Training Program Framework

No.	Course Code	Education Block / Course Title	Total Credits	Theory	Practice / Lab	Sem. / Assign.	Project	Intern.	Term	Prereq. / Prior Code
9.1		**General Education**	49	46	3	0	0	0		
9.1.1		**Social Sciences and Humanities**	19	19	0	0	0	0		
9.1.1.1		**Compulsory**	15	15	0	0	0	0		
1.	LP6010	Marxist–Leninist Philosophy	3	3	0	0	0	0	1	
2.	LP6026	Scientific Socialism	2	2	0	0	0	0	2	Prior: LP6024
3.	LP6025	Marxist–Leninist Political Economy	2	2	0	0	0	0	2	Prior: LP6024
4.	LP6022	Ho Chi Minh Thought	2	2	0	0	0	0	3	
5.	LP6021	Introduction to Law	2	2	0	0	0	0	3	
6.	LP6027	History of the Communist Party of Vietnam	2	2	0	0	0	0	4	
7.	BS6046	Intercultural Communication	2	2	0	0	0	0	7	
9.1.1.2		***Electives (Choose one course from each group)***	4	4	0	0	0	0		
Tc1		**Group 1**	2	2	0	0	0	0	7	
8.	BS6047	Introduction to Scientific Research	2	2	0	0	0	0	7	
9.	SE6257	Project Management	2	2	0	0	0	0	7	
10.	BS6048	Labour Relations and Employment	2	2	0	0	0	0	7	
11.	BS6049	People and the Environment	2	2	0	0	0	0	7	
12.	SE6218	Introduction to Economics	2	2	0	0	0	0	7	
13.	SM6186	Professional Work Practices	2	2	0	0	0	0	7	
Tc2		**Group 2**	2	2	0	0	0	0		
14.	BS6050	Introduction to Music	2	2	0	0	0	0	7	
15.	BS6051	Introduction to Art Studies	2	2	0	0	0	0	7	
16.	BS6052	Introduction to Fine Arts	2	2	0	0	0	0	7	Prior: LP6025
9.1.2	Chọn 1 trong 4 Ngoại ngữ sau	Choose One of the Following Foreign Languages	10	10	0	0	0	0		
		English Language Program								
18.	SL6579	English for Chemical Technology 1	5	5	0	0	0	0	3	Prior: FL6579
19.	SL6580	English for Chemical Technology 2	5	5	0	0	0	0	4	Prior: SL6580
		Chinese Language Program								
20.	FL6339	Chinese 1	5	5	0	0	0	0	3	Prior: FL6561
21.	FL6340	Chinese 2	5	5	0	0	0	0	4	Prior: SL6347
		Korean Language Program								
22.	SL6351	Korean 1	5	5	0	0	0	0	3	Prior: FL6564

