MASTER OF CHEMICAL ENGINEERING – TRAINING PROGRAM FRAMEWORK

Program code: 8520301 | 60 credits

No.	Course Code	Knowledge Area / Course Title	Total Credits	Theory	Practice / Lab	Discussion	Internship / Project
6.1		Part 1. General Knowledge	5	4	0	1	0
1	LP7202	Philosophy	3	3	0	0	0
2	ME7218	Scientific Research Methodology	2	1	0	1	0
3		Foreign Language*					
6.2		Part 2. Foundational Discipline Knowledge	11	11	0	0	0
6.2.1		Compulsory Courses	7	7	0	0	0
1	CT7210	Kinetics of Chemical Engineering Processes	2	2	0	0	0
2	CT7222	Chemical Engineering Thermodynamics	2	2	0	0	0
3	CT7232	Methods for Materials Structure Characterization	3	3	0	0	0
6.2.2		Elective Courses (Select at Least 4 Credits)	4	4	0	0	0
1	CT7218	Multicomponent Separation Techniques	2	2	0	0	0
2	CT7242	Stereochemistry	2	2	0	0	0
3	CT7235	Optimization of Chemical Engineering Processes	2	2	0	0	0
4	CT7215	Surface Physical Chemistry	2	2	0	0	0
6.3		Part 3. Specialized Knowledge	26	26	0	0	0
6.3.1		Compulsory Courses	10	10	0	0	0
1	CT7231	Industrial Catalysis	2	2	0	0	0
2	CT7236	Industrial Waste Treatment	2	2	0	0	0
3	CT7221	Alternative Fuels	2	2	0	0	0

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4	CT7226	Equipment Design and Calculations for Inorganic Chemical Processes	2	2	0	0	0
5	CT7237	Advanced Composite Materials	2	2	0	0	0
6.3.2		Elective Courses (Select at Least 16 Credits)	16	16	0	0	0
1	CT7214	Rare-Earth Chemistry and Technology	2	2	0	0	0
2	CT7204	Emulsion Technology	2	2	0	0	0
3	CT7216	Bioactive Compounds	2	2	0	0	0
4	CT7246	Organic Coatings	2	2	0	0	0
5	CT7238	Mineral Processing Technology	2	2	0	0	0
6	CT7247	Green Analytical Chemistry	2	2	0	0	0
7	CT7240	Inorganic Coatings	2	2	0	0	0
8	CT7241	Biodegradable Polymers	2	2	0	0	0
9	CT7217	Advanced Analytical Techniques	2	2	0	0	0
10	CT7213	Petroleum Chemistry and Processing Technology	2	2	0	0	0
11	CT7224	Photochemistry and Electrochemistry in Chemical Synthesis	2	2	0	0	0
12	CT7243	Verification and Calibration of Measuring Instruments	2	2	0	0	0
6.4		Part 4. Internship	9				
	CT7244	Internship	9	0	0	0	9
6.5		Part 5. Graduation Project	9				
	CT7245	Graduation Project	9	0	0	0	9
		Total	60	41	0	1	18

* Foreign language: Students undertake independent study to attain Level 4/6 of the Vietnamese Foreign Language Proficiency Framework or an equivalent level.