





BACHELOR OF ENGINEERING IN WOOD TECHNOLOGY

Programme code: 7549001

Faculty of Forestry

CONTENT

PA	RT 1. GENERAL INFORMATION OF THE PROGRAM	I
	Program title: Wood Technology	
	Awarding and teaching institution: Nong Lam University - Ho Chi Minh City	
1.3	Degree: Bachelor of Engineering in Wood Technology (BWT)	1
1.4	Study mode: Full-time, on campus	1
1.5	Training time: 4 years	1
	Admission criteria	
PA]	RT 2. PROGRAM OBJECTIVES AND EXPECTED LEARNING OUTCOMES	1
	Program objectives (POs)	
2.2	Expected learning outcomes (PLOs)	1
2.3	The alignment between POs and PLOs of BWT program	2
2.4	Employment opportunities	2
	Postgraduate study opportunities	
PA]	RT 3. PROGRAM STRUCTURE AND CURRICULUM	3
3.1	Program structure	3
	Curriculum	
	CLOs and PLOs matrix	
PA	RT 4. BRIEF OUTLINE OF ALL COURSES IN THE PROGRAM	9
	. GENERAL COURSES	
4.2.	. FUNDAMENTAL SPECIALIZED COURSES	12
	. SPECIALIZED COURSES	
	ACHING AND LEARNING METHODS	
PR	OFESSIONAL SEMINAR AND ENGAGEMENT WOLD OF WORK	24
LIS	ST OF SOME PARTNERS	26
CO	NTACT INFORMATION	28

PART 1. GENERAL INFORMATION OF THE PROGRAM

- **1.1 Program title**: Wood Technology
- **1.2** Awarding and teaching institution: Nong Lam University Ho Chi Minh City
- **1.3 Degree**: Bachelor of Engineering in Wood Technology (BWT)
- **1.4 Study mode**: Full-time, on campus
- **1.5** Training time: 4 years

1.6 Admission criteria

The selection of students to provide admission letters for the BWT programme must be following the guideline of MOET and NLU [NLU's admission schemes]. From 2012 to 2019, admission criteria only depend on the national examination. The priority of candidates will be arranged based on their examination results. Since 2020, candidates can enroll in the BWT programme using both their general point averages (GPAs) at high school and their national examination results. Their entry into the programme will be assessed on the basic of the exam grades in Mathematics, Physics and Chemistry (group A00); or Mathematics, Physics and English (A01) or Mathematics, Chemistry and Biology (group B00); or Mathematics, Biology, Literature and English (group D01).

PART 2. PROGRAM OBJECTIVES AND EXPECTED LEARNING OUTCOMES

2.1 Program objectives (POs)

BWT programme provides:

- **PO 1**: General knowledge of natural-social science and fundamental knowledge to receive the specialized knowledge in wood technology.
- **PO 2:** Specialized knowledge in wood technology to apply in work, research and technology transfer.
- **PO 3:** Communication skills, independent working skills, teamwork skills, analysis and problem-solving skills to study, work and research efficiently in the field of wood technology.
- **PO 4**: Proper attitude to fulfilling the professional and social responsibilities, human and environmental preservation; professional ethics and lifelong learning.

2.2 Expected learning outcomes (PLOs)

After successful completion of the BWT programme, graduates will be able to:

A. KNOWLEDGE

General knowledge

- **PLO 1:** Utilize general knowledge of natural and social sciences in the field of wood technology.
- **PLO 2:** Apply fundamental knowledge to receive the specialized knowledge and actual production in wood technology.

Professional knowledge

- **PLO 3:** Apply the specialized knowledge and software to design interior and exterior wood products.
- **PLO 4:** Determine the process parameters in wood product manufacturing.
- **PLO 5:** Analyse and evaluate the machinery systems accurately in the production lines.
- **PLO 6:** Apply economic and specialized knowledge in business management, commerce, production management and product quality control.

B. SKILLS

General skills

- **PLO 7:** Use spoken and written language effectively in communication.
- **PLO 8:** Use English and Informatics efficiently for studying, researching and international labour market integration.
- **PLO 9:** Work effectively in individual and group-oriented settings.

Professional skills

PLO 10: Evaluate raw wood materials in production and commerce.

PLO 11: Design and analyse structural interior and exterior timber elements.

PLO 12: Design technological processes in wood product production lines.

PLO 13: Utilize, operate and maintain the machinery system in the wood processing factory.

PLO 14: Set up the production lines of interior and exterior wood products.

C. ATTITUDES

PLO 15: Be aware of the importance of environmental preservation; social responsibilities and law compliance.

PLO 16: Demonstrate professional behaviour; proactive at work; positive, critical and creative thinking.

2.3 The alignment between POs and PLOs of BWT program

POs		PLOs														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1	1														
2			2	2	2	2										
3							3	3	3	4	4	4	4	4		
4															5	5

: General knowledges

2 : Professional skills

: Professional knowledges 5 : Attitudes

: Generic skills

2.4 Employment opportunities

Work at companies, factories of state management agencies, university, institutes with working positions suitable for their specialties:

- Staff of furniture design in wood product manufacturing companies;
- Technical staff at wood product manufacturing factories;
- Staff/Leader of timber / wood product quality control and quality assurance in wood product manufacturing companies, wood trading business;
- Lecturers / researchers at university, institutes of the same expertise.

Postgraduate study opportunities

Continue to study MSc. program and PhD. program in wood technology, and other relevant discipline in the country as well as international universities.

PART 3. PROGRAM STRUCTURE AND CURRICULUM

3.1 Program structure

Group	Credits									
	Compulsory	Elective	Total							
General knowledge	44	5	49							
Fundamental specialized knowledge	27	8	35							
Specialized knowledge	34	18	52							
Total	105	31	136							

3.2 Curriculum

The curriculum of BWT programme was issued under the Decision 3641/QĐ-ĐHNL-ĐT, dated 15th October 2018 by NLU's President.

Degree: Bachelor of Engineering in Wood Technology Code: 7549001

Faculty: Faculty of Forestry (FF)