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23.	SL6352	Korean 2	5	5	0	0	0	0	4	Prior: SL6351
		Japanese Language Program								
24.	SL6349	Japanese 1	5	5	0	0	0	0	3	Prior: FL6563
25.	SL6350	Japanese 2	5	5	0	0	0	0	4	Prior: SL6349
		German Language Program								
26.	FL6582	German 1	5	5	0	0	0	0	3	Prior: FL6580
27.	FL6583	German 2	5	5	0	0	0	0	4	Prior: FL6582
9.1.3		**Mathematics and Natural Sciences**	20	17	3	0	0	0		
9.1.3.1		**Compulsory**	15	3	2	0	0	0		
28.	BS6002	Calculus	3	3	0	0	0	0	1	
29.	CT6001	General Chemistry	3	2	1	0	0	0	1	
30.	BS6027	General Physics	3	2	1	0	0	0	1	
31.	BS6037	Linear Algebra	3	3	0	0	0	0	2	
32.	SC6201	Digital Competency Development	3	3	0	0	0	0	4	
9.1.3.2		***Electives (at least 3 credits)***	5	4	1	0	0	0		
33.	BS6032	Numerical Methods	2	2	0	0	0	0	2	Prior: BS6010
34.	BS6044	Probability Theory	2	2	0	0	0	0	2	
35.	BS6040	Engineering Mathematics	3	3	0	0	0	0	2	
36.	CT6411	General Biology	3	2	1	0	0	0	2	
9.1.4		**National Defence and Security Education**	8,5	5,0	3,5	0,0	0,0	0,0	1	
		Pursuant to Circular No. 05/2020/TT-BGDĐT dated 18 March 2020								
9.1.5		**Physical Education**	4,0	0,0	4,0	0,0	0,0	0,0	1,2,3	
		Pursuant to current regulations of Hanoi University of Industry								
9.2		**Professional Education**	69	54,5	14	1,5	4	2		
9.2.1		**Field Foundation Courses**	19	13,5	4,0	1,5	0,0	0,0		
		Compulsory	19	13,5	4,0	1,5	0,0	0,0		
1	SM6050	Engineering Drawing	3,0	2,5	0,0	0,5	0,0	0,0	4	
2	SEE6164	Electrical and Electronic Engineering	3,0	2,0	1,0	0,0	0,0	0,0	6	
3	CT6108	Introduction to Engineering	3,0	2,0	0,0	1,0	0,0	0,0	1	
4	CT6255	Organic Chemistry	3,0	2,0	1,0	0,0	0,0	0,0	3	Prior: CT6001
5	CT6256	Analytical Chemistry	3,0	2,0	1,0	0,0	0,0	0,0	3	Prior: CT6001

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6	CT6257	Physical Chemistry	3,0	3,0	0,0	0,0	0,0	0,0	2	Prior: CT6001
7	CT6386	Physical Chemistry Laboratory	1,0	0,0	1,0	0,0	0,0	0,0	2	Prior: CT6001
9.2.2		**Discipline Foundation Courses**	19	14	4	0	0	1		
9.2.2.1		**Compulsory**	15	10	4	0	0	1		
44.	CT6376	Heat Transfer Processes and Equipment	2,0	2,0	0,0	0,0	0,0	0,0	3	Prior: CT6001
45.	CT6375	Mass Transfer Processes and Equipment	2,0	2,0	0,0	0,0	0,0	0,0	5	Prior: CT6001; CT6257
46.	CT6374	Mechanical Unit Operations and Equipment	2,0	2,0	0,0	0,0	0,0	0,0	5	Prior: CT6001; CT6257
47.	CT6402	Unit Operations Laboratory	2,0	0,0	2,0	0,0	0,0	0,0	5	Prior: CT6001; CT6257
48.	CT6340	Food Biochemistry	2,0	2,0	0,0	0,0	0,0	0,0	3	Prior: CT6255
49.	CT6387	Food Biochemistry Laboratory	1,0	0,0	1,0	0,0	0,0	0,0	3	Prior: CT6143, CT6255
50.	CT6345	Industrial Observation Internship (Food Technology)	1,0	0,0	0,0	0,0	0,0	1,0	4	Prior: CT6001
51.	CT6271	Food Microbiology	3,0	2,0	1,0	0,0	0,0	0,0	4	Prior: CT6340
9.2.2.2	TC4	Electives	4	4	0	0	0	0		
53.	CT6298	Enzyme Technology	2	1,5	0	0,5	0	0	4	Prior: CT6340
54.	CT6322	Nutrition and Food Safety	2	2	0	0	0	0	4	
55.	CT6363	Instrumental Analysis	2	2	0	0	0	0	4	Prior: CT6256
56.	CT6383	Optimization in Food Technology	2	2	0	0	0	0	4	Prior: CT6001
57.	CT6356	Food Processing Machinery and Equipment	2	2	0	0	0	0	4	Prior: CT6374, CT6375
58.	CT6320	Fundamentals of Food Plant Design	2	2	0	0	0	0	4	Prior: CT6001
9.2.3		**Specialization**	31	23	6	0	2	0		
9.2.3.1		**Compulsory**	21	13	6	0	2	0		
1	CT6292	Sugarcane Processing and Confectionery Technology	2	2	0	0	0	0	6	Prior: CT6340
2	CT6314	Postharvest Technology of Fruits and Vegetables	2	2	0	0	0	0	6	Prior: CT6340, CT6356
3	CT6294	Milk and Dairy Processing Technology	2	2	0	0	0	0	5	Prior: CT6340, CT6271
4	CT6304	Fermentation Technology	2	2	0	0	0	0	5	Prior: CT6271

