



**MINISTRY OF EDUCATION & TRAINING
CAN THO UNIVERSITY**

Programme Specification

(2019 – 2023)

**PROGRAMME:
BACHELOR OF ENGINEERING
IN FOOD TECHNOLOGY**

College of Agriculture

July 2021

**MINISTRY OF EDUCATION TRAINING
CAN THO UNIVERSITY**

**Programme Specification
(2019 - 2023)**

**PROGRAMME: BACHELOR OF ENGINEERING
IN FOOD TECHNOLOGY**

Degree: Engineer

Programme code: 7540101

Programme: Bachelor of Engineering in Food Technology

College: College of Agriculture

Credits: 150

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Part 1: General information of the programme

1.1 General information

GENERAL INFORMATION OF THE PROGRAMME

Programme title:	Bachelor of Engineering in Food Technology (BEFT) (Code: 7540101)
Awarding institution	Can Tho University
Degree	Bachelor of Engineering in Food Technology
Mode of training	Full-time, regular
Training time	4.5 years (maximum 9 years)
Admission criteria	<p>High school graduates must pass the National High School Graduation Examination which is held by MOET around end of June every year.</p> <p style="text-align: center;">+</p> <p>They must have the total score of groups of subjects equal or higher than the admission scores by CTU based on the admission quota of MOET.</p> <p>Those groups of subjects are: (1) Mathematics, Physics, and Chemistry (group A00); (2) Mathematics, Chemistry, Biology, Physics (group B00); (3) Mathematics, Chemistry, English (group D07); (4) Mathematics, Physics, English</p>
Credits	150 credits (103 compulsory and 47 elective)

1.2 Benchmarking statements

- BEFT of the University of Agriculture and Forestry in Ho Chi Minh City (accredited according to the AUN-QA);
- BEFT of Ho Chi Minh City University of Technology (accredited according to the AUN-QA, HCERES);
- BEFT of Can Tho University (CTU) (internally accredited according to the AUN-QA)

1.3 Programme quality accreditation information

The programme was internally accredited in 2018.

Part 2: Program objectives (POs) and Expected Learning Outcomes (PLOs)

2.1 Program objectives

To train engineers with solid theoretical knowledge and practical skills in the field of food processing. To train engineers with ability to adapt to work changes; have political and professional ethics, adapt to market access, team working and lifelong learning skills in order to meet the self-improvement requirements of learners, the requirements of serving the national socio-economic development and regional and international integration.

Specific Programme Objectives (POs):

- a. To train students with sufficient knowledge, practical capacity, career commitment, political ethics, social responsibility and skills to support the continuous professional development, contributing to the sustainable development of food processing and quality management in modern, safe and effective way.
- b. To equip students with professional knowledge and skills to promptly identify and solve the requirements of businesses (factories, enterprises) in the field of food processing.
- c. To train students with ability to approach market needs, research, acquire and implement new technologies to improve productivity and quality of food products.
- d. To train students with effective teamwork skills and self-study skills to improve their specialised knowledge in food technology and its closely related fields.

2.2 Expected Learning Outcomes (PLOs)

Upon completion of the BEFT, students demonstrate a mastery of knowledge, skills, autonomy and responsibility as follows:

2.2.1 Knowledge

2.2.1.1 General knowledge

a Apply general knowledge of Marxism-Leninism, general law, social sciences and humanities; incorporate this knowledge with natural science knowledge to study issues in food technology.

b Demonstrate basic knowledge of English and information technology to meet the requirements at work, in research and communication.

2.2.1.2 Fundamental knowledge

a. Demonstrate an understanding of the structure and operating principles of basic machinery and equipment in food processing technology to operate, troubleshoot, and improve machine performance.

b. Demonstrate the mastery of knowledge about scientific research organisation, experiment arrangement, data processing, research skills and and scientific research methodology.

2.2.1.3 Specialised knowledge

a. Master changes in the production process in order to explain the mechanisms of physical, chemical and microbiological changes of food during processing and preservation.

b. Exhibit systematic and modern knowledge of FT; understanding of contemporary issues such as climate change, the relationship between food and the environment.

c. Apply supplementary knowledge in career development, adapt to diverse job duties in scientific institutions, production management enterprises or self-employed businesses in food processing.

2.2.2 Skills

2.2.2.1 Specialised skills

a. Demonstrate the development in professional skills such as analysing and evaluating product quality, processing food to ensure food quality and safety.

b. Proficiently use laboratory equipment and tools in scientific research and production practices.

2.2.2.2 Transferable Skills

a . Organise experiments scientifically, collect and process data and present experiment results.

b .Exhibit the following skills: communication, self-study and teamwork.

2.2.3. Attitudes, Autonomy and Responsibility

a. Demonstrate autonomy, confidence and a sense of lifelong learning, activeness to improve professional qualifications in learning, research and application of specialised knowledge in FT.

b. Demonstrate the professional ethics, good sense responsibility and discipline at work as well as civic duties.

Table 1. Alignment between POs and PLOs of the BEFT Programme

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

1	x					x	x					x	x
2			x		x		x	x	x				
3		x		x	x	x		x					
4		x		x	x			x		x	x		

Note:

x is the correlation between the POs and PLOs.

	General knowledge
	Fundamental knowledge
	Specialised knowledge

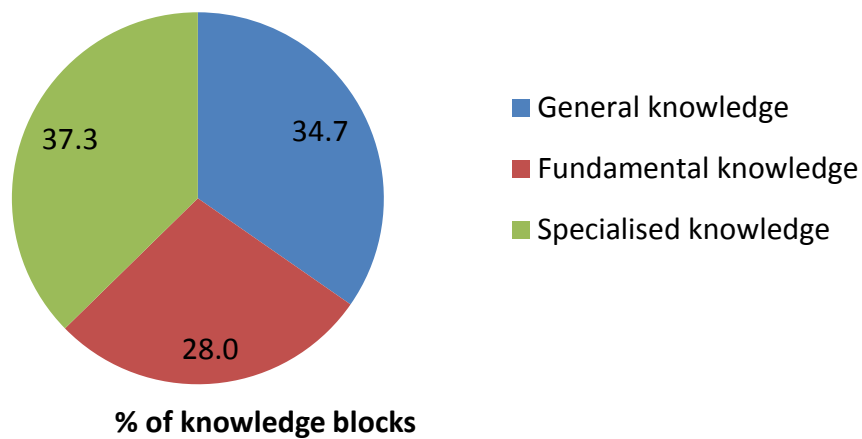
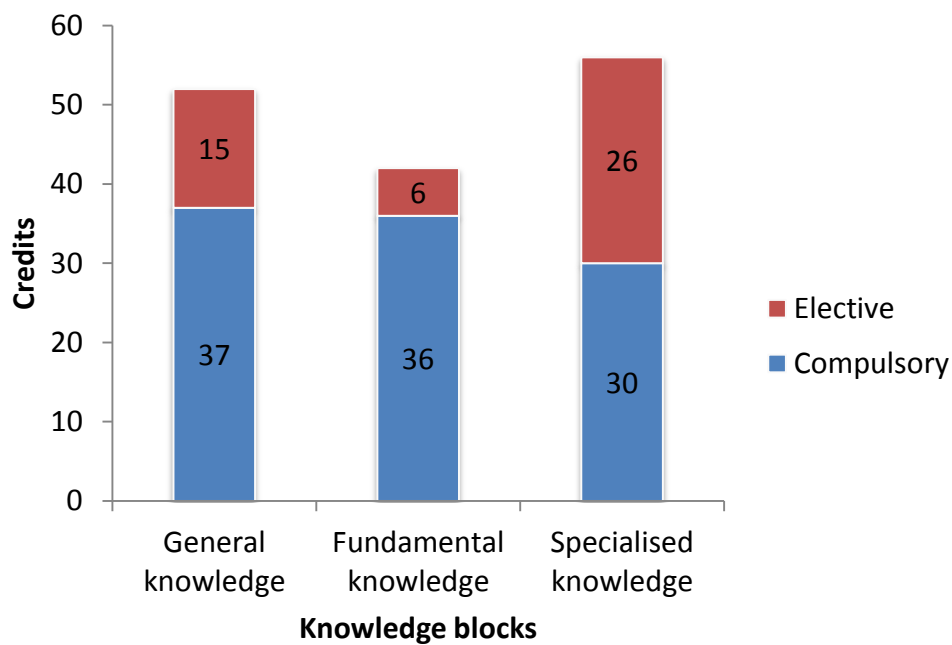
	Hard Skills
	Transferable Skills
	Attitudes, Autonomy, Responsibility

Part 3: Programme Structure and Curriculum

3.1 Programme Structure

Table 1: Programme workload

Knowledge blocks	Compulsory	Elective	Credits	%
General knowledge	37	15	52	34.7
Fundamental knowledge	36	6	42	28
Specialised knowledge	30	26	56	37.3
Total	103	47	150	100