Discipline: Wood Technology

The minimum number of credits accumulated: 136 Program: BWT

Minimum GPA: 2.0

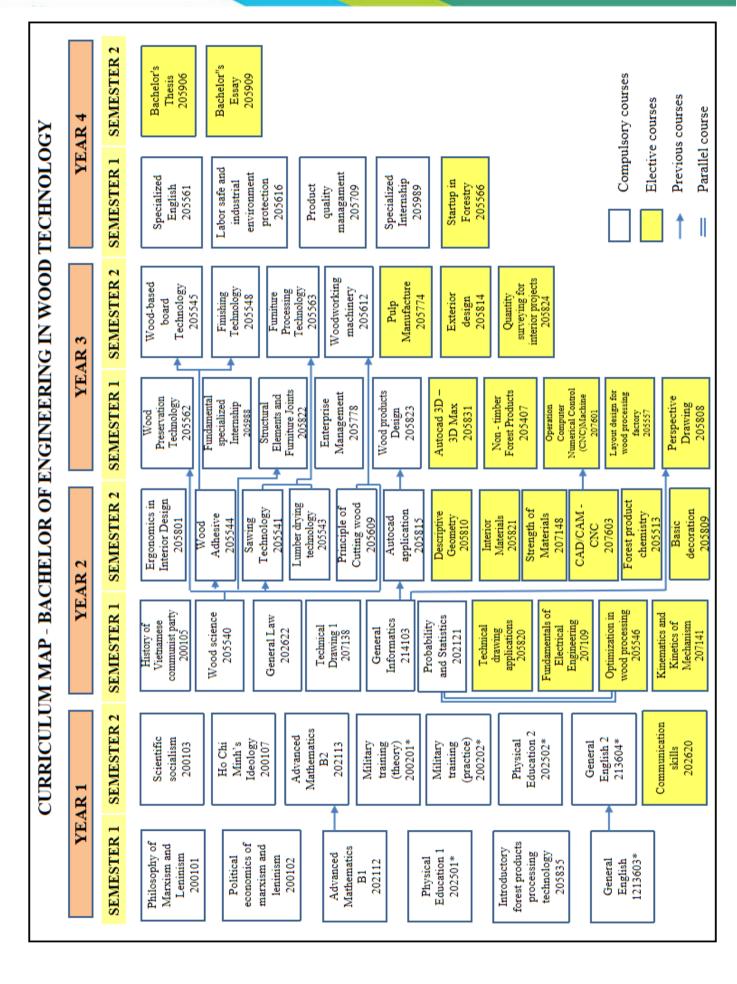
No	Course ID	Course name	Credits	Total hours	Theory	Practice	Field study	Dissertation	Thesis	Year	Semester	Previous course	Prerequisite course	Parallel course
	neral kno													
1	pulsory su 200101	Philosophy of Marxism and Leninism	3	45	45	0	0	0	0	1	1			
2	200102	Political economics of Marxism and Leninism	2	30	30	0	0	0	0	1	1			
3	202112	Advanced Mathematics B1	2	30	30	0	0	0	0	1	1			
4	202501	Physical Education 1	1	45	0	0	45	0	0	1	1			
5	205835	Introductory forest products processing technology	3	60	30	30	0	0	0	1	1			
6	213603	General English 1	4	60	60	0	0	0	0	1	1			
7	200103	Scientific socialism	2	30	30	0	0	0	0	1	2			
8	200107	Ho Chi Minh Ideology	2	30	30	0	0	0	0	1	2			
9	200201	Military training (theory)	3	45	45	0	0	0	0	1	2			
10	200202	Military training (practice)	3	90	0	90	0	0	0	1	2			
11	202113	Advanced Mathematics B2	2	30	30	0	0	0	0	1	2	202112		
12	202502	Physical Education 2	1	45	0	0	45	0	0	1	2			

History of Victnamese communist party Communist party	13	213604	General English 2	3	45	45	0	0	0	0	1	2	213603	
14 20115 Communist party 2 30 30 0 0 0 0 2 1		1											213003	
15 202622 General Law 2 30 30 0 0 0 0 2 1	14	200105	communist party	2	30	30	0	0	0	0	2	1		
17	15	202121	Statistics	3	45	45	0	0	0	0		1		
18	16						0	0	_	0		1		
Total	17	207138	Technical Drawing 1		45	45	0	0	0	0		1		
Technical crawning		L	General Informatics							0	2	1		
1	Tota	al		44	795	555	150	90	0	0				
Technical drawing and perfections September Sept	Elec		ect - completed 0101 - acc		lated a	at leas	st 2 cı	redits	: 5 cı	edits				
2	1	202620		2	30	30	0	0	0	0	1	2		
2010 Electrical Engineering 2 45 15 30 0 0 0 2 1	2	205820	applications	3	60	30	30	0	0	0	2	1		
Principle of cutting wood Principle of cutting Principle of cu	3		Electrical Engineering				30	0	0	0		1		
2. Fundamental specialized knowledge Compulsory subjects 1 205540 Wood science 4 75 45 30 0 0 0 2 2 205540	-	l l	Descriptive Geometry					_		_	2	2		
Compulsory subjects 1					180	90	90	0	0	0				
1 205540				9										
2 205541 Sawing Technology 3 60 30 30 0 0 0 2 2 205540	Co	mpulsory s	subjects	1				1						
3	1	205540	Wood science	4	75	45	30	0	0	0	2	1		
Society Soci	2	205541		3	60	30	30	0	0	0	2	2	205540	
5 205609 Principle of cutting wood 2 30 30 0 0 0 2 2 6 205801 Ergonomics in Interior Design 3 60 30 30 0 0 0 2 2 7 205815 Autocad application 3 60 30 30 0 0 0 2 2 214103 8 205562 Wood Preservation Technology 3 60 30 30 0 0 0 3 1 205540 9 205988 Fundamental specialized Internship 3 135 0 0 135 0 0 3 1 205540	3	205543	technology	3	60	30	30	0	0	0		2		
Section Sect	4	205544		3	60	30	30	0	0	0	2	2	205540	
Total Design Solution Sol	5	205609	wood	2	30	30	0	0	0	0	2	2		
8 205562 Wood Preservation Technology 3 60 30 30 0 0 0 3 1 205540 9 205988 Fundamental specialized Internship 3 135 0 0 135 0 0 3 1 1 Elective subject - completed 0201 - accumulated at least 2 credits: 8 credits 1 205546 Optimization in wood processing 3 60 30 30 0 0 0 2 1 202121 2 207141 Kinematics and Kinetics of Mechanism 2 30 30 0 0 0 2 1 202121 3 205821 Interior Materials 2 30 30 0 0 0 2 2 2 4 207148 Strength of Materials 2 30 30 0 0 0 2 2 202113 5 207603 Aided Manufacturing (CAM) and Computer Numerical Control (CNC) 3	6		Design							0		2		
Society Soci	7	205815		3	60	30	30	0	0	0	2	2	214103	
Second	8	205562	Technology	3	60	30	30	0	0	0	3	1	205540	
Computer-Aided Design (CAD)/Computer-Numerical Control (CNC) CNC) CNC	9	205988		3	135				0	0	3	1		
1 205546 Optimization in wood processing 3 60 30 30 0 0 0 2 1 202121 2 207141 Kinematics and Kinetics of Mechanism 2 30 30 0 0 0 0 2 1 1 3 205821 Interior Materials 3 60 30 30 0 0 0 2 2 2 4 207148 Strength of Materials 2 30 30 0 0 0 2 2 202113 5 207603 Aided Manufacturing (CAD)/Computer-Numerical Control (CNC) 3 60 30 30 0 0 0 2 2 2 6 205831 Autocad 3D – 3D Max 3 60 30 30 0 0 0 3 1 7 207601 Machine 2 60 0 60 0 0 0 0 0	Tota	al		27	600	255	210	135	0	0				
205346 processing 3 60 30 30 0 0 0 2 1 202121	Elec	ctive subje	ect - completed 0201 - acc	cumul	lated a	at leas	st 2 cı	redits	: 8 cı	edits				
2 207141 Kinetics of Mechanism 2 30 30 0 0 0 0 2 1	1	205546	processing	3	60	30	30	0	0	0	2	1		202121
4 207148 Strength of Materials 2 30 30 0 0 0 0 2 2 202113 5 207603 Computer-Aided Design (CAD)/Computer-Aided Manufacturing (CAM) and Computer Numerical Control (CNC) 3 60 30 30 0 0 0 2 2 6 205831 Autocad 3D – 3D Max 3 60 30 30 0 0 0 3 1 7 207601 Numerical Control (CNC) Machine 2 60 0 60 0 0 0 3 1 Total 18 350 185 165 0 0 0 0	2	207141	Kinetics of Mechanism	2	30	30	0	0	0	0		1		
Computer-Aided Design (CAD)/Computer-Aided Design (CAM) and Computer Numerical Control (CNC) 6 205831 Autocad 3D – 3D Max 3 60 30 30 0 0 0 2 2 2 Operation Computer Numerical Control (CNC)	3	205821	Interior Materials	3	60	30	30	0	0	0		2		
Design (CAD)/Computer- Aided Manufacturing (CAM) and Computer Numerical Control (CNC) Autocad 3D – 3D Max 3 60 30 30 0 0 0 2 2 2	4	207148		2	30	30	0	0	0	0	2	2	202113	
6 205831 Autocad 3D – 3D Max 3 60 30 30 0 0 0 3 1 7 207601 Operation Computer Numerical Control (CNC) Machine 2 60 0 60 0 0 0 0 3 1 Total 18 350 185 165 0 0 0 0 0	5	207603	Design (CAD)/Computer- Aided Manufacturing (CAM) and Computer Numerical Control	3	60	30	30	0	0	0	2	2		
7 207601 Operation Computer Numerical Control (CNC) Machine 2 60 0 60 0 0 0 3 1 Total 18 350 185 165 0 0 0	6	205831		3	60	30	30	0	0	0	3	1		
	7		Operation Computer Numerical Control	2	60		60	0	0	0	3	1		
3. Specialized knowledge	Tota	al		18	350	185	165	0	0	0				
	3. S	pecialized	knowledge											

