)	1	4	0	0	26	0	21	1120172		Faculty of Physical Education and National Defense	
14	1120176	Physical Education 2 (Volleyball 2) (*)	1	4	0	0	26	0	21	1120175		Faculty of Physical Education and National Defense	
15	1120179	Physical Education 2 (Basketball 2) (*)	1	4	0	0	26	0	21	1120178		Faculty of Physical Education and National Defense	
16	1120182	Physical Education 2 (Badminton 2) (*)	1	4	0	0	26	0	21	1120181		Faculty of Physical Education and National Defense	
17	1120185	Physical Education 2 (Vietnamese Traditional Martial Arts 2) (*)	1	4	0	0	26	0	21	1120184		Faculty of Physical Education and National Defense	
18	1120188	Physical Education 2 (Taekwondo 2) (*)	1	4	0	0	26	0	21	1120187		Faculty of Physical Education and National Defense	
19	1120191	Physical Education 2 (Karatedo 2) (*)	1	4	0	0	26	0	21	1120190		Faculty of Physical Education and National	

												Defense	
<b>Semester 3: 16.0 credits (16 compulsory, 0 elective, 01 PE)</b>													
<b>Compulsory (16.0 crs)</b>													
1	1130301	Scientific Socialism	2	27	0	6	0	0	57	1130300	Faculty of Political Theory, Law and Public Administration		
2	2020307	Agricultural Mechanics	2	25	0	10	0	0	55	0	Faculty of Natural Sciences		
3	2020310	Zoology Laboratory	1	0	0	0	30	0	15	2020309	Faculty of Natural Sciences		
4	2020312	Botany Laboratory	1	0	0	0	30	0	15	2020311	Faculty of Natural Sciences		
5	2020313	Biochemistry	2	30	0	0	0	0	60	0	Faculty of Natural Sciences		
6	2020317	Agricultural Microbiology	2	30	0	0	0	0	60	2020247	Faculty of Natural Sciences		
7	2020146	Critical Thinking and Problem-Solving Skills	2	15	10	10	0	0	55	0	Faculty of Natural Sciences		
8	2020319	Agricultural Plant Taxonomy	2	28	0	4	0	0	58	2020311	Faculty of Natural Sciences		
9	2020350	Biosafety in Agriculture	2	28	0	4	0	0	58	2020308	Faculty of Natural Sciences		
<b>Elective (0.0 cr)</b>													
<b>Group 3 (1.0 cr): Physical Education (Choose 1 of the following 7 modules):</b>													
10	1120174	Physical Education 3 (Football 3) (*)	1	4	0	0	26	0	21	1120173	Faculty of Physical Education and National Defense		
11	1120177	Physical Education 3 (Volleyball 3) (*)	1	4	0	0	26	0	21	1120176	Faculty of Physical Education and National Defense		
12	1120180	Physical Education 3 (Basketball 3) (*)	1	4	0	0	26	0	21	1120179	Faculty of Physical Education and National Defense		
13	1120183	Physical Education 3 (Badminton 3) (*)	1	4	0	0	26	0	21	1120182	Faculty of Physical Education and National Defense		
14	1120186	Physical Education 3 (Vietnamese Traditional Martial Arts 3) (*)	1	4	0	0	26	0	21	1120185	Faculty of Physical Education and National Defense		
15	1120189	Physical Education 3 (Võ Taekwondo 3) (*)	1	4	0	0	26	0	21	1120188	Faculty of Physical Education and National Defense		