CURRICULUM MAP

CURRICULUM MAP										
YEAR 1			YEAR 2			YEAR 3		YEAR 4		YEAR 5
SEMESTER 1	SEMESTER 2	SUMMER 1	SEMESTER 1	SEMESTER 2	SUMMER 2	SEMESTER 1	SEMESTER 2	SEMESTER 1	SEMESTER 2	SEMESTER 1
Marxist-Leninist Philosophy [ML014]	National Defence and Security Education 1 (*) [DP0101]	Excursion [NS287]	Scientific Socialism [ML018]	Technical Drawing [NN155]	Fundamental in Food Processing - in factory [NN206]	Safety and Pollution in Food Processing	History of the Communist Party of Vietnam	Ho Chi Minh Ideology [ML021]	Fundamental Food Technology in Food	Graduation Thesis [NS503]
Advanced Mathematics B [TN059]	National Defence and Security Education 2 (*) [DP0111]		Basic Logic [ML007]	General Microbiology [CS112]		Specialised English for Food Processing	Food Chemistry [NS318]	Sensory Evaluation and Consumer Research [NS248]	Fruit and Vegetable Processing	Graduation Project [NS427]
General Chemistry [TN039]	National Defence and Security Education 3 (*) [DP0121]		Vietnamese Culture [XH011]	Microbiology Practical [CS113]		Food Processing Machinery	Food Bioprocess Engineering [NS114]	Food Management - Food Law [NS328]	Cereal Processing Technology [NS393]	Functional Foods [NS335]
Experiment on General Chemistry [TN020]	Marxist-Leninist Political Economy		Overview of sociology [XH028]	Physical Education 2(*) [TC004]		Principle of Water Supply and Waste	Applied Informatics - Food	Academic Career Activity [NS275]	Technology of Meat and	New Food Development [NS336]
General Physics [TN048]	General Law [KL001]		Vietnamese in use [XH012]	Material and Energy Balances [NS112]		Food Additives [NN151]	Physical Properties of	Food supply chain management [NS269]	Fish and Fisheries Technology	Fat and Oil Technology [NS333]
Fundamental Physics Practice [TN049]	Basic Informatics [TN033]		General Management Documents and	Heat Transfer in		Food Packaging [NN226]	Food Additives [NN151]	Quality Management [KT345]	Milk and Dairy Product Technology [NN217]	Management and Utilisation of Co-products in Food Processing
	Experiment on Basic Informatics [TN034]		Transferrable skills [KN001]	Mass Transfer		Physical Education 3(*) [TC019]	General English 3 (*) [XH025]	Specialized training for food	Technology of Wine, Beer and Beverage [NS244]	Traditional Food Processing [NN225]
	General Analytical Chemistry		Entrepreneurship and Innovation	Fluid mechanics in food technology		General English 2 (*) [XH024]	Case Study in Unit Operation in Food	Practising Basic Techniques of Food	Technology of Sugar - Biscuits	Food Canning Technology [NS240]
	Fundamental General Analytical Chemistry		General English 1 (*) [XH023]	Physical Education 1(*) [TC003]		Unit Operation in Food Processing - in laboratory	Research Methodology in Food Science and Technology	Human Nutrition [NN207]	Tea, Coffee, Cocoa: Production	Post harvest Technology of Cereals [NS223]
			Physical Chemical Processes in Food	Thermodynamic Engineering			Statistics Methods and		Fundamental In Food Technology	
		Electrical Engineering	Biochemistry B [NN123]							
			Fundamental Biochemistry B							
			Physical Chemical Processes in Food							
			Electrical Engineering							

Note: Cells with coloured background are elective courses; Cells without color background are compulsory courses

3.2 Programme Specification

3.2.1 Curriculum

No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester		
General knowledge												
1	QP006	National Defence and Security Education 1 (*)	2	2		30				Divided by specialised sub-group		
2	QP007	National Defence and Security Education 2 (*)	2	2		30				Divided by specialised sub-group		
3	QP008	National Defence and Security Education 3 (*)	3	3		20	65			Divided by specialised sub-group		
4	QP009	National Defence and Security Education 4 (*)	1	1		10	10			Divided by specialised sub-group		
5	TC100	Physical Education 1+2+3 (*)	1+1+1		3		90			I, II, III		
6	XH023	General English 1 (*)	4	EN	10 credit s; EN or FR	60				I, II, III		
7	XH024	General English 2 (*)	3			45		XH023		I, II, III		
8	XH025	General English 3 (*)	3			45		XH024		I, II, III		
9	XH031	Level B2 English 1 (*)	4			60		XH025		I, II, III		
10	XH032	Level B2 English 2 (*)	3			45		XH031		I, II, III		
11	XH033	Level B2 English 3 (*)	3			45		XH032		I, II, III		
12	FL001	General French 1 (*)	4			FR	FR	60				I, II, III
13	FL002	General French 2 (*)	3					45		FL001		I, II, III
14	FL003	General French 3 (*)	3					45		FL002		I, II, III
15	FL007	Intensive French 1 (*)	4					60		FL003		I, II, III
16	FL008	Intensive French 2 (*)	3	45				FL007		I, II, III		
17	FL009	Intensive French 3 (*)	3	45				FL008		I, II, III		
18	TN033	Basic Informatics (*)	1	1				15				I, II, III
19	TN034	Experiment on Basic Informatics in	2	2			60		TN033	I, II, III		

No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester
		Labs (*)								
20	ML014	Marxist - Leninist Philosophy	3	3		45				I, II, III
21	ML016	Marxist - Leninist Political Economy	2	2		30		ML014		I, II, III
22	ML018	Scientific Socialism	2	2		30		ML016		I, II, III
23	ML019	History of the Communist Party of Vietnam	2	2		30		ML018		I, II, III
24	ML021	Ho Chi Minh Ideology	2	2		30		ML019		I, II, III
25	KL001	General Law	2	2		30				I, II, III
26	ML007	Basic Logic	2		2	30				I, II, III
27	XH028	Overview of Sociology	2			30				I, II, III
28	XH011	Vietnamese Culture	2			30				I, II, III
29	XH012	Vietnamese in use	2			30				I, II, III
30	XH014	General Management Documents and Archives	2			30				I, II, III
31	KN001	Transferable Skills	2			20	20			I, II, III
32	KN002	Entrepreneurship and Innovation	2		20	20			I, II, III	
33	TN059	Advanced Mathematics B	3	3		45				I, II, III
34	TN048	General Physics	3	3		45				I, II, III
35	TN049	Fundamental Physics Practice	1	1			30			I, II, III
36	TN039	General Chemistry	2	2		30				I, II, III
37	TN020	Fundamental Chemistry Laboratory	1	1			30			I, II, III
38	TN023	General Analytical Chemistry	2	2		30				I, II, III
39	TN024	Practice General Analytical Chemistry	1	1			30			I, II, III
Total: 52 credits (Compulsory: 37 credits; Elective: 15 credits)										
Fundamental knowledge										
40	NS287	Excursion	2	2			60			I, II, III
41	NN123	Biochemistry B	2	2		30				I, II

No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester
42	NN124	Experiment on Biochemistry	1	1			30			I, II
43	CS112	General Microbiology	3	3		45	0			I, II
44	CS113	Microbiology Practical	1	1			30			I, II
45	NS231	Physical Chemical Processes in Food Technology	3	3		30	30			I, II
46	NS250	Electrical Engineering	2	2		20	20			I, II
47	NS109	Fluid mechanics in food technology	2	2		30				I, II
48	NS292	Heat Transfer in Food Processing	2	2		30		NN125		I, II
49	NS291	Mass Transfer	2	2		30			NS112	I, II
50	NS112	Material and Energy Balances	2	2		20	20	NN125		I, II
51	NS113	Unit Operation in Food Processing _ in laboratory	2	2			60		NS109, NS292, NS291	I, II
52	NN206	Unit Operation in Food Processing _ in factory	2	2			60	NS291, NS292		I, II
53	NN153	Statistics Methods and Experimental Design in Food Technology	2	2		20	20			I, II
54	NN125	Thermodynamic Engineering	2	2		20	20			I, II
55	NN155	Technical Drawing	2	2		20	20			I, II
56	NN164	Case Study in Unit Operation in Food Processing	2	2			60	NS109, NS291, NS292, NS112,		I, II
57	NN165	Research Methodology in Food	2	2		20	20		NN153	I, II