Con	apulsory si	ubjects											
1	205778	Enterprise Management	3	45	45	0	0	0	0	3	1		
2	205822	Structural Elements and Furniture Joints	3	60	30	30	0	0	0	3	1	205540	
3	205823	Wood products Design	4	75	45	30	0	0	0	3	1	205815	
4	205545	Wood-based board Technology	4	75	45	30	0	0	0	3	2	205544	
5	205548	Finishing Technology	3	45	45	0	0	0	0	3	2	205544	
6	205563	Furniture Processing Technology	4	75	45	30	0	0	0	3	2	205541 205543	
7	205612	Woodworking machinery	3	60	30	30	0	0	0	3	2	205540 205609	
8	205561	Specialized English	3	45	45	0	0	0	0	4	1		
9	205616	Labor safe and industrial environment protection	2	30	30	0	0	0	0	4	1		
10	205709	Product quality management	2	30	30	0	0	0	0	4	1		
11	205989	Specialized Internship	3	135	0	0	135	0	0	4	1		
Tota	ıl		34	675	390	150	135	0	0				
Elec	tive subje	ct - completed 0301 - acc	cumul	lated a	at leas	st 2 cı	edits	: 8 cr	edits				
1	205513	Forest product chemistry	2	30	30	0	0	0	0	2	2		
2	205809	Basic decoration	2	45	15	30	0	0	0	2	2		
3	205407	Non - timber Forest Products	2	30	30	0	0	0	0	3	1		
4	205557	Layout design for wood processing factory	2	45	15	30	0	0	0	3	1		
5	205808	Perspective Drawing	2	45	15	30	0	0	0	3	1	214103	
6	205774	Pulp Manufacture	4	75	45	30	0	0	0	3	2		
7	205814	Exterior design	2	45	15	30	0	0	0	3	2		
8	205824	Quantity surveying for interior projects	2	45	15	30	0	0	0	3	2		
9	205566	Startup in Forestry	2	30	30	0	0	0	0	4	1		
Tota			20	390	210	180	0	0	0				
Electiv		- completed 0302 - accur				2 cred		10 cre	dits			Ţ	
1	205906	Bachelor's Thesis	10	150	0	0	0	150	0	4	2		
2	205909	Bachelor's Essay	5	75	0	0	0	75	0	4	2		
		Total	15	225	0	0	0	225	0				

Total credits of required subjects: 105 credits Total credits of elective subjects: 31 credits (*) Conditional Study Program, Certificates will be issued upon competition Graduation Methods:

- 1. Bachelor's Thesis (10 credits)
- 2. Bachelor's Essay (5 credits) + completion of 5 credits of elective subjects



3.3 CLOs and PLOs matrix

								PLOs											
No	Course ID	Course Name	Credits		F	Knov	vledg	je					S	kill				Atti	tude
			Cr	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. G	eneral kno	owledge																	
Con	npulsory sı																		
1	200101	Philosophy of Marxism and Leninism	3	S	S	N	N	N	N	S	S	S	N	N	N	N	N	S	S
2	200102	Political economics of Marxism and Leninism	2	Н	Н	N	N	N	N	N	N	Н	S	N	N	N	N	N	S
3	202112	Advanced Mathematics B1	2	Н	S	N	N	N	N	N	N	N	N	S	N	N	N	S	S
4	202501	Physical Education 1	1	Н	Н	N	N	N	N	S	S	N	N	N	N	N	N	S	S
5	205835	Introductory forest products processing technology	3	S	S	N	N	S	S	Н	S	Н	S	N	N	N	S	Н	Н
6	213603	General English 1	4	N	N	N	N	N	N	Н	Н	Н	N	N	N	N	N	N	Н
7	200103	Scientific socialism	2	S	N	N	N	N	N	S	N	S	N	N	N	N	N	S	S
8	200107	Ho Chi Minh Ideology	2	Н	N	N	N	N	N	S	N	S	N	N	N	N	N	Н	Н
9	200201	Military training (theory)	3																
10	200202	Military training (practice)	3																
11	202113	Advanced Mathematics B2	2	Н	S	N	N	N	N	N	N	S	N	S	N	N	N	S	S
12	202502	Physical Education 2	1	Н	N	N	S	S	N	N	N	Н	N	N	N	N	N	S	S
13	213604	General English 2	3	Н	N	N	S	S	N	N	N	Н	N	N	N	N	N	S	S
14	200105	History of Vietnamese communist party	2	S	N	N	N	N	N	S	N	S	N	N	N	N	N	S	S
15	202121	Probability and Statistics	3	Н	S	N	N	N	N	N	N	S	N	S	N	N	N	S	S
16	202622	General Law	2	Н	N	N	N	N	N	N	N	S	N	S	N	N	N	S	S
17	207138	Technical Drawing 1	3	N	Н	N	N	N	N	N	N	S	N	N	N	N	N	N	S
18	214103	General Informatics	3	Н	Н	N	N	N	N	N	S	Н	N	S	N	N	N	N	N
Elec	tive subjec	ct - completed 0101 - accumu	ated	at le	ast 2	crec	lits :	5 cr	edits							<u> </u>			
1	202620	Communication skills	2	N	N	N	N	N	N	Н	N	Н	N	N	N	N	N	N	Н
2	205820	Technical drawing applications	3	S	Н	N	N	N	N	S	S	S	N	S	N	N	N	N	S
3	207109	Fundamentals of Electrical Engineering	2	S	Н	N	N	N	N	N	N	N	N	N	N	N	N	N	N
4	205810	Descriptive Geometry	2	Н	S	N	N	N	N	N	N	S	N	S	N	N	N	S	S
2. F	undamenta	al specialized knowledge		•													•		
Con	npulsory sı	ubjects																	
1	205540	Wood science	4	S	Н	Н	S	N	Н	S	S	Н	Н	S	S	N	S	Н	Н
2	205541	Sawing Technology	3	N	Н	N	Н	N	N	N	S	Н	Н	N	Н	N	N	Н	Н
3	205543	Lumber drying technology	3	S	S	N	S	S	S	S	S	Н	Н	N	Н	Н	S	Н	Н
4	205544	Wood Adhesive	3	S	Н	N	Н	N	N	N	S	S	Н	N	Н	N	N	S	Н
5	205609	Principles of cutting wood	2	S	S	N	S	Н	N	N	N	N	N	N	Н	Н	S	S	S
6	205801	Ergonomics in Interior Design	3	S	S	Н	S	S	Н	S	S	S	S	Н	S	N	Н	S	S
7	205815	Autocad application	3	N	S	Н	N	N	S	S	Н	Н	N	Н	N	Н	N	S	Н
8	205562	Wood Preservation Technology	3	N	Н	N	Н	N	S	N	N	Н	S	N	Н	Н	N	Н	Н
9	205988	Fundamental specialized Internship	3	S	Н	N	N	S	S	Н	Н	Н	Н	N	S	Н	N	Н	Н