16	1120192	<i>Physical Education 3 (Karatedo 3) (*)</i>	1	4	0	0	26	0	21	1120191	Faculty of Physical Education and National Defense	
<b>Semester 4 (25.0 credits) (10 compulsory, 06 elective, 09 National Defense and Security Education)</b>												
<b>Compulsory (10.0 crs)</b>												
1	1130302	History of Vietnamese Communist Party	2	27	0	6	0	0	57	1130301	Faculty of Political Theory, Law and Public Administration	
2	2020314	Biochemistry Laboratory	1	0	0	0	30	0	15	2020313	Faculty of Natural Sciences	
3	2020315	Pedology and Agro-Chemistry	2	28	0	4	0	0	58	2020304	Faculty of Natural Sciences	
4	2020318	Agricultural Microbiology Laboratory	1	0	0	0	30	0	15	2020317	Faculty of Natural Sciences	
5	2020542	Applied Genetics in Agriculture	2	28	0	4	0	0	58	2020247	Faculty of Natural Sciences	
6	2020147	Time Management and Teamwork Skills	2	21	0	0	18	0	51	0	Faculty of Natural Sciences	
7	1120168	<i>National Defense and Security Education 1 (*)</i>	3	37	0	16	0	0	82	0	Faculty of Physical Education and National Defense	
8	1120169	<i>National Defense and Security Education 2 (*)</i>	2	22	0	16	0	0	52	0	Faculty of Physical Education and National Defense	
9	1120170	<i>National Defense and Security Education 3 (*)</i>	2	14	0	0	32	0	44	0	Faculty of Physical Education and National Defense	
10	1120171	<i>National Defense and Security Education 4 (*)</i>	2	4	0	0	56	0	36	0	Faculty of Physical Education and National Defense	
<b>Elective (6.0 crs): Choose 3 of the following 8 modules):</b>												
11	2020343	Medicinal Plants	2	28	0	4	0	0	58	2020311	Faculty of Natural Sciences	
12	2020322	Plant Growth Regulators	2	30	0	0	0	0	60	2020313	Faculty of Natural Sciences	
13	2020323	Organic Farming	2	28	0	4	0	0	58	2020308	Faculty of Natural Sciences	
14	2020342	Food Crops and Fruit Crops	2	28	0	4	0	0	58	2020311	Faculty of Natural Sciences	
15	2020325	Environmental and Natural Resource Management in Agriculture	2	28	0	4	0	0	58	2020308	Faculty of Natural Sciences	
16	2020326	Agroforestry System	2	30	0	0	0	0	60	0	Faculty of	

											Natural Sciences	
17	1040176	Agricultural Entomology	2	28		4	0	0	58	2020309	Faculty of Natural Sciences	
18	2020346	Floriculture and Ornamental Plants	2	28		4	0	0	58	2020319	Faculty of Natural Sciences	
<b>Semester 5 (18.0 credits)</b>												
<b>Compulsory (18.0 crs)</b>												
1	1130091	Ho Chi Minh Thought	2	27	0	6	0	0	57	1130302	Faculty of Political Theory, Law and Public Administration	
2	1150422	Entrepreneurship	2	20	5	10	0	0	55	0	Faculty of Finance, Banking and Business Administration	
3	2020316	Pedology and Agro-Chemistry Laboratory	5	1	0	0	0	30	15	2020315	Faculty of Natural Sciences	
4	2020329	Physiology of livestock and aquatic animals	2	30	0	0	0	0	60	2020309	Faculty of Natural Sciences	
5	2020331	Crop Physiology	2	30	0	0	0	0	60	2020247 2020313	Faculty of Natural Sciences	
6	2020540	Supply chain Management and Traceability for agricultural products	2	28	0	4	0	0	58	0	Faculty of Economics and Accounting	
7	2020335	Aquaculture	3	30	0	0	30	0	75	2020308	Faculty of Natural Sciences	
8	2020336	Research Methods in Agricultural Science	2	25	0	10	0	0	55	0	Faculty of Natural Sciences	
9	1040254	Plant Tissue and Cell Culture	2	15	0	0	30	0	45	2020311	Faculty of Natural Sciences	
<b>Semester 6 (18.0 credits)</b>												
<b>Compulsory (18.0 crs)</b>												
1	2020327	Mineral Nutrition	2	25	0	0	10	0	55	2020331	Faculty of Natural Sciences	
2	2020330	Animal-aquaculture physiology Laboratory	1	0	0	0	30	0	15	2020329	Faculty of Natural Sciences	
3	2020332	Crop Physiology Laboratory	1	0	0	0	30	0	15	2020331	Faculty of Natural Sciences	
4	2020541	Application of Global Positioning System (GPS) in Agriculture	1	5	0	0	20	0	20	0	Faculty of Natural Sciences	
5	2020338	Plant Protection	2	28	0	4	0	0	58	2020317 2020331	Faculty of Natural Sciences	
6	2020340	Livestock and Poultry Husbandry	3	35	0	0	20	0	80	2020329	Faculty of Natural Sciences	