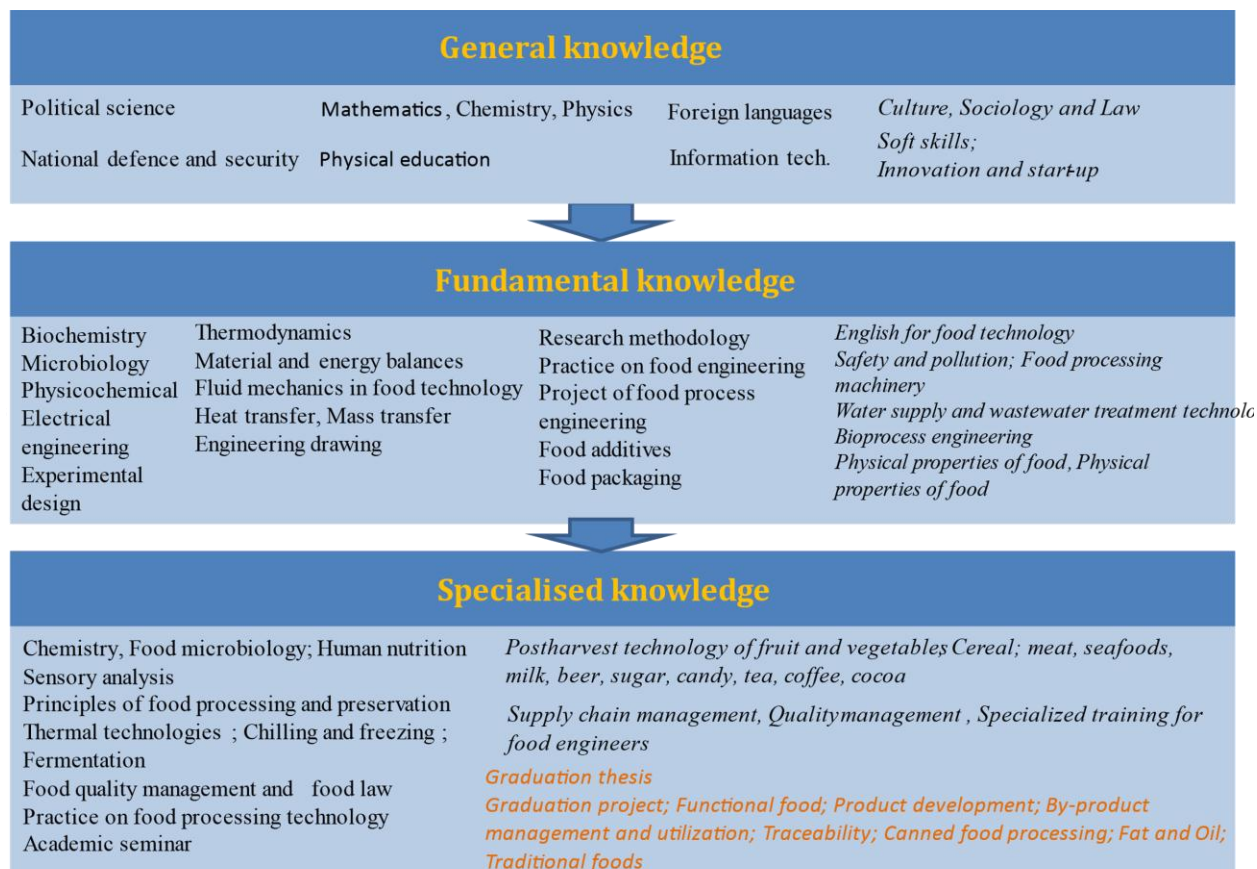
No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester
		Science and Technology								
58	NN158	Specialised English for Food Processing	2		6	30				I, II
59	NN208	Food Processing Machinery	2			30				I, II
60	NS114	Food Bioprocess Engineering	2			30				I, II
61	NN166	Safety and Pollution in Food Processing	2			30				I, II
62	NN167	Principle of Water Supply and Waste Water Treatment	2			30				I, II
63	NN157	Applied Informatics _ Food Technology	2			15	30			I, II
64	NN152	Physical Properties of Food	2			20	20			I, II
65	NN151	Food Additives	2			30				I, II
66	NN226	Food Packaging	2		30				I, II	
Total: 42 credits (Compulsory: 36 credits; Elective: 6 credits)										
Specialised knowledge										
67	NS275	Career Academic Activity	2	2			60			I, II
68	NS318	Food Chemistry	3	3		30	30			I, II
69	NS319	Food Microbiology	2	2		20	20			I, II
70	NN180	Principles and Food Preservation and Processing	2	2		30				I, II
71	NS248	Sensory Evaluation and Consumer Research	2	2		20	20			I, II
72	NS323	Thermal Engineering in Food Processing	2	2		30				I, II
73	NS324	Chilling and Freezing of Food	2	2		30				I, II
74	NS326	Food Fermentation Techniques	2	2		30				I, II

No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester
75	NS440	Practising Basic Techniques of Food Processing	3	3			90		NS323, NS324, NS326	I, II
76	NN207	Human Nutrition	2	2		30		NS318		I, II
77	NS328	Food Management - Food Law	2	2		30				I, II
78	NN213	Experiment on Practising on Food Technology in Factory	3	3			90	NS328		III
79	NN214	Laboratory Manual in Food Technology	3	3			90			I, II
80	NS239	Fruit and Vegetable Processing	2		10	30			NN214	I, II
81	NS393	Cereal Processing Technology	2			30			NN214	I, II
82	NS331	Technology of Meat and Poultry	2			30			NN214	I, II
83	NN219	Fish and Fisheries Technology	2			30			NN214	I, II
84	NN217	Milk and Dairy Product Technology	2			30			NN214	I, II
85	NS244	Technology of Wine, Beer and Beverage	2			30			NN214	I, II
86	NS330	Technology of Sugar and Biscuits Processing	2			30			NN214	I, II
87	NN296	Tea, Coffee, Cocoa: Production and Processing Technology	2			30			NN214	I, II
88	NS269	Food supply chain management	2		2	30				I, II
89	KT345	Quality Management	2			30				I, II
90	NS247	Specialized training for food engineers	2			30				I, II
91	NS503	Graduation Thesis	14		14		420	>120T C		I, II
92	NS427	Graduation Project	6				180	>120T C		I, II

No	Course code	Course name	Credits	Compulsory	Elective	Theory hour	Practice hour	Prerequisite	Corequisite	Semester
93	NS335	Functional Foods	2			30				I, II
94	NS336	New Food Development	2			30				I, II
95	NS333	Fat and Oil Technology	2			30				I, II
96	NS339	Management and Utilisation of Co-products in Food Processing	2			30				I, II
97	NS341	Food Traceability	2			30				I, II
98	NN225	Traditional Food Processing	2			30				I, II
99	NS240	Food Canning Technology	2			30				I, II
100	NS223	Post harvest Technology of Cereals	2			30				I, II
Total: 56 credits (Compulsory: 30 credits; Elective: 26 credits)										
Total: 150 credits (Compulsory: 103 credits; Elective: 47 credits)										

(*): conditional courses, pass required but not included in GPA. Students must pass the exams of National Defence Education, Physical Education and English (or French) as specified by CTU. Students can complete the above courses by submitting certificates according to CTU's regulations or cumulative study.

3.1.2 Distribution of Knowledge Blocks



Overview Distribution of Knowledge Blocks

Note: Elective courses are italic; graduation courses are italic and coloured.

Part 4: Brief outline of all courses in the programme

Table 2: Brief outline of all courses in the programme

No	Course code	Course name	Credits	Brief description of the course	Administration unit
1	QP006	National Defence and Security Education 1	2	This course presents the Party's basic theory of the military policy, including: the basic issues Marxist-Leninist Theory, Ho Chi Minh's thought on war, the army and the defense of the country; Party's views on the people war, building the armed forces, the all-people defense, the people's security; the Party's views on combining socio-economic development with strengthening national defense and security. In addition, the course introduces some basic contents about the history of Vietnamese military art through the periods	Center for National Defence Education
2	QP007	National Defence and Security Education 2	2	This course presents the basic contents of the defence and security tasks of the Party and State in the new situation, including: building the militia, self-defence, mobilization reserve force; increasing the potentials of national defence and technical and material foundations; defeating the strategy of "peaceful evolution", and riot to overthrow hostile forces toward the Vietnamese revolution. The course addresses a number of issues of ethnicity, religion and the fight against the enemies who take advantage of issues of ethnicity and religion to fight the Vietnamese revolution, building and protecting border sovereignty, sovereignty over islands, national security, fighting crime prevention and maintaining social order and safety, combating non-traditional security threats in Vietnam.	Center for National Defence Education
3	QP008	National Defence and Security Education 3	3	The course provides theory combined with practice to provide students with some basic skills to practice shooting with pistols, basic knowledge of maps, military terrain, and combat against the enemies with a weapon. high-tech gas, forging bravery and health through military content, training for class and block formation. The contents of the course include the followings: unit team (platoon level); training combat skills; commanding combat units; combat synergies in attack and defence	Center for National Defence Education
4	QP009	National Defence and Security Education 4	1	The course introduces the history, traditions of the army, the army, the organization of the forces of the army, visiting to learn the history, units in the armed forces.	Center for National Defence Education

No	Course code	Course name	Credits	Brief description of the course	Administration unit
5	TC100	Physical Education 1+2+3	1+1+1	Physical Education 1+2+3 (*) is a general course that represents the Physical Education courses. All students who are not majoring in Physical Education must study these courses to complete the curriculum of their majors. To complete the Physical Education courses, the students do not register for course TC100, instead, students must register for each specific course depending on their ability and desire to learn. For example, if a student wants to learn Taekwondo, they register for the following 3 modules: Taekwondo 1 (TC003), Taekwondo 2 (TC004) and Taekwondo 3 (TC019). The other Physical Education courses are the same	Physical Education
6	XH023	General English 1	4	This course provides students with common English vocabulary for basic communication, focusing on topics such as introduction to personal information, family, residence, and daily life items, sports, free time activities, basic shopping, eating habits, food, festivals, culture and facilities. In addition to developing the ability to communicate some basic communication situations in English on these topics, the course also aims to develop foreign language skills at level 2 for students according to the 6-level Foreign Language Proficiency Framework applied for Vietnam)	School of Foreign Languages
7	XH024	General English 2	3	This course provides students with common English vocabulary for basic communication, focusing on topics such as introduction to travel, fashion, art and the environment. In addition to developing the ability to communicate some basic communication situations in English on these topics. The course also aims to develop foreign language skills at level 2 for students according to the 6-level Foreign Language Proficiency Framework applied for Vietnam.	School of Foreign Languages
8	XH025	General English 3	3	This course reviews common English words in basic communication, focusing on topics such as introduction to personal information, family, residence, daily life items, technology equipment, sports, free time activities, festivals, basic shopping, learning, etc. In addition to developing the ability to communicate some basic communication situations in English on these topics, the course also aims to develop foreign language skills at level 3 for students according to the 6-level Foreign Language Proficiency Framework applied for Vietnam.	School of Foreign Languages