Elec	tive subjec	ct - completed 0201 - accumul	lated	at le	ast 2	crec	lits :	8 cr	edits										
1	205546	Optimization in wood processing	3	Н	S	N	S	N	Н	S	Н	Н	N	N	S	N	N	S	S
2	207141	Kinematics and Kinetics of Mechanism	2	N	S	N	N	N	N	S	S	N	N	N	N	N	N	S	S
3	205821	Interior Materials	3	S	Н	S	N	N	S	S	S	Н	Н	S	S	N	S	S	Н
4	207148	Strength of Materials	2	N	Н	N	N	N	N	N	S	N	N	S	N	N	N	N	S
5	207603	Computer-Aided Design (CAD)/Computer-Aided Manufacturing (CAM) and Computer Numerical Control (CNC)	3	S	S	S	N	S	N	N	Н	S	N	S	Н	Н	N	N	Н
6	205831	Autocad 3D – 3D Max	3	N	N	Н	N	N	N	S	Н	Н	N	Н	N	N	N	N	Н
7	207601	Operation Computer Numerical Control (CNC) Machine	2	N	S	Н	N	N	N	N	N	S	N	S	N	S	N	N	S
3. S _]	pecialized l	knowledge																	
Con	npulsory s	ubjects																	
1	205778	Enterprise Management	3	N	N	N	N	N	Н	S	S	S	N	N	N	N	N	S	S
2	205822	Structural Elements and Furniture Joints	3	S	S	Н	S	N	N	S	S	S	N	Н	S	N	S	S	S
3	205823	Wood products Design	4	S	Н	Н	Н	S	N	S	Н	S	S	Н	Н	S	Н	S	Н
4	205545	Wood-based board Technology	4	N	S	N	Н	Н	N	S	S	Н	Н	N	Н	S	N	Н	Н
5	205548	Finishing Technology	3	N	N	S	Н	Н	N	S	N	S	S	N	Н	S	N	N	S
6	205563	Furniture Processing Technology	4	S	S	Н	Н	Н	Н	S	S	S	Н	Н	Н	Н	Н	S	S
7	205612	Woodworking machinery	3	S	S	N	S	Н	N	S	S	S	S	S	S	Н	S	S	S
8	205561	Specialized English	3	N	N	S	N	S	S	Н	Н	Н	S	N	N	N	N	N	Н
9	205616	Labor safe and industrial environment protection	2	N	N	N	N	Н	Н	S	S	Н	N	N	S	N	S	Н	Н
10	205709	Product quality management	2	S	S	N	Н	Н	Н	Н	S	Н	S	N	N	N	S	S	Н
11	205989	Specialized Internship	3	S	S	Н	Н	Н	Н	S	S	Н	Н	Н	Н	Н	S	S	Н
Elec		ct - completed 0301 - accumu																	L
1	205513	Forest product chemistry	2	N	Н	N	Н	N	S	S	S	S	Н	N	S	S	N	S	Н
2	205809	Basic decoration	2	N	S	S	N	N	N	S	S	Н	S	N	N	N	N	S	Н
3	205407	Non - timber Forest Products	2	S	S	N	N	N	N	Н	N	Н	N	N	N	N	N	Н	Н
4	205557	Layout design for wood processing factory	2	S	S	N	Н	Н	Н	Н	Н	Н	N	N	Н	N	Н	Н	Н
5	205808	Perspective Drawing	2	S	S	Н	N	N	S	Н	Н	Н	S	N	N	N	S	S	Н
6	205774	Pulp Manufacture	4	N	N	N	S	Н	N	N	N	Н	S	N	Н	N	N	S	S
7	205814	Exterior design	2	N	N	S	N	N	N	S	S	Н	N	S	N	N	N	S	S
8	205824	Quantity surveying for interior projects	2	S	S	Н	N	N	S	S	Н	Н	S	Н	N	N	N	S	S
9	205566	Startup in Forestry	2	Н	N	N	N	N	Н	Н	S	Н	N	N	N	N	Н	Н	Н
Ele		ject - completed 0302 - ac	cum	ulat	ed a	t lea	st 2	cre	dits	: 10	cre	dits							
1	205906	Bachelor's Thesis	10	S	S	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	Н	S	Н
2	205909	Bachelor's Essay	5	S	S	Н	Н	Н	Н	Н	Н	Н	Н	S	S	Н	Н	S	Н

H: Highly supportive; S: Supportive; N: Non Supportive

PART 4. BRIEF OUTLINE OF ALL COURSES IN THE PROGRAM

4.1. GENERAL COURSES

1. Philosophy of Marxism and Leninism

Code: 200101 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The basic contents of the worldview and methodology of Philosophy Marx – Lenin is summarized. Based on the objectives of this course, the content is structured into three parts with 4 chapters. The first part (one chapter) covers the basics of philosophy and the philosophical role in social life. The second part (two chapters) presents two main contents: Marxist-Leninist philosophy. The third part (one chapter) outlines the role of Marxist-Leninist philosophical in today's era.

2. Political economics of Marxism and Leninism

Code: 200102 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The concepts, categories, economic rules, methodologies of the economic thinking of Marxist-Leninist political economy are summarized. Based on the objectives of this course, the content is structured into three parts with 6 chapters. The first part (one chapter) covers the basics of political economy and its functions. The second part (three chapters) presents three main contents of Marxist-Leninist political-economic theory. The third part (two chapters) generally presents the role of Marxist-Lenin political-

economic in Vietnam.

3. Advanced Mathematics B1

Code: 202112 Credit: 02

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course of Advanced Mathematics B1 is designed to provide for students the basic knowledge of mathematical analysis. This is a branch of mathematics, which introduces students with the mathematical problems applied to the linear algebraic theory and helps students see the connection between Mathematics and Wood Processing Technology.

4. Physical education 1

Code: 202501 Credit: 1

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

This course provides for students an overview of the history of developments of sports and the Olympic, the benefits of practicing sports and the principles and methods of exercise and sports. Techniques in long-distance leaping that extend the body and running with an average distance. Tests on physical training standards are according to the regulations of the Ministry of Education and Training.

5. Introductory Forest products processing technology

Code: 205835 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides an overview about Nong Lam University and Falcuty of Forestry for freshmen getting along well with college life. This course also introduces to the students about their study program and the opportunities after graduation. The professional skills, critical thinking, and problem-solving skills are also engaged in the course.

6. General English 1

Code: 213603 Credit: 4

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

To review basic vocabulary, grammar, and practise listening/speaking skills at preintermediate level.