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5	CT6365	Food Analysis	2	2	0	0	0	0	5	Prior: CT6083; CT6256
6	CT6401	Food Analysis Laboratory	1	0	1	0	0	0	5	Prior: CT6145
7	CT6272	Food Technology Laboratory 1	2	0	2	0	0	0	5	Prior: CT6340
8	CT6273	Food Technology Laboratory 2	2	0	2	0	0	0	6	Prior: CT6340
9	CT6324	Food Sensory Evaluation	2	1	1	0	0	0	5	Prior: CT6256
10	CT6377	Food Quality Management and Traceability	2	2	0	0	0	0	4	Prior: CT6340
11	CT6438	Food Technology Course Project	2	0	0	0	2	0	7	PQ: CT6345; Prior: CT6356
9.2.3.2		***Electives (at least 10 credits)***	10	10	0,0	0,0	0,0	0,0		
1	CT6303	Food Refrigeration Technology	2	1,5	0	0,5	0	0	7	Prior: CT6376
2	CT6391	Packaging Design and Product Development	2	2	0	0	0	0	7	Prior: CT6255
3	CT6310	Alcoholic and Non-Alcoholic Beverage Technology	2	2	0	0	0	0	6	Prior: CT6340
4	CT6369	Food Additives	2	2	0	0	0	0	5	Prior: CT6340
5	CT6312	Edible Oil Production Technology	2	2	0	0	0	0	5	Prior: CT6340
6	CT6289	Tea, Coffee and Tobacco Processing Technology	2	2	0	0	0	0	7	Prior: CT6340
7	CT6295	Seafood Processing Technology	2	2	0	0	0	0	7	Prior: CT6340
8	CT6313	Postharvest Technology of Cereal Grains	2	2	0	0	0	0	6	Prior: CT6340
9	CT6408	Waste Treatment in the Food Industry	2	2	0	0	0	0	6	Prior: CT6255; CT6374
10	HP10407	Meat and Meat Products Processing Technology	2	2	0	0	0	0	6	Prior: CT6340
9.3		***Free Elective Supplementary Courses***	2	2	0	0	0	0		
9.3.1		**Compulsory**	2	2	0	0	0	0		
80.	SE6209	Innovation and Entrepreneurial Thinking	2	2	0	0	0	0	7	
9.3.2		***Electives (Choose one of four foreign-language groups)***	10	10	0	0	0	0		
		Chinese Language Program	10	10	0	0	0	0		
81.	FL6560	Basic Chinese 1	5	5	0	0	0	0	1	
82.	FL6561	Basic Chinese 2	5	5	0	0	0	0	2	
		Korean Language Program	10	10	0	0	0	0		
83.	FL6564	Basic Korean 1	5	5	0	0	0	0	1	
84.	FL6565	Basic Korean 2	5	5	0	0	0	0	2	
		Japanese Language Program	10	10	0	0	0	0		

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85.	FL6562	Basic Japanese 1	5	5	0	0	0	0	1	
86.	FL6563	Basic Japanese 2	5	5	0	0	0	0	2	
		English Language Program	10	10	0	0	0	0		
87.	FL6578	Basic English for Chemical Technology 1	5	5	0	0	0	0	1	
88.	FL6579	Basic English for Chemical Technology 2	5	5	0	0	0	0	2	
9.4		**Industrial Internship and Graduation Project/Thesis**	15	0	0	0	8	7		
89.	CT6275	Industrial Internship	7	0	0	0	0	7	8	Prior: CT6292, CT6438
90.	CT6276	Graduation Project/Thesis	8	0	0	0	8	0	8	Prior: CT6275
		Total Program Credits	135							