No	Course code	Course name	Credits	Brief description of the course	Administration unit
9	XH031	Intensive English 1	4	This course (in the English Intensive Programme 1-3) provides students with English knowledge and the opportunity to practice the skills needed to suit the requirements of international communication competency in common situations. The course presents the following principles and characteristics: (1) towards developing competency-based learning; (2) integrated and blended learning method; (3) promote self-study (promoting learner independence in learning); (4) learning by interaction and by doing; (5) purposeful learning; and (6) flexibility. In addition to developing the ability to communicate and use language, the course also aims to support students to reach level B1 (level 3) in the 6-level Foreign Language Proficiency Framework applied for Vietnam (through VSTEP exam).	School of Foreign Languages
10	XH032	Intensive English 2	3		
11	XH033	Intensive English 3	3		
12	FL001	General French 1	4	The course aims to help students to communicate in daily life, such as introducing themselves, family, talking about habits, interests, getting to know and referring someone, talking and writing about hours in the usual and administrative ways, etc. In addition, knowledge of the language and French culture is also incorporated into the course content. Through this course, the students will be familiar with the pronunciation, intonation, alphabet of French, know how to conjugate verbs of group I, group II and some verbs of group III at present, write a simple sentence numbers, etc.	School of Foreign Languages
13	FL002	General French 2	3	This course provides students with basic knowledge of grammar, phonetics, vocabulary, ... of French. It aims at developing students' communication in daily life such as asking for information, explaining, accepting invitations or refusing, talking about their working day, talking about future plans... The students will be familiar with how to make questions with complex French pronouns, know how to conjugate group I, group II verbs and some group III verbs in the imperative form, know directions, locate in the space, etc. In addition, knowledge of French language and culture is also incorporated into the course content	School of Foreign Languages

No	Course code	Course name	Credits	Brief description of the course	Administration unit
14	FL003	General French 3	3	<p>The course aims to help students communicate in daily life such as discussing holidays, New Year, food, describing people, objects, clothes, expressing their choices, and quantity, introducing family members, retelling a story of the past, etc. In this course, the students are introduced to texts of 100 words or more, long dialogues, writing paragraphs of about 100 words and writing letters. The students can apply their knowledge of grammar in their writing such as noun matching, adjective conjugation, past tense conjugation, past tense combination, etc. The Basic French Course 3 is divided into 3 major parts: Part 1 will introduce French life, activities and entertainment; Part 2 will discuss social relationships and symbols of France; Part 3 will introduce students to how to describe future plans.</p>	School of Foreign Languages
15	FL007	Intensive French 1	4	<p>The course aims to help students communicate in daily life such as introducing family members, getting to know someone, narrating daily activities, describing people and places, and comparing quantity or quality, etc. In this course, students are acquainted with reading passages of about 200 words, writing short passages of about 80-100 words. Especially at the end of each unit, there will be exercises for students to practice skills to take the Delf B1 exam. In addition, students can apply knowledge of grammar in their writing such as coordinating nouns, adjectives, conjugating verbs in the future, past tense, coordinating tenses in the present tense. the past tense... French Intensive Course 1 is divided into 3 main parts: Part 1 is about family and daily activities, part 2 is about social and cultural life and the characteristics and habits of the French, part 3 is about life and the discovery of tourist cities of France.</p>	School of Foreign Languages

No	Course code	Course name	Credits	Brief description of the course	Administration unit
16	FL008	Intensive French 2	3	This course provides non-French majors with knowledge about communication situations in daily life such as health, work, free time, etc. Also, students get acquainted with reading passages of 250 words, write paragraphs of about 100-140 words Especially at the end of each unit, there will be exercises for students to practice skills to take the Delf B1 exam. In addition, students can apply knowledge of grammar in their writing such as coordinating nouns, adjectives, conjugating verbs in the future, past tense, coordinating tenses in the present tense. the past tense... French Intensive Course 2 is divided into 3 main parts: Part 1 is about health and life; Part 2 is about work and labor market of the French; Part 3 is about free time and activities of the French.	School of Foreign Languages
17	FL009	Intensive French 3	3	This course provides non-French majors with knowledge about communication situations in daily life about media, communication on social networks, travel, discovery, memories... in the course. In this course, students are familiar with the course about 300 words, write paragraphs about 140-180 words. Especially at the end of each unit, there will be exercises for students to practice skills to take the Delf B1 exam. In addition, students can apply knowledge of grammar in their writing such as coordinating nouns, adjectives, conjugating verbs in the future, past tense, coordinating tenses in the present tense. the past tense... French Intensive Course 2 is divided into 3 main parts: Part 1 is about media and social networks, Part 2 is about French travel and discovery, and Part 3 is about social issues and habits of the French.	School of Foreign Languages
18	TN033	Basic Informatics	1	This course provides students with basic theoretical knowledge of information technology: information concepts, general structure of computers, the Windows operating system, commands and operations to edit documents using Microsoft Word, processing spreadsheets using Microsoft Excel, creating and presenting reports on computers using Microsoft PowerPoint and the Internet; and using emails.	College of Information and Communication Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
19	TN034	Fundamental Basic Informatics	2	The course helps students to apply the theory of basic Informatics they have learned by practicing operations on computers. Students can practice skills: Using the Windows operating system, editing documents with the Microsoft Word, processing spreadsheets with Microsoft Excel, presenting reports with Microsoft Powerpoint, using the Internet and emails. In the practical part, skills in writing scientific reports and skills in composing presentations on multimedia projectors are also integrated.	College of Information and Communication Technology
20	ML014	Marxist–Leninist Philosophy	2	This course provides students with basic and intensive knowledge of Marxist-Leninist philosophy including: philosophy and the role of philosophy in social life, dialectical materialism, materialism and consciousness, classes, nations, states and social revolutions, social consciousness, philosophy about human beings	College of Political Science
21	ML016	Marxist–Leninist Political Economy	2	This course provides students with the basic and intensive knowledge of Marxist-Leninist political economy, including: subjects, research methods and functions of Mac Leninist political economy, commodities, markets, and the role of entities when participating the market, surplus value in a market economy, competition and monopoly; socialist-oriented market economy and economic relations in Vietnam.	College of Political Science
22	ML018	Scientific Socialism	2	This course provides students with the knowledge of the general theories of socialism and practice in the construction course of socialism in our country today. The course content mainly focuses on several issues such as: the birth and development of scientific socialism; the historic mission o the birth and development of scientific socialism; the historic mission of the working class, socialism and the transition to socialism; socialist democracy and a socialist state; alliances of class, class; ethnicity, religion issues; the family problem in the transition to socialism.	College of Political Science

No	Course code	Course name	Credits	Brief description of the course	Administration unit
23	ML019	History of the Communist Party of Vietnam	2	This course provides students with an understanding of the object, purpose, mission, methods of researching and learning Party history and the basic, core, systematic knowledge about the Party's birth (1920-1930); the Party's leadership to guide people to struggle for power (1930-1945); two resistance wars against French colonialists and American imperialists, national liberation and reunification (1945-1975); Party's leading the country in the transition to socialism and carrying out the "Doi Moi" (1975-2018). Thereby, the course can help improve their awareness and belief in the Party and the ability to apply their knowledge into working practice, contributing to the construction and defense of the Socialist Vietnamese Fatherland	College of Political Science
24	ML021	Ho Chi Minh Ideology	2	Together with Marxist-Leninist Philosophy, Marxist-Leninist Political Economy, Scientific Socialism, History of the Communist Party of Vietnam, this course creates an understanding of the ideological foundation, the guideline for the Party's actions and our country's revolution. It continues to provide basic knowledge about Marxism-Leninism, contributing to building a new human moral foundation. The course consists of 6 chapters, which present the basic contents of Ho Chi Minh's Thought according to the objectives of the module, providing a systematic understanding of Ho Chi Minh's ideology, morality and values.	College of Political Science
25	KL001	General Law	2	This course is designed to teach non-majored students. It introduces the basic theoretical issues of the Marxist-Leninist doctrine of the state and the law from the origin, nature, form, function as well as the types of state and the law that have formed, existed and developed through different socio-economic forms in human history. In addition, the course also includes the study of the position of the state in the political system, the composition of the state apparatus, the systems of state agencies It also introduces the position of the State in the political system, constitution of the State apparatus, the systems of State agencies, the legal provisions on many issues such as basic rights and obligations of citizens, crimes, violations of administrative law, legal provisions on marriage, divorce, inheritance...	School of Law

No	Course code	Course name	Credits	Brief description of the course	Administration unit
26	ML007	Basic Logic	2	This course provides the knowledge of formal logic; rules and requirements of the basic laws of thought such as the law of identity, the law of excluded middle, the law of non-contradiction, and the law of sufficient reason. The course also introduces basic forms of thinking such as concepts, judge, deductive, hypothesis, proving, refuting and sophistication	College of Political Science
27	XH028	Overview of Sociology	2	The course provides the law, the regularity of formation, movement, changing relationships, interactions between people and society. The course focuses on social relationships, social interactions manifested through human-to-person behaviours in groups, organizations and social systems	School of Social Sciences and Humanities
28	XH011	Vietnamese Culture	2	The course content is presented in 5 chapters, covering from theory to practice. In Chapter 1, after introducing necessary scientific concepts and terminology (culture, cultural studies, cultural processes, cultural exchange, cultural acculturation, etc.), it presents the types of Vietnamese culture. Chapters 2, 3 and 4 present knowledge about the valuable aspects of culture and their rich and varied manifestations in the material and spiritual life of Vietnamese people. Chapter 5 focuses on discovering characteristics of the national culture and future.	School of Social Sciences and Humanities
29	XH012	Vietnamese in use	2	The course is designed into 4 chapters. Each chapter consists of two main parts which are interwoven: theory and practice exercises. Chapter 1 focuses on writing and spelling. Chapter 2 focuses on practicing word skills. Chapter 3 teaches students about sentences. Chapter 4 trains students' skills in creating and using texts.	School of Social Sciences and Humanities
30	XH014	General Management Documents and Archives	2	This course provides students with theoretical and practical knowledge about management documents and archives, ways to realize the role of administrative documents and archival documents for management activities. It also offers solid knowledge about methods of scientific drafting and management of main and archived documents, methods of sorting and classifying documents for archive, knowing how to search and use archives.	School of Social Sciences and Humanities