7. Scientific socialism

Code: 200103 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The opening section outlines the fundamental and systematic knowledge of the foundation, development stages, objects, research methods and the meaning of learning and studying scientific socialism. On that basis, students will be able to study the next categories of scientific socialism. Based on the objectives of this course, the content is structured into three parts with seven chapters. The first part (two chapters) covers the basic issues of scientific socialism and the meaning of research. The second part (three chapters) presents three main contents of scientific socialism theory. The third part (two chapters) generally presents the basic problem in the transition period to socialism.

8. Ho Chi Minh Ideology

Code: 200107 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Through this course, a basic systematic understanding of ideology, ethics and cultural values of Ho Chi Minh is provided for students. Continuing to provide basic knowledge of Marxism- Leninism philosophy, the insights on ideological bases, guiding the actions of the Party and our country's revolution are created. This contributes to building the foundation of a new morality of human: actively and proactively solving the economic, political, cultural, and social issues according to the Party and State guidelines.

9. Advanced Mathematics B2

Code: 202113 Credit: 2

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course of Advanced Mathematics B2 provides the basic knowledge of functional matrices and differential equations. The objectives of this course are to not only provide students with basic mathematical tools as background knowledge to study the technical fields but also help students apply the knowledge of this course to be able to model mathematically for basic issues related to wood processing technology. Therefore, the actual models applying the knowledge of this course are also presented.

10. Physical education 2

Code: 202502 Credit: 1

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

This course provides for students the practicing sports, the principles, and methods for doing exercise and sports. Techniques in volleyball are provided. Tests standards are according to the regulations of the Ministry of Education and Training.

11. General English 2

Code: 213604 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

Improve and complete basic grammar sections. New knowledge of exam questions, exam contents, skills for English test at the intermediate level.

12. History of Vietnamese communist party

Code: 200105 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ☑ no

Summary of course content:

The founding of the Communist Party of Vietnam; The Party's first political platform; the Party's revolutionary lines from the people's democratic revolution to the socialist revolutionary socialism.

13. Probability and Statistics

Code: 202121 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Providing knowledge of statistical theories, particularly in concepts of random unheaval, definition of statistics, statistical formulas; providing for student concepts of sampling, population, measurable parameter equations, verifying statistical hypothesis and analyzing regression correlating.

14. General Law

Code: 202622 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The State and law, simultaneously a connection with the State and law of the Socialist Republic of Vietnam.

15. Technical drawing 1

Code: 207138 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Technical drawing module 1 provides students with knowledge about representing points, lines, planes, projections of some basic geometric blocks and some common intersections in engineering; standards for the presentation of technical drawings; drawing geometry, orthogonal views, axes projections and sections.

16. General Informatics

Code: 214103 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Providing for students basic knowledge of computer science and such softwave as winword, excel and internet; helping students understand how to use computers correctly and can apply software in their learning process effectively.

17. Communication Skills

Code: 202620 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Providing and explaining to students about basic concepts of communication; skills, styles and elements to build up communication skills.

18. Technical drawing applications

Code: 205820 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

This course provides the basics of projection; method of representing geometric space by projections on projection planes and how to solve basic geometry problems on its projections; study the basic transformations in the orthogonal projection method as a basis for the establishment of technical drawings.

19. Fundamentals of Electrical Engineering

Code: 207109 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The main content of this course is to provide the basic knowledge of electrical circuits, electrical machines and their applications in electrical and mechanical equipment, as well as in the technological processes of factories, enterprises, and systems related to the field of engineering. Additionally, the general knowledge about electrical experiment practice to determine the working parameters and characteristics of electrical machines, as well as the technical knowledge about assembly, operation, and repair of electric machines are introduced in this course. Knowing, understanding, and performing experiments are to determine working parameters and characteristics of DC and AC transformers and motors in the industry. The skills of inspection, operation, repair, and assembly are formed. This course also provides knowledge of electrical safety in factories.

20. Descriptive Geometry

Code: 205810 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

This course provides students with the most general knowledge about applied geometry. The course also builds students' thinking capacity about the system of projections in technical drawings. Thereby helping students interpret and understand industry technical drawings and can develop technical drawings in furniture design.

4.2.FUNDAMENTAL SPECIALIZED COURSES

21. Wood science

Code: 205540 Credit: 4

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Providing the knowledge of anatomical characteristics of wood; Methods of observation the wood structure; The chemical properties of wood and the determination of the wood chemical compositions; The physical properties of wood and the determination of moisture content, hygroscopicity, water absorption, shrinkage and swelling ratio, density... The mechanical properties of wood and the determination of parallel compressive strength, transversal compressive strength, static bending...; The wood defects and remedies; The relationship between structure and properties of wood; The classification of wood, identification and orientation of wood use according to wood properties.

22. Sawing Technology

Code: 205541 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The Sawmill Technology module provides the technological process of sawing wood, mapping sawing, calculating the rate of timber utilization, sawing methods... Features and functions of some main equipment and auxiliary equipment in the sawmill workshop. Analysis and selection of suitable technology lines. Build a sawing map in accordance with product requirements and features and functions of each type of equipment

23. Lumber drying technology

Code: 205543 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ☑ no

Summary of course content:

The course "Lumber drying technology" equips learners with basic knowledge about principles of drying methods and operation; the effect of raw materials and drying environmental factors on the wood drying process; the sequence of steps to check dried material; how to operate equipment and how to control drying environmental factors. In addition, this subject also provides applied exercises to calculate drying environmental parameters and how to design a drying workshop in reality to serve the production process. Thereby, learners will gain basic knowledge related to wood drying and the design of wood

drying kilns.

24. Wood Adhesive

Code: 205544 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course provides students with knowledge of the basic gluing rules between glue and wood, gluing rules, glue classification, introduction of glues used in the wood industry, the factors that affect the quality of the joint, the method of processing and restoring the joint using glue. This course guides students with skills to set up the process of preparing wood glue and how to preserve wood glue after preparation

25. Principle of cutting wood

Code: 205609 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides students with theoretical knowledge of wood cutting tools, concepts of cutting tools and types of wood cutting, the forces by the cutting tool on wood, sawdust formation, the factors affecting the wood cutting process. Students are provided with skills in calculating the wood cutting schedule, setting up wood cutting process diagram, calculating the wood cutting machine capacity at the factory, operating the wood cutting process, and assessing the quality of wood products after cutting

26. Ergonomics in Interior Design

Code: 205801 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The module "Ergonomics in Interior Design" presents basic knowledge about Ergonomics application, roles of Ergonomics and related science, human physiological system, research methods Ergonomics, people and environment, Ergonomics and design Interior space, Ergonomics and furniture design, Ergonomics and home safety.

27. Autocad application

Code: 205815 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course introduces the basic knowledge of CAD technology in general and the applicability of CAD systems in the production preparation process for the Forest Product Processing industry in particular. In addition, the module also guides learners on how to apply and implement the functions of the Autocad software system in the process of product design and completion of drawings, in order to meet the needs of deploying production in reality.

28. Wood Preservation Technology

Code: 205562 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course "Wood Preservation Technology" provides students with knowledge related to wood preservation treatment: The principles of the process of wood/bamboo preservation; Wood degradation factors; The methods of treating and preserving wood without using chemicals; Treating and preserving wood with chemical methods, including chemical preservatives and wood applying methods; Wood modification methods. This course also introduces the certifications and methods for evaluating the effectiveness of wood preservation treatments.