7	2020544	Genetics and Livestock Breeding	2	24	0	0	12	0	54	2020 542	Faculty of Natural Sciences	
8	1040172	Farming Systems and Agricultural Extension Methods	2	30	0	0	0	0	60	2020 335	Faculty of Natural Sciences	
9	2020352	GIS and Remote Sensing in Agriculture	2	21	0	0	18	0	51	0	Faculty of Natural Sciences	
10	2020321	Good Agricultural Practices (GAP) and Organic Agriculture	2	28	0	4	0	0	58	2020 315	Faculty of Natural Sciences	
<b>Semester 7 (17.0 credits)</b>												
<b>Compulsory (11.0 crs)</b>												
1	2020339	Plant Protection Laboratory	1	0	0	0	30	0	15	2020 338	Faculty of Natural Sciences	
2	2020354	Preservation of agricultural products	2	24	0	0	12	0	54	2020 317 2020 331	Faculty of Natural Sciences	
3	2020543	Genetics and Plant Breeding	2	24	0	0	12	0	54	2020 542	Faculty of Natural Sciences	
4	2020341	Animal Nutrition and Feed	2	24	0	0	12	0	54	2020 340	Faculty of Natural Sciences	
5	1040197	Plant Pathology	2	24	0	0	12	0	54	2020 338	Faculty of Natural Sciences	
6	1040302	English for Agronomy	2	15	10	10	0	0	55	1090 166	Faculty of Natural Sciences	
<b>Elective (6.0 crs): Choose 3 of the following 9 modules:</b>												
7	2020337	Biostatistics and Field Experiments	2	24			12		54	202033 6	Faculty of Natural Sciences	
8	2020324	Biological Control Methods	2	28	0	4	0	0	58	2020 308 2020 338	Faculty of Natural Sciences	
9	2020344	Contagious Diseases of Livestock and Poultry	2	30	0	0	0	0	60	2020 329	Faculty of Natural Sciences	
10	2020345	Animal Feed Manufacturing Technology	2	25	0	10	0	0	55	2020 329	Faculty of Natural Sciences	
11	2020328	High Technology Applications in Plant Cultivation	2	24			12		54	202032 202033	Faculty of Natural Sciences	
12	1040199	Artificial Reproduction in Aquaculture	2	20	0	0	20	0	50	2020 308 2020 329	Faculty of Natural Sciences	
13	2020347	Marine Fish Culture	2	30	0	0	0	0	60	2020 335	Faculty of Natural Sciences	
14	2020545	Basic Fertilizer Production Technology	2	24	0	0	12	0	54	0	Faculty of Natural Sciences	
15	2020349	Integrated Pest Management (IPM)	2	28	0	4	0	0	58	2020 308 2020 338	Faculty of Natural Sciences	

<b>Semester 8 (17.0 credits)</b>												
<b>Compulsory (17.0 crs)</b>												
1	2020353	Basic Veterinary	2	24	0	0	12	0	54	2020 330	Faculty of Natural Sciences	
2	2020355	Agricultural Project Management	2	30	0	0	0	0	60	0	Faculty of Natural Sciences	
3	1040258	Hydroponic Cultivation and Safe Vegetable Production	2	15	0	0	30	0	45	2020 327	Faculty of Natural Sciences	
4	2020356	Mushroom Cultivation Techniques	3	25	0	0	40	0	70	2020 317	Faculty of Natural Sciences	
5	2020351	Shrimp Farming Techniques	2	15	0	0	30	0	45	2020 335	Faculty of Natural Sciences	
6	2020357	Good Animal Husbandry Practices (GAHP)	2	15	0	0	30	0	45	2020 329 2020 341	Faculty of Natural Sciences	
7	2020358	Farm Management	2	22	4	8	0	0	56	0	Faculty of Economics and Accounting	
8	2020359	Cognitive Internship	2	0	0	0	0	I	0	0	Faculty of Natural Sciences	
<b>Semester 9 (13.0 credits)</b>												
<b>Compulsory (13.0 crs)</b>												
1	2020360	Graduation Internship	5	0	0	0	0	GI	0	0	Faculty of Natural Sciences	
2	2020361	Graduation Thesis	8	0	0	0	0	GT	0	0	Faculty of Natural Sciences	

Notes: I: Internship, GI: Graduation Internship, GT: Graduation Thesis

## 11. GUIDELINES FOR 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**