No	Course code	Course name	Credits	Brief description of the course	Administration unit
31	KN001	Transferable Skills	2	The course provides basic knowledge and instructions to train the necessary skills for learners: communication skills, general principles of communication; effective listening, speaking, and presentation skills; teamwork skills to ensure good cooperation in learning and working; creative thinking skills; time management skills and emotional management skills.	Center for Student Consultancy and Start-up
32	KN002	Entrepreneurship and Innovation	2	The course focuses on the general knowledge of creativity, innovation and conceptualization for entrepreneurship, choosing the type of business ownership, basic understanding of intellectual property rights. In addition, students are also provided with basic knowledge and skills about the market such as assessment of strengths, opportunities, threats, risks of product commercialization from business ideas, discovery of potential businesses and planning for start-up. More importantly, the students can share their start-up experiences from successful entrepreneurs and/or visit a successful start-up model	Center for Student Consultancy and Start-up
33	TN059	Advanced Mathematics B	3	The course introduces basic knowledge of advanced mathematics such as systems of linear, limit, continuous equations, derivatives, and integrals of functions of one and multi-variables.	College of Natural Sciences

No	Course code	Course name	Credits	Brief description of the course	Administration unit
34	TN048	General Physics	3	The 13-chapter course introduces students with the concepts of particle kinetics and motion patterns of particles. Basic laws of particle dynamics, forces in mechanics. Conservation laws. Motion patterns of solid bodies, basic equations of motion of the system of points and solids. Concepts, theorems and conservation laws of momentum, angular momentum, mechanical energy and Huygen's theorem about moments of inertia. Concepts, continuity equations, fundamental equations of motion of ideal fluids, Bernoulli's law, Pascal's principle, and internal friction. Types of mechanical oscillations, synthesis and analysis of vibrations, interference and far-field disturbances of mechanical waves, Huygen's principle, Doppler effect... Molecular kinetic theory, ideal gas equations of state, phenomena surface tension, basic principles of thermodynamics the formation of electric fields, magnetic fields, interference, diffraction, and the like; fundamental laws and characteristic quantities in electromagnetics and wave optics; properties of conductors, dielectrics, magnetic materials, and lights in the medium. Radioactivity, fission, fusion and applications. Thereby, students are able to understand and explain related natural phenomena, and construction and operation principles of electrical, magnetic, and optical equipment. Moreover, it is one of the basic contents that helps engineering students to study fundamental and specialised courses well.	College of Natural Sciences
35	TN049	Experiment on General Physics	1	This course consists of 6 practical exercises: Exercise 1: the use of basic measuring instruments to measure some simple shaped objects. Exercises 2, 3, 4, 5 and 6: the verification of the laws of conservation of mechanics, the numerical determination of physical quantities, and the investigation of phenomena related to heat and optics.	College of Natural Sciences
36	TN039	Chemistry Laboratory	2	The course provides students with the most basic knowledge of chemistry such as: conditions for a chemical reaction to take place, reaction rate, stoichiometry, solution concentration, calculate pH of acidic solution, strong base, weak base, pH of salt solution, buffer solution, reaction oxidation-reduction, electrochemistry and electrolysis.	College of Natural Sciences

No	Course code	Course name	Credits	Brief description of the course	Administration unit
37	TN020	Experiment on Chemistry Laboratory	1	The course provides students with the most basic knowledge about Chemistry through Chemical experiments: reaction speed, chemical balance, solution concentration, calculate the pH of the solution, electrochemical battery, electrolysis, metal corrosion... It helps students to continue learning basic fundamentals of chemistry such as inorganic chemistry, organic chemistry, analytical chemistry, and physical chemistry, as well as applying this knowledge to chemistry-related disciplines.	College of Natural Sciences
38	TN023	General Analytical Chemistry	2	This course provides basic knowledge of principles in analytical chemistry, ways to calculate ionic balance in solution as: acid-base balance, redox balance, sparingly soluble balance, complexing balance, and distributional balance. The theory of quantitative analysis presents the basis of the methods of quantitative analysis such as: volumetric analysis and gravimetric methods. In addition, it presents the statistical processing of experimental data, methods of collecting and processing samples.	College of Natural Sciences
39	TN024	Experiment on General Analytical Chemistry	1	The course introduces students to common chemical analysis methods and operations such as: Analyze mass, analyze volume, know how to use tools and equipment in the laboratory proficiently.	College of Natural Sciences
40	NS287	Excursion	2	The course equips students with practical knowledge about the actual operations and management methods of the production process of food products. The course provides an objective view of the current situation of food production in the Mekong Delta and in the whole country. Thereby, students can have a good career orientation during the internship and directly participate in the food processing field later. It also helps students to be able to work in groups effectively along with problem-solving skills in front of crowds and to be able to analyze things in positive ways. It helps students to develop problem solving skills , honesty and cooperation in work.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
41	NN123	Biochemistry B	2	This course provides students with : history of biochemistry, the development and application of biochemistry in all areas of life; - understanding of the physical, chemical, biological properties, roles and applications of compounds that make up the organism such as carbohydrates, lipids, amino acids, proteins, vitamins, enzymes, nucleic acids; - understanding of the basic biochemical analysis methods for determining the chemical composition of living things; - application of the basic concepts of metabolism, the transformation of structural materials in the organism; - determination of energy requirements, decomposition and energy generation from nutritional components essential for living organisms.	College of Agriculture
42	NN124	Experiment on Biochemistry	1	In this course, students: - Reinforce the knowledge of biochemistry learned in the theoretical part. - master basic biochemical analysis methods for analyzing the chemical composition of nutrients in living organisms such as qualitative and quantitative carbohydrates, basic indexes in lipids, and qualitative analysis. and quantification of amino acids, proteins and some vitamins, experiments on extraction of phospholipid compounds, enzymes, and research on factors affecting enzyme-catalysed reactions in order to equip foundational knowledge for research advanced in bioengineering.	College of Agriculture
43	CS112	General Microbiology	3	This course provides students with knowledge about the functional structure of protozoan and eukaryotic groups. Microbial growth and environmental factors affect microbial growth. Specific procedures used in the microbiology laboratory such as the use of microscopes and laboratory instruments, staining methods, and sterilization methods. Metabolic cycles and microbial genetics	Biotechnology Research and Development Institute