29. Fundamental specialized Internship

Code: 205988 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course "Internship 1" equips students with the opportunity to approach and learn practically at some wood processing factories as well as the opportunity to self-study and practice more working styles and behavior in relationships. Through this internship, students also have the opportunity to review and better understand the basic knowledge of their specialization which they have learned, from the stage of round timbers to sawing stage and wood treatment stage. At the same time, this subject also helps students know the situation today of raw materials, machinery, production processes and products being produced at sawmills, drying workshops and wood treatment workshops.

30. Optimization in wood processing

Code: 205546 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The optimization module provides methods of classifying optimization problems, applying optimization problems to solve practical problems in production and business activities of wood processing companies. The optimization problem is the problem of finding extremes (maximum or minimum) of a function that has constraints on variables to find optimal plan to improve the efficiency of a production process or economic activity

31. Kinematics and Kinetics of Mechanism

Code: 207141 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

This course provides for students in wood technology the knowledge of the fabrication principles of structures, the movement of structural elements in terms of geometry and structural design methods according to given kinematic parameters; and the methods to determine the movement of the stages in the structure and machine under the external forces.

32. Interior Materials

Code: 205821 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The interior materials module presents the classification methods, properties, applications and manufacturing principles of some basic materials used in interiors, including wood, non-timber forest products, artificial boards, material for gluing surface, metal materials, glass, stone materials, ceramics, glues, paints, hardware

33. Strength of Materials

Code: 207148 Credit: 2

Summary of course content:

The main content of this course is to study the basic deformations of the bar: right compression, twisting, and bending; calculate the complex bearing forms by the method of adding effects; calculate the durability and stiffness for bars, bar system, and frames under the impact of dynamic loads; and calculate stably for the straight bar compressed at the center point.

34. Computer-Aided Design (CAD)/Computer-Aided Manufacturing (CAM) and Computer Numerical Control (CNC)

Code: 207603 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides students with basic concepts about the structure and operating principles of machining machines, under computer control. Specialized software such as CREO,

Cimatron E, aspire, CNC, Cimco... are equipped for students to program and process mechanical parts with modern CNC machine tools. Students use CAD software to design and CAM software to translate to Gcode. The results will be loaded into the CNC machine. In addition, the course provides programming, processing and operating skills on CNC milling and lathes machines for students.

35. Autocad 3D – 3D Max

Code: 205831 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides knowledge about 3ds max software for students. This software supports modeling 3D and rendering. Students of Wood Technology use 3ds max software to research, propose plans, make 3D models of furniture and interior space.

36. Operation Computer Numerical Control (CNC) Machine

Code: 207601 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ☑ no

Summary of course content:

The course provides basic knowledge about CNC overview, coordinate system on CNC machines, G, M instruction sets of CNC machines with manual programming method or automatic programming method. In addition, students are equipped with skills in writing turning and machining simulation programs on softwares: CIMCO, ssCNC, ArtCam, JdPaint; program writing and actual machining on CNC lathes FLC-20L and CNC milling MVC-955.

4.3.SPECIALIZED COURSES

37. Enterprise Management

Code: 205778 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides learners with an overview of business management, specifically basic knowledge of materials management, marketing management, human resource management, capital management, price and production costs management. On this basis, students have the basic knowledge to be able to take on leadership positions in enterprises or sales and marketing, production and human resources departments.

38. Structural Elements and Furniture Joints

Code: 205822 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The wood structures module provides a method for calculating the strength of wood product structures. Select the appropriate wood structures for the use requirements of the building such as: guaranteed durability, aesthetics, easy to process, disassemble and save materials.

39. Wood products Design

Code: 205823 Credit: 4

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The interior product design module provides the basic knowledge of wood product design, basic knowledge of structure; construction method, machining chart, technology sheet. Methodologies for product design help students orient their studies, research and professional development

40. Wood-based board Technology

Code: 205545 Credit: 4

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course "Wood Based Board Technology" provides students with knowledge about wood based board types and manufacturing technologies: Lamination wood boards and Glulam; Veneers and Plywood; Particle boards made from wood and agricultural residues; Fiberboards made from wood and non-wood fiber. This course also introduces the certifications and methods for evaluating the quality of wood based boards, the methods for determining the formaldehyde emission and the solutions to reduce the formaldehyde emission in wood based boards.

41. Finishing Technology

Code: 205548 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course focuses on the concepts and characteristics of materials used in coating wood surfaces and wood based boards, theories on surface coating methods, coating technology methods on wood surfaces, the method of coating wood based boards with veneers, the principle of operating the equipment, spraying techniques and checking the quality of the wood surface

42. Furniture Processing Technology

Code: 205563 Credit: 4

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course provides for students with general knowledge about materials in furniture production, industrial fine arts, design principles, production of wooden products, theory of furniture production technology, methods of designing and manufacturing wood products, wood product assembly techniques, bending technology, calculating wood materials, wood product costs, methods of economical using materials, designing and processing manufacture products, designing production lines, planning and organizing furniture production

43. Woodworking machinery

Code: 205612 Credit: 3

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course "Woodworking machinery" provides students with knowledge of the structure and operating principles of machinery and equipment used in the wood industry such as those in sawmills, furniture and board factories, and etc. In addition, the course also provides students with technical skills to operate, install, use, and maintain machinery and equipment to ensure occupational safety.

44. Specialized English

Code: 205561 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides for students with an overview of English terms about woodworking technology such as: wood science, principles of cutting wood, wood drying, wood preservation, furniture manufacturing technology, technology for manufacturing wood based boards and pulp, design and construction of wood working, drawing standards, wood names in English and accessories for the wood industry. Through this course students also provides with skills such as: write reports and presentations by English, look up specialized journals, scientific articles on wood and communicate with researchers, partners and foreign experts in the wood processing industry

45. Labor safe and industrial environment protection

Code: 205616 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course "Labor safety and industrial environment protection" equips learners with basic knowledge of some articles prescribed by the Law on labor safety and hygiene, techniques for safety and fire prevention in production. From this knowledge, learners can identify factors affecting working conditions and how to improve adverse working conditions to increase economic efficiency and safety for the production process.

46. Product quality management

Code: 205709 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course "Product quality management" equips learners with general knowledge of quality and product quality management, including concepts of product, quality and quality management; tools for quality management; methods of quality management as well as quality management standards. From this acquired knowledge, learners can apply it to identify, evaluate and give solutions to quality problems at the factories, consequently, helping the factories to improve operational efficiency in management, production and business.

47. Specialized Internship

Code: 205989 Credit: 3

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides students with practical knowledge in processing technology for wood products, wood product design, wood product manufacturing process, wood based board manufacturing technology, and operating machinery, setting the plan and schedule in the production of wood products at the factory. In addition, students are also provided with the skills to read drawings, evaluate product quality, design and plan the production process of wood products.

48. Forest product chemistry

Code: 205513 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides for students with knowledge about the basic principles of the types of forest materials to be extracted, extraction methods, extraction processes such as extraction of essential oils, resins, tannins, waxes, pigments etc. and wood pyrolysis process. This course also teaches students how to perform the extraction process and how to preserve essential oils, tannins, and resins after extraction in laboratories and factories.

49. Basic decoration

Code: 205809 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course is built to provide students with basic knowledge about colors, decorative motifs, arranging the layout of a basic decoration, etc. to apply them to product design, interior decoration design, etc. raise awareness of the arts.