No	Course code	Course name	Credits	Brief description of the course	Administration unit
44	CS113	Practical General Microbiology	1	The course provides students with the fundamentals of working in a microbiology laboratory, become familiar with basic microbiology laboratory equipment, and know how to use it. In addition, it helps students to know how to perform the most basic techniques such as: Prepare culture media for organisms, observe and identify typical groups of microorganisms. Perform microbial staining techniques (single staining, double staining, spore staining). Perform the technique of culture transfer and pure isolation of a microorganism. Carry out sizing and counting of microorganisms. Identify microorganisms in common food samples (vinegar, wine, yogurt).	Biotechnology Research and Development Institute
45	NS231	Physical Chemical Processes in Food Technology	3	The course provides students with basic physicochemical knowledge closely related to food technology including chemical kinetics, electrochemical properties, surface phenomena and colloidal properties as well as their application in practice.	College of Agriculture - Department of Food Technology
46	NS230	Electrical Engineering	2	The course provides students with basic knowledge including 3 parts: electrical circuits and electrical safety; power tools and electrical equipment and power supply for small projects.	College of Engineering Technology
47	NS109	Fluid mechanics in food technology	2	The course provides knowledge related to the transportation of liquids and bulk materials to help students calculate, select the right equipment for the production line and manage production activities at the factory effectively.	College of Agriculture - Department of Food Technology
48	NS292	Heat Transfer in Food Processing	2	The course provides students with an overview of heat transfer and the basics of heat transfer in food, and the basic forms of heat transfer (heat conduction, thermal convection and thermal radiation). It also provides knowledge about stable heat transfer, unstable heat transfer and phase change heat transfer. It highlights the application of heat transfer in basic processing processes such as heating, cooling, condensation, pasteurization (sterilization) and food concentration.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
49	NS291	Mass Transfer	2	The course provides the concept of mass transfer, overviews the basic mass transfer processes applied in food preservation and processing, presents the mechanism of molecular movement from one phase to another. (diffusion) and the phase balance of multicomponent systems. It also covers the following contents: Theory and calculation methods of mass transfer (diffusion) processes and devices are based on phase balance such as distillation processes (liquid-vapour balance), liquid extraction (liquid-vapour equilibrium) liquid), extraction process, osmosis process (liquid-solid balance), drying process (solid-vapour balance).	College of Agriculture - Department of Food Technology
50	NS112	Material and Energy Balances	2	This course provides knowledge about quantities commonly used in the calculation of heat transfer, mass transfer, and fluid mechanics. It focuses on the calculation method of the above-mentioned technical processes in food processing on the basis of the laws of conservation of matter and the law of conservation of energy.	College of Agriculture - Department of Food Technology
51	NS113	Unit Operation in Food Processing _ in laboratory	2	This course includes 12 practical exercises with 3 main parts, related to 3 basic processes in food technology, including heat transfer, fluid mechanics and mass transfer with applications in food technology. These exercises help students understand and apply theoretical knowledge to calculate and control corresponding processes and equipment.	College of Agriculture - Department of Food Technology
52	NN206	Unit Operation in Food Processing _ in laboratory	2	Students take this course after completing the theoretical ones on generalization of matter and energy, heat transfer, mass transfer, fluid mechanics, and bulk materials. During fieldtrips to factories, students learn issues related to processes and equipment such as structure, operating principles, technical parameters in equipment operation, and other factors affecting the processes occurring in the device.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
53	NN153	Statistics Methods and Experimental Design in Food Technology	2	This course provides students with theoretical and practical knowledge, including key contents such as basic concepts of variable forms and probability distribution functions, statistical hypothesis testing methods, model analysis, and statistical analysis. description, regression analysis, analysis of variance, methods of experimental design and sample size estimation required for the study, how to collect, analyze and interpret results from the collected data. Students apply the knowledge learnt in this course in specialized research in the field of food technology.	College of Agriculture - Department of Food Technology
54	NN125	Thermodynamic Engineering	2	This course introduces the energy required for engineering processes and life. This is a necessary part of the technical training programme of most countries around the world. The course content covers problems related to the units and dimensions that underlie engineering calculations. It also deals with the properties of water and phase transitions; properties of moist air and the fundamental processes involved in forms of heat energy as well as air conditioning processes. Most importantly, the two basic laws of thermodynamics that underlie technical equipment and power systems in processing plants are also introduced in detail. In food preservation and processing as well as in a number of other related industries such as seafood processing, post-harvest technology, chemical technology, these thermodynamic processes are applied.	
55	NN155	Technical Drawing	2	This course provides students with the basic knowledge of projection methods to produce a technical drawing in accordance with applicable national standards. The skill of reading and understanding drawings as well as expressing details by drawings is indispensable for students of food technology.	College of Agriculture - Department of Food Technology
56	NN164	Case Study in Unit Operation in Food Processing	2	One of the duties of a food technologist is to design the necessary equipment in food production. This course equips students with calculation skills and presents calculation results with detailed drawings of equipment structure to be designed. Calculation results and detailed drawings must be reported and evaluated through a expert panel.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
57	NN165	Research Methodology in Food Science and Technology	2	The course is designed to train students' creative thinking while helping them gain understanding and step-by-step approach to scientific research. It also equips students with knowledge, cultivate skills and orient the right attitude to help learners organize well scientific research activities, write and present scientific reports according to international standards.	College of Agriculture - Department of Food Technology
58	NN158	English specialised for Food Technology	2	This course provides students with the method and ability to read, understand, translate and present in specialized English related to knowledge of food nutrition composition, food safety and hygiene, processing technologies. food, food processing techniques, food preservation techniques GMP, SSOP, HACCP	College of Agriculture - Department of Food Technology
59	NS208	Food Processing Machinery	2	This course provides students with basic knowledge about the structure and operating principles of machines commonly used in food processing.	College of Agriculture - Department of Food Technology
60	NS114	Food Bioprocess Engineering	2	This course introduces the basic content in the application of bioengineering in food, which is enzyme kinetics, cell dynamics and related issues. Engineering of food biological processes includes parts of biological processes. The course also introduces two basic applications of biotechnology in food, enzymes and fermentation techniques. In each technique, the issues highlighted include: basic dynamics, production conditions, recall techniques and their application in food.	College of Agriculture - Department of Food Technology
61	NN166	Safety and Pollution in Food Processing	2	This course focuses on the most important aspects of safety and contamination in food production. The first part is an overview of pollutants and techniques to prevent occupational accidents and diseases in the workplace. The second part includes an overview of food contamination such as microbiological, chemical and physical infections. The course also introduces different methods to control food safety in the production chain. It guides students to analyze the practical aspects of the problem, as well as the causes and effects of microbiological, chemical or physical contamination in a particular food product.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
62	NN167	Principle of Water Supply and Waste Water Treatment	2	The course consists of 6 chapters, introducing issues of water supply and wastewater treatment in daily life and in the field of Food Processing and Post-Harvest Technology. The water supply section will refer to the types of water sources; composition and properties of natural water sources; water treatment schemes for domestic use and in food processing plants, which emphasize water treatment processes to ensure water quality standards in domestic and production. The wastewater section presents the general problems of wastewater, wastewater treatment methods and steps to select and design wastewater treatment technology.	College of Agriculture - Department of Food Technology
63	NN157	Applied Informatics _ Food Technology	2	The course introduces powerful tools to calculate the processes involved in the preservation and processing of food: Calculations related to the growth and destruction of microorganisms, calculations related to water activity, calculations of heat transfer processes, heat processing, fluid transport systems as well as engineering Calculating parameters in white box and black box models helps to effectively control food production and preservation activities.	College of Agriculture - Department of Food Technology
64	NN152	Physical Properties of Food	2	This course provides understanding of food physical properties: water activity, thermal properties, optical properties, mechanical properties.... methods to determine physical properties and their application in: Evaluation, designing products, developing products, developing preservation regimes and controlling food quality	College of Agriculture - Department of Food Technology
65	NN151	Food Additives	2	This course provides students with knowledge about classification, physicochemical properties and the role of food additives; health aspects and principles of using food additives; preservatives and their effect on food preservation; lipid antioxidants and their impact in the preservation of fatty foods; colloids, emulsifiers, surfactants, cleaning and sanitizing agents and their roles; sugar-free sweeteners, natural and synthetic colors and flavors; enzymes and their role in the food processing industry. It also provides information on safety and permissible dosages when using food additives.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
66	NN226	Food Packaging	2	This course introduces the science and technology of post-harvest packaging and transportation of agricultural products applied in the country and around the world. It also equips students with knowledge about packaging materials, food packaging techniques, packaging technology for some food products, packaging modeling for fresh products and other issues. for packaging.	College of Agriculture - Department of Food Technology
67	NS275	Career Academic Activity	2	Academic activity is a topic with the participation of many speakers: Experienced lecturers from Food Technology, foreign professors working in the field of food, speakers from food factories and companies that have applied automation to the production process. The course provides students with the knowledge and practical requirements to apply cutting-edge technology to the food industry. After that, students synthesize information and write reports.	College of Agriculture - Department of Food Technology
68	NS318	Food Chemistry	3	This course provides students with an overview of the ingredients that make up foods, their basic structures, functions, and properties. It consists of 4 chapters, corresponding to 4 main ingredients in food: water, carbohydrates, proteins, lipids. The content mainly covers the structure, physical and chemical properties, interaction and reactivity of these ingredients in food, as well as variation during food processing and preservation.	College of Agriculture - Department of Food Technology
69	NS319	Food Microbiology	2	The course introduces food microbiome and the sources of foodborne pathogens, the changes that microbiome can cause in the food (beneficial and harmful), an introduction to some applications of microbiome in food processing and preservation, the spoilage types of some common foods due to microbiome and the harmful effects of these spoilage on the health of consumers.	College of Agriculture - Department of Food Technology
70	NN180	Principles and Food Preservation and Processing	2	This course provides an overview of spoilage factors in processing and storage; the chemical composition, self-antibiotics and natural antioxidants in food affect the quality and preservation; principles that limit food exposure to spoilage and pathogenic factors (i), processing and preservation technologies that slow food spoilage (ii) and processing destroy the factors causing spoilage and disease of food (iii).	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
71	NS248	Sensory Evaluation and Consumer Research	2	This course provides students with the scientific basis of sensory assessment, sensory evaluation methods; distinguish the applicable conditions and the relationship between sensory quality analysis of food and investigation of consumer tastes as well as between sensory analysis and food quality classification. It also introduces conditions, methods of training and testing sensory thresholds; practice collecting and processing data of food sensory evaluation results	College of Agriculture - Department of Food Technology
72	NS323	Thermal Engineering in Food Processing	2	The course provides students with an overview of food heat processing methods and basic knowledge of heat transfer as well as the kinetics of heat processing. It also provides knowledge about the sterilization/purification process and processing criteria. It focuses on the heat permeability when handling different types of food and how to determine the parameters of the pasteurization (sterilization) process. Moreover, it provides knowledge on optimizing food quality assurance after heat treatment and has applicability to real heat processing conditions.	College of Agriculture - Department of Food Technology
73	NS324	Chilling and Freezing of Food	2	The course provides students with the necessary knowledge related to the field of low-temperature processing. The content mainly deals with the refrigeration and cooling system and the changes of food in cold storage, the theory of food freezing and related technological issues, the method of thawing food after storage. crowded and possible changes.	College of Agriculture - Department of Food Technology
74	NS326	Food Fermentation Techniques	2	The course provides students with basic and advanced technical knowledge of the main fermentation techniques applied in food and related products; biochemical changes, main fermentation technology, product recovery and preservation techniques, kinetics of fermentation processes are covered; as a basis for development.	College of Agriculture - Department of Food Technology
75	NS440	Practising Basic Techniques of Food Processing	3	This course includes 12 practical exercises related to high-temperature food processing, low-temperature processing, and food fermentation techniques.	College of Agriculture - Department of Food Technology
76	NN207	Human Nutrition	2	This course introduces the macro and micronutrients in food and their function in human health. In addition, it provides students with knowledge about the nature of the process of digestion and absorption of nutrients, the process of generating energy for the body. In addition, diseases related to diet and lifestyle are also discussed.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
77	NS328	Food Management - Food Law	2	This course equips students with relevant knowledge about food safety and quality management as well as the provisions of law (national and international) on food. The main content includes: (1) Introduction to regulations and requirements in processing, storage and transportation (2) Knowledge and relationship between food quality and safety (3) Hazards (chemical, biological, allergens and physical) causing food insecurity (4) Management systems to ensure food safety and quality such as HACCP, ISO, BRC, IFS, GlobalGAP.	College of Agriculture - Department of Food Technology
78	NN213	Practising on Food Technology in Factory	2	Students take this course after completing theoretical modules specialized in Food Technology. The content of the module is mainly an internship off campus. Students can access food processing technologies in production facilities and factories (for domestic trade or export). Under the guidance of lecturers, students apply theoretical knowledge learned at school and combine practical knowledge imparted by people working directly at production units to enhance comprehensive knowledge of domestic food production practices. At the end of the internship, students synthesize practical knowledge, combined with theory to write a report on the activities they have visited and studied. The results of the report will be evaluated by a panel of lecturers participating in teaching and guiding practice.	College of Agriculture - Department of Food Technology
79	NN214	Practising on Food Technology in Laboratory	3	The course provides students with knowledge and practical skills in laboratories as well as experimental workshops, including main contents such as criteria for classifying raw materials, methods of evaluating raw material quality, and treatment measures, material management, processing and preservation techniques for foods made from the following main groups of food ingredients: vegetables; cattle and poultry meat; Seafood; eggs, milk; food grains and legumes.	College of Agriculture - Department of Food Technology
80	NS239	Fruit and Vegetable Processing	2	This course provides students with an overview of fruits and vegetables, their physiological and biochemical properties, sensory and taste properties, nutrition, chemical properties, genetic engineering and microbiology. In addition, It covers the following contents: fruit and vegetable processing technology and technology and product and plant safety issues, including microbiological safety, GAP and GMP, and HACCP related to fruit and vegetable processing technology.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
81	NS393	Cereal Processing Technology	2	The course introduces the processes that make grains into convenient and nutritious products including techniques for processing common types of food products from cereals such as starch, parboiled rice, rice noodles, instant noodles, bread, breakfast cereals, etc. and discuss quality standards, as well as product preservation.	College of Agriculture - Department of Food Technology
82	NS331	Technology of Meat and Poultry	2	The course provides basic knowledge about the slaughtering process of livestock and poultry, for use as raw materials for processing, the stages of meat transformation after slaughter, processing methods and meat preservation, and some meat product processing processes.	College of Agriculture - Department of Food Technology
83	NN219	Fish and Fisheries Technology	2	This course introduces these contents: raw materials, chemical composition and changes of aquatic animals after death, seafood preservation techniques including fresh and frozen preservation of aquatic materials and common seafood processing technologies in Vietnam: Fish sauce processing technology, processing technology of dried, smoked, canned and surimi products.	College of Agriculture - Department of Food Technology
84	NN217	Milk and Dairy Product Technology	2	This course introduces the importance, consumption capacity as well as the current demand at home and abroad for dairy materials. It equips students with the basic knowledge about the composition, the important properties of milk as a basis for the next processing process. It also introduces methods to assess and maintain the quality of raw milk, and cover technical issues in the processing of dairy products. The course also provides knowledge about the processing of dairy products, the variations in each process and measures to ensure quality for dairy products.	College of Agriculture - Department of Food Technology
85	NS244	Technology of Wine, Beer and Beverage	2	This course provides students with knowledge about beer production technology (1), wine production technology (2) and beverage production technology (3). It also provides knowledge about the causes of spoilage and deterioration of products as well as how to control the quality of beer, wine and beverage products.	College of Agriculture - Department of Food Technology
86	NS330	Technology of Sugar and Biscuits Processing	2	The course introduces methods to evaluate the quality of raw cane, cleaning technology and cooking techniques, methods of drying and preserving finished sugar; and the requirements for ingredients, additives, the role of the main stages in the confectionery production process.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
87	NN296	Tea, Coffee, Cocoa: Production and Processing Technology	2	This course provides students with basic knowledge about: - the characteristics of tea, coffee and cocoa materials; technological processes for processing tea, coffee and cocoa products; - the characteristics of raw materials, the required criteria for each material for each specific product as well as the purpose, transformations, equipment of each process in a processing process and product quality standards. - Standards, quality assessment of these products according to domestic and international regulations. Based on this knowledge, students study, research and can formulate ideas and develop new products. The course also helps students form a scientific way of thinking about how to set up a process technology when assigned to a specific food ingredient and requirements for the finished product.	College of Agriculture - Department of Food Technology
88	NS269	Food supply chain management	2	This course provides background knowledge on agro-food value chain, including the characteristics of the agriculture of the analyzed countries and the proposed models of rational development of Vietnam's agriculture; Logistics activities in the distribution chain and how to connect stakeholders throughout the chain and how to manage the food production chain.	College of Agriculture - Department of Food Technology
89	KT345	Quality Management	2	This course provides students with the basic knowledge and concepts of quality management, statistical quality control tools and some popular quality management systems today.	College of Economics
90	NS247	Specialized training for food engineers	2	The course trains students' problem-solving skills related to food technology and engineering. It provides students with knowledge and skills related to issues such as planning and conducting a technical study, collecting data, and drafting and presenting research findings. It also trains students' essential skills for food technology engineers such as presentation and critical thinking skills	College of Agriculture - Department of Food Technology
91	NS503	Graduation Thesis	14	In this course, students conduct a research appropriate to their scientific expertise. Students participate in research topics and projects of the Department and units with similar research fields according to the training program of the Food Technology industry and according to PLOs. Conduct research in laboratories (1) or research in food storage, processing or manufacturing establishments (2).	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
92	NS427	Graduation Project	6	In this course, students solve a specific situation or participate in a research relevant to their scientific expertise. Students participate in research topics and projects of the Department and units with similar research fields according to the training program of the Food Technology industry and according to PLOs. Conduct research in laboratories (1) or research in food storage, processing or manufacturing establishments (2).	College of Agriculture - Department of Food Technology
93	NS335	Functional Foods	2	The course provides students with an overview of functional foods; The effect of functional foods on human health through supporting and preventing a number of common diseases such as arthritis, diabetes, high blood pressure, blood fat and cardiovascular problems, obesity and cancer. It also introduces functionally active compounds derived from major chemical constituents in foods such as carbohydrates, lipids, proteins and peptides, phytochemicals and dietary fibers, including their structure, food sources and dietary sources. levels, functional characteristics and mechanisms of action on human health. This course also discusses the management and development of functional foods	College of Agriculture - Department of Food Technology
94	NS336	New Food Development	2	This course provides students with the process of developing a new food product. In this course, students familiarise themselves with problem solving skills and solve problems related to new product development. The course introduces a professional, team-working environment like food professionals.	College of Agriculture - Department of Food Technology
95	NS333	Fat and Oil Technology	2	The course equips students with the basic knowledge about the composition, the important properties of food oil. It introduces general knowledge about technology for producing raw oil from oilseeds and oil-containing fruit pulp; refining technology and production of food fats and oils; the processing process of common food fats and oils.	College of Agriculture - Department of Food Technology

No	Course code	Course name	Credits	Brief description of the course	Administration unit
96	NS339	Management and Utilisation of Co-products in Food Processing	2	The course provides basic knowledge on the situation of by-products in the food industry, the properties and hazards of by-products; methods to optimize the production process to minimize waste and save energy and water. In addition, it provides students with knowledge about classifying waste by-products and make use of waste products and propose the most appropriate treatment and processing methods and technologies; and techniques for each type of by-product from different food production processes	College of Agriculture - Department of Food Technology
97	NS341	Food Traceability	2	The course introduces the concept and importance of food traceability; the standards and legal basis applied in traceability, the internal traceability system and the implementation of traceability in the factory, traceability systems in practice, external traceability measures and traceability measures.	College of Agriculture - Department of Food Technology
98	NN225	Traditional Food Processing	2	The course includes 02 parts: Part 1 consists of 05 theory chapters; Part 2 students work in groups, discuss, write reports and present in class. In the theory part, students learn the principles and scientific foundations of traditional food processing, Then apply them in actual processing procedures. In addition, the theory part also provides technical specifications of some traditional products made from different groups of ingredients such as soybeans, starch, vegetables, meat and fish.	College of Agriculture - Department of Food Technology
99	NS240	Food Canning Technology	2	The course introduces methods of preserving and processing common, effective and safe food products by using high temperature with sealed containers, in order to equip students with specialized knowledge about food safety and hygiene. basic processes in the production of canned food (vegetables, fruits, meat, seafood, pasteurized milk...) and processes for preparing canned foods. In addition, the course also helps students master the pasteurization process, understand the value of pasteurization and calculate the technical parameters in the process of pasteurization/sterilization of canned foods.	College of Agriculture - Department of Food Technology
100	NS223	Post harvest Technology of Cereals	2	The course introduces the physical properties and living activities of cereals (rice, rice, corn, soybeans, peanuts, wheat...); Postharvest activities and postharvest spoilage phenomena of cereals; Evaluation of grain loss in terms of quantity at post-harvest stages; Rice quality testing and food processing technology technology	College of Agriculture - Department of Food Technology

Part 5: Student assessment methods

5.1 Course assessment

Theoretical courses or combined theoretical and practical courses: Total course grade is calculated from component grades, including: exercise grade, midterm test grade, practice grade, cognitive assessment grade, discussion grade, attendance grade, project grade and final exam grade. The final exam is compulsory, and its grade must have a weight of no less than 50%.

Practical courses Total course grade is calculated by an average grade of the practical exercises.

Forms of assessment and weights of the component grades are proposed by lecturers, approved by the head of FTD, Dean of CoA. They are announced in course syllabi.