50. Non-Timber Forest Products

Code: 205407 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Non-timber forest products are products of biological or biological origin (excluding timber and forest trees for timber purposes) found in forests and forest land and having direct value for human use. This course will provide basic knowledge about non-timber forest products for students to be able to investigate, to identify, to analyze the status of non-timber forest

products exploitation, utilization in order to contribute to the non-timber forest products development plans and strategies at different levels. Students will obtain the knowledge and skills of this course through theoretical lectures and class assignments and thematic.

51. Layout design for wood processing factory

Code: 205557 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course "Plant layout design in wood processing technology" equips learners with basic knowledge of layout design for wood processing factory, including general principles that need to be ensured when planning for survey - design, pre-design and post-design works; technological design; calculating the required energy for the needs; and principles of workshop design. Thereby, learners can know the sequence of steps to design, calculate and build a synthetic wood processing factory.

52. Perspective Drawing

Code: 205808 Credit: 2

Study conditions: prerequisite / pre-study / parallel: ✓ yes □ no

Summary of course content:

The course is built to provide students with knowledge, principles of perspective drawing, symbols and requirements on technical drawings. Draw a preliminary sketch of an interior viewport with the correct proportions and dimensions by hand-drawing methods and the application of auxiliary software such as Autocad, 3Dsmax, Sketch up... perfecting ideas and reinforcing thinking in design .

53. Pulp Manufacture

Code: 205774 Credit: 4

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

Providing the knowledge of wood processing for pulp manufacture; All main methods for pulping technology; The equipments are used in pulping lines; Introduction and determination of some important pulp properties. In addition, the course also introduces some actual pulping production lines in Vietnam.

54. Exterior design

Code: 205814 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The course provides students with a method of thinking to find ideas, steps to design an actual exterior project such as survey and assessment of the current situation; outline ideas; overall ground design, subdivisions design, miniatures, trees... In addition, the course also trains students in the skills of expressing technical drawings for exterior construction.

55. Quantity surveying for interior projects

Code: 205824 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The interior project estimating module provides the basic principles of estimating, cost estimation forms and a system of legal documents guiding the preparation of estimates on the method of calculating unit prices, norms, making estimates. An estimate is a document estimating the total amount of funds needed for the completion of a work or project

56. Startup in Forestry

Code: 205566 Credit: 2

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The "Startup in Forestry Business" module includes knowledge about career opportunities

and career ladders; competencies required for career success. In addition, this module also supports practicing self-awareness, comparing yourself with the necessary competencies for success, and knowing how to plan an effective career. An important part of the module is to provide tools for learners to create business models, analyze and compare the established business models with those in the market.

57. Bachelor's Thesis

Code: 205906 Credit: 10

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The graduation thesis course is one of two options of the group of graduated courses that learners need to complete in the industry training program. This course is done by students under the guidance of lecturers. The course result is a satisfactory thesis according to the regulations of the Faculty of Forestry and presented to the Evaluation Council to defend the research results.

58. Bachelor's Essay

Code: 205909 Credit: 5

Study conditions: prerequisite / pre-study / parallel: □ yes ✓ no

Summary of course content:

The graduation essay module is one of two options of the group of graduate courses that learners need to complete in the training program of the Forest Product Processing major. This course is done by students under the guidance of teachers. The course result is a satisfactory essay according to the regulations of the Faculty of Forestry.

TEACHING AND LEARNING METHODS

The BWT programme provides students background knowledge, the kind of critical thinking and creativity needed to address today's engineering challenges. Teaching methods depend on several factors such as the expected outcome, the time allotment, the subject matter, the equipment and facilities etc. In NLU, while the high number of students in general-course classrooms requires classic teaching methods such as top-down lectures, presentation and/or class discussion. The lower number of students in fundamental and specialized courses allows lectures to apply 'student-centered' perceptive. By this way, FF students can lead their own way in learning and be more active to participate in group discussion or project designs relating to their study.

The main teaching and learning methods here are:

1. Lectures

Lectures deliver information, ideas and theories to a large number of students. A lecture is normally a presentation or demonstration designed to give students an overview of a topic. Students can develop content synthesis and note-taking skills through this teaching method.





2. Group discussion/debate

Students are divided into small groups which work together to answer the questions had been raised at the beginning of each course. The group discussion and debate help not only the learners getting into the subject but also enhancing their brainstorming ability and critical thinking.









3. Laboratory and practical learning

Learning by doing is an essential part of courses in BWT programme. Our aim is to give students an insight of subject methodology and materials in laboratory and in working place. Students may be asked to work as an individual or a pair or a small group. For most courses where the incorporated practical element is available, students would be required to submit the experimental results which will account for some parts of overall result.













4. Learning through research

This method provides students the chance to be involved in scientific research which has an impact beyond the degree. By doing this, students can have the analytical skills helping them taking the next step their academic careers or study.





5. Internship

Internships are 9-day compulsory courses in BWT programme carried at FF's partnership companies. Similar to laboratory and practical work, internship is to provide real-world experience that enables students to put everything they have learned into action. An internship can help you gain skills that can be applied to future jobs.



6. Projects

Projects are designed for teaching specialized courses which required insight knowledge of academic fields. This method provides students skills and techniques working as a researcher including setting up experiments with the appropriate methods, collecting and analyzing data, reporting and presenting the result, etc. This method would build the foundation for students pursuing their academic careers.

Students design wood models with supporting from lecturers. The products show the diligence, creativity and ingenuity of student groups in working together. Not only is practice models simple but also complex models which helps students to develop their skills and experiences in teamwork, those will help them to find good jobs after graduation.



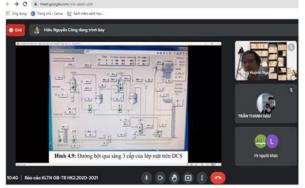




7. Online Learning

Zoom platform, Google Meet and Microsoft Team platform had been used for virtual classrooms during online learning due to the COVID19 pandemic. Lectures would provide students online materials including electronic papers or relevant audio and virtual lessons.





8. Fieldtrip

Since the second semester of first year in BWT programme, students are organized to visit wood processing factories or international fairs of furniture and wood machinery in one or two-day trips. The trips would help them learn more about what they had been studying and the lasted technology in wood processing production. This would inspire them in career orientation and arouse their interests in learning process.









PROFESSIONAL SEMINAR AND ENGAGEMENT WOLD OF WORK

Professional Seminars

These sessions are often led by lecturers or guest speakers. The goal is to promote open discussion about specific topics or theories. The guest speakers were invited from selective alumni and/or personnel of FF' partnership companies who would share their experience and update student the new advanced technology in particular subject. Students can link the study to practices with active questioning during the sessions.













Engagement of World of Work (WoW)

Students have opportunities to approach WoW not only at the early stage (at the first and second academic year) but also during all the time of the training program. FF has established long-term cooperation with companies, associations which mainly focus in timber and wood processing field by signing Memorandum of Understanding (MoU). These MoUs guarantee the engagement of WoW in training students through activities such as supporting scholarships, fieldtrips, internships and the priority in recruitment.

On April 5th 2019, Assoc. Dr. Pham Ngoc Nam - Former Dean of the FF had a meeting and signed a MoU between BIFA (Binh Duong Woodworking Association) and Nong Lam University HCMC.

In addition, the NLU signed the MoU with the Handicraft and Wood Industry Association Ho Chi Minh City (HAWA).