5.2 Course grade

The course grade is the total grade of all assessment grades of the course multiplied by the corresponding weights. The grades for assessment of courses and the final exam grades are given on a 10-grade scale (from 0 to 10), rounded to one decimal place. Lecturers in charge of the course enter the course grades into the online management system; this system automatically converts the course grades on the 10-grade scale to the corresponding ones on letter and 4-grade scales Table 3 presents the course grading system

Table 3: Course grading system

Grades (a 10-grade scale)	Letter scale	Grades (a 4-grade scale)
9,0-10,0	A	4,0
8,0-8,9	B ⁺	3,5
7,0-7,9	B	3,0
6,5-6,9	C ⁺	2,5
5,5-6,4	C	2,0
5,0-5,4	D ⁺	1,5
4,0-4,9	D	1,0
< 4,0	F	0,0

Part 6: Learning environment

6.1 Library and learning materials

6.1.1 Library of the College of Agriculture

CoA Library established in 1996 is under direct management of Learning Resource Center of CTU. Located on Block A of CoA, the library with an area of 1,016 m² with over 135 seats and equipment is a spacious facility that can completely meet the BEFT requirements.

It provides specialised references to serve the requirements of CTU's staff and students in their scientific research, study and teaching activities. Currently, reference materials in CoA Library are as follow: more than 20,889 copies of books, more than 14,653 copies of university dissertations; more than 1,430 copies of master theses and doctoral dissertations ; more than 11,655 copies of journals; and more than 214 discs of specialised CDs.

The library has 40 computers connected to the internet to serve the needs of staff and students to exploit information in their study and research. Readers can use LRC database such as: Blackwell Synergy, ProQuest Central, Hinari, Agora, specialized Vietnamese data, and online databases (open sourceware). The open hours is from Monday to Saturday.



A corner of College Library

6.1.2 Can Tho University Learning Resource Center

The Learning Resource Center (LRC) is built on a land area of 7,560 m² and is one of the largest learning resource centers in the country. LRC provides a wide range of books, textbooks, and reference materials in Vietnamese and foreign languages which are changed and updated regularly. There is a total of 139,289 titles and 306,117 book copies. There are 1,397 titles and 2,054 book copies in the IT field. The center also has electronic library systems and electronic databases (such as ProQuest, Springerlink, Ebrary, Research4Life, etc) that provide documentation in almost every field of teaching and research, allowing users to access from both inside and outside the university, effectively meeting the requirements of lecturers and students. In addition, the LRC has 400 computers, 3 discussion rooms, 1 audio-visual room and many self-study desks. <https://lrc.ctu.edu.vn/>



The 2nd Floor of LRC

6.1.3 Can Tho University Journal of Science

Can Tho University Journal of Science (CTUJS) has 02 ISSN codes: 1859 - 2333 (Vietnamese) và 2615 - 9422 (English). The magazine is published annually with 06 Vietnamese volumes and 03 English volumes. The scopes of the Journal include, but not limited to, the following topic areas:

1. Natural Sciences, Technology and Environment;
2. Agriculture, Fisheries and Biotechnology;
3. Social Sciences, Humanities and Education;
4. Economics and Law, etc. CTUJS provides immediate open access to its published articles to the public, to broaden opportunities for high quality research findings to be available and widely disseminated with free of charge, contributing to the greater exchange of knowledge.

CTUJS permits everyone to read, download, copy, distribute, print, search, or link to the full texts of the published articles without registration, price barriers, or asking for permission from the Journal or the author. <https://sj.ctu.edu.vn>.

6.2 Dormitories

The CTU's dormitories have a total of 1,391 rooms which can accommodate 10,200 students. These dormitories are located on Campus I and II of CTU in Ninh Kieu District, Cantho city. They are convenient places to stay and study for students and foreign visitors. They have yards for playing sports and green outdoor areas, as well as canteens for food. The dorms have professional security forces to guard all 24 hours a day, 7 days a week. All students wishing to live in the dormitory are arranged to live immediately after admission.

Facilities for students living on campus:

- Wifi connection speed is 14Mbps/14Mbps, free bike parking.
- Dormitories all have mini supermarkets, canteens, garages to meet the needs of students.
- Chances to participate in academic clubs, cultural activities, arts, physical training and sports, soft skills training.
- Recreation area, sports practice for students.



Dormitory B - CTU

6.3 Sports Facilities

The construction of Can Tho University Gymnastics and Sports Hall according to Decision No.4285/QD-BGD&DT dated June 25, 2009 is to strengthen facilities for health education and create a healthy playground for CTU staff and students.

The total investment for the project is VND 26,842,544,000 from the state budget for construction investment. CTU's Gymnastics and Sports Stadium has 2 floors, floor area is 3,465 m², usable area is 3,465 m²; the area of the playing field is 1,000 m²; the stands can accommodate nearly 1,000 seats. The Stadium hosts courts that can be adapted for indoor volleyball, steam volleyball, futsal football, tug of war, outdoor run, basketball, javelin, weightlifting and team games, etc. for students' courses of Physical Education and sports services after office-hours.

CTU also has a Gymnasium that serves for sports such as badminton, table tennis, soccer, taekwondo, traditional martial arts, volleyball courts, outdoor basketball, etc. The Gymnasium serves as a training facility for the students as well as staffs not only to train themselves for the sport activities but also to keep them fit.





CTU Gymnasium

6.4 Student Exchange Programmes

According to the policy of CTU and in order to create favorable conditions for its staff and students to exchange experience on academic and cultural studies abroad, the University has organized a short study exchange at Universities abroad (Thailand). Each student is sponsored with a maximum of 9 million VND by CTU funding.

In CTU, "Students are the first to be served". Therefore, every year, the University spends a budget of nearly 2 billion VND for student exchanges activities for a short time in order to create opportunities for students to develop their skills, to study abroad and to build and develop good relationships in the future.



Student exchange in Thailand

6.5 Extra-curricular activities

The 2015 Cultural Exchange Camp was held at Prince of Songkla University - Thailand within 3 weeks from July 5 to July 26, 2015 with the aim of connecting students in ASEAN + 3 via cultural - art - language exchange for better inter- cultural understanding. The students experienced the colorful culture of Thailand with activities such as: explore Thai country and its people, past and present at Ton Nga Chang Waterfall Resort and Songkhla Zoo, PSUIC Studio, visit the Southern Thailand Research Institute; participate in art performance exchanges with staff and students at Thai Universities; learn about Thai culinary culture... With many topics such as life skills, culture, Thai Dancing & Boxing, Traditional Medicine, Cooking, Life and Environment, the camp provided an opportunity for students in ASEAN+3 to learn more about Thai culture, language and traditions.



ASEAN+3 students in Cultural Exchange Camp in Thailand

This experience helped BEFT students to promote their ability in collective activities, presentations, group activities, etc. At the same time, the program also creates conditions for students from other countries to express their cultural identity through cultural performances. Through these activities, students of Can Tho University introduced to international friends about Vietnam in general and Vietnamese people in particular.

In addition, the University is building an "international park" in Campus 2 with the support of the US Consulate General and the French Consulate General, in order to create a space for students to practice, practice, improve their skills and knowledge. foreign language skills and other skills.



Extracurricular activities for students

Extra-curricular activities, community activities as well as skill-building courses, academic exchanges are held for students during their study time, which helps students develop more soft skills.

Part 7: After graduation

7.1 Career prospects

Graduates are able to work as:

- Staff/managers of technical department, production management, food quality control, research and development (R&D), project management at enterprises, food processing companies in Vietnam and abroad. - Staff/managers of science and technology department in state agencies and organizations.
- Lecturers/researchers of food technology at universities/colleges/institutes in Vietnam and abroad.
- Self-employed/ owner of food production enterprises.

7.2 Further study

Graduates are able to study at graduate level through Master's training programmes (domestic and international - Vlier-network program), PhD at the FTD or through study abroad with scholarships from graduate training programs and international cooperation projects of CTU, CoA or FTD.

7.3 Alumni network

To improve the training quality and to meet the requirements of quality human resources of the society, CTU always focuses on cooperation and association with enterprises in training, research and technology transfer activities. creating conditions for students to access the real working environment, improve their skills when participating in the labor market. Therefore, meeting alumni is especially important in creating connection between alumni of various industries and CTU. CTU rector hopes that alumni or entrepreneurs will share, advise, support and create opportunities for its students to develop creativity, build entrepreneurship programs, further develop products specific to the Mekong Delta region. Besides, much attention is paid to calling for the continued support and cooperation of alumni on the following issues: contribution to the development of the study programmes, coordination in training, production-service activities and scientific research...

Recent alumni meeting on the occasion of the 40th anniversary of the BEFT created conditions for staff, alumni and students to learn, to share experiences, achievements in life, cooperation opportunities for better development of the BEFT in the future.



Alumni meeting to celebrate the 40th anniversary of the establishment of BEFT - CTU

Part 8: Information

8.1 Feedbacks

Students are surveyed on the quality of academic consultancy, service and T&L activities each semester. Mechanisms and plans for feedback collection are guided, scheduled and monitored by the Quality Management Center (at the website: oss3.ctu.edu.vn).

8.2 Quality indicator

- BEFT is operated with QA commitment (see at <https://www.ctu.edu.vn/cong-khai.html>);(xem tại <https://www.ctu.edu.vn/cong-khai.html>);
- BEFT lecturers have been trained in pedagogical skills and professional skills (Lecturers Ranks 1, 2, 3) to meet the requirements of teaching activities and PLOs;
- Every year, CTU collects information about the percentage of graduates, employability as well as feedbacks on teaching and learning activities. This information is analysed and published on CTU website.

8.3 Websites and information about the programme

- Department of Food Technology <https://coa.ctu.edu.vn/bm-cntp.html>
- FTD Facebook <https://www.facebook.com/dftctu/>
- Student Affairs Department: <https://dsa.ctu.edu.vn/>
- Quality Management Center <https://qat.ctu.edu.vn/>
- Admission Information of CTU <https://tuyensinh.ctu.edu.vn/>
- Can Tho University: <https://www.ctu.edu.vn/>

8.4 Contact

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