LIST OF SOME PARTNERS

No.	NAME OF PARTNERS	
1	Handicraft and Wood Industry Association of Ho Chi Minh City (HAWA)	HAWA
2	Binh Duong Furniture Association (BIFA)	BIFA BIN TOOK FURNISHE MISCANDO
3	Dong Nai Wood & Handicraft Association (DOWA)	TOGETHER WE GROW!
4	The Forest Products Association of Binh Dinh (FPA Binh Đinh)	FPA BINHDINH
5	Timber Phoenix Company Limited	IMBER PHOENI
6	Anh Khoa wood company limited	CIV THE
7	Truong Thanh Furniture Corporation	TTF®
8	Kim Tin Group	KIMTIN
9	Tavico Wood	TAVICO
10	Loc Troi Group	LOCTROI
11	Dong Hoa wood processing one member company limited	Vielan Ribber Group RUBICO
12	Sadaco Binh Duong furniture company	Sapago
13	Minh duong Furniture	
14	El Mondo Co.,Ltd	S
15	Tien Trien Viet Nam co., ltd	TIENTEEN INDOOR FURNITURE Alandrag manufacture of said vood furniture

16	TTT Corporation	
17	Lam Viet Furniture	
18	Khoa Lam furniture co., ltd	
19	Nghia Son Wooden Furniture Co., Ltd	NGHIA SON FURNITURE
20	Tuong Van wood processing one member limited company	TUONG WAN FURNITURE Quality concomitance
21	AAH Corporation	A A H
22	Công ty Đại Thuận	DAIFUCO
1 72	Hoang Chau plywood trading production corporation	INCOMP TALE
24	Van Hue furniture import export joint stock company	

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ACADEMIC STAFF AND SUPPORT STAFF

Position/Title	Name	Contact	Research field
Dean	Dr. Tang Thi Kim Hong	tangkimhong@hcmuaf.edu.vn	Research on processing, preserving and modifying wood/bamboo in environmentally friendly methods. Artificial board manufacture from wood, bamboo, argriculture and forestry residue.
Vice Dean	Dr. Nguyen Minh Canh	nmcanh@hcmuaf.edu.vn	Forest structure; Forest Biodiversity; Forest growth and increment; Forest valuation.
Vice Dean	Dr. Truong Van Vinh	tvvinh@hcmuaf.edu.vn	Climate change, Carbon stock, CO2 emission, Mangrove Forest.

Department of Wood and Paper Technology

Position/Title	Name	Contact	Research field
Head of the Department	Dr. Tang Thi Kim Hong	tangkimhong@hcmuaf.edu.vn	Research on processing, preserving and modifying wood/bamboo in environmentally friendly methods. Artificial board manufacture from wood, bamboo, argriculture and forestry residue.
Vice Head of Department	MSc. Dang Thi Thanh Nhan	dangthanhnhan@hcmuaf.edu.vn	Research on pulping technology, additives in pulping to increase the pulp yield and pulp properties, the recycling technology for packaging paper from recovered paper
Lecturer	Dr. Hoang Thi Thanh Huong	htthuong@hcmuaf.edu.vn	Research on wood materials and products, wood modification technology, wood drying treatment, bamboo processing technology, research on new materials
Lecturer	MSc. Nguyen Thi Anh Nguyet	nguyet.nguyenthianh@hcmuaf.edu.vn	Research on characteristics, wood identification and wood use orientation

Lecturer	MSc. Bui Thi Thien Kim	thienkim@hcmuaf.edu.vn	Research on: technology, engineering, woodworking and manufacturing, technical drawing, wood adhesive and wood chemistry
Lecturer	MSc. Le Thanh Thuy	lethanhthuy@hcmuaf.edu.vn	Reseach on wood denaturation technology
Lecturer	MSc. Tran Thi Hien	hien.tranthi@hcmuaf.edu.vn	Business administration and Business management
Lecturer	MSc. Le Tieu Anh Thu	thu.letieuanh@hcmuaf.edu.vn	Additives in papermaking and paper properties
Lecturer	MSc.Huynh Ngoc Hung	hung.huynhngoc@hcmuaf.edu.vn	Machines and equipments in pulp and paper lines
Lecturer	MSc. Nguyen Duy Linh	nguyenduylinh@hcmuaf.edu.vn	Research on Artificial board manufacture from wood, bamboo, argriculture and forestry residue; Machines and equipments in pulp and paper lines.

Department of Furniture Design and Interior

Position/Title	Name	Contact	Research field
Vice Head of Department	MSc. Hoang Van Hoa	hoangvanhoa@hcmuaf.edu.vn	Wood modification technology, wood drying treatment
Lecturer	Assoc.Prof. Pham Ngoc Nam	drpnnam@hcmuaf.edu.vn	Research on the use of wood, wood material, design furniture
Lecturer	Dr. Nguyen Le Hong Thuy	lehongthuynguyen@hcmuaf.edu.vn	Structural timber engineering, Life-cycle analysis of wood products and Circular economy in wood products
Lecturer	MSc. Dang Minh Hai	haidang@hcmuaf.edu.vn	New material, ergonomics in furniture design
Lecturer	MSc. Le Quang Nghia	lqnghia@hcmuaf.edu.vn	Furniture design, Interior and exterior decoration design

Department of Resources Management and Forest Environment

Position/Title	Name	Contact	Research field
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Lecturer	Assoc.Prof. Vien Ngoc Nam	vnnam@hcmuaf.edu.vn	Forest Biodiversity, mangrove ecosystem, Carbon Measure and monitoring of forest, Payment Environmental Forest Services, Remote sensing in forest management, GIS in forest management, Apply informatic in bio statistic
Lecturer	MSc. Mac Van Cham	macvancham@hcmuaf.edu.vn	Growth and yield of plantations; Forestry laws and policies; Sustainable forest resources management; Forest certification; Propagation and growth of plants.
Lecturer	Dr. Truong Van Vinh	tvvinh@hcmuaf.edu.vn	Climate change, Carbon stock, CO2 emission, Mangrove Forest.
Lecturer	MSc. Nguyen Thi Kieu Nuong	ntknuong@hcmuaf.edu.vn	Wildlife, Biodiversity, Land use Management, Mangrove Forest

Department of Silviculture and Agroforestry

Position/Title	Name	Contact	Research field
Head of the Department	Dr. Phan Minh Xuan	pmxuan@hcmuaf.edu.vn	Forest tree classification, Forest Biodiversity, Forest science.
Lecturer	MSc. Nguyen Quoc Binh	ngquocbinh@hcmuaf.edu.vn	Researching and developing in indigenous plants in the economic development of the households, the small and medium farms. Studying in forest tree species was used for landscaping and decoration, Researching on community-based natural resource management issues; Participating in the development of adaptive technology for natural resource management and the development of forest resource comanagement systems. Applying GIS technology in participatical land-used management.

Lecturer	MSc. Tran The Phong	tranthephong@hcmuaf.edu.vn	Forest tree nursery, Forest tree plantation, Urban forestry.
Lecturer	Dr. Pham Thanh Hai	pthai@hcmuaf.edu.vn	Forest Soils and Site, Forest Ecology, Forest tree propagation, English in Forestry. Forest and Environment.
Lecturer	MSc. Nguyen Thi Minh Hai	minhhai@hcmuaf.edu.vn	Silviculture; Plant breeding techniques.

Department of Urban Forestry

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Lecturer	Dr. Ho Le Tuan	hltuan@hcmuaf.edu.vn	Tree ecophysiology Tree-ring studies Plant tissue culture propagation
Lecturer	Phan Van Trong	trong.phanvan@hcmuaf.edu.vn	Nursery technology

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