



### Doctor of Engineering Program in Chemical Engineering

It is hoped that graduates who graduate from this program will have advanced research and development capabilities in chemical engineering, along with the development of learning skills and skills in various fields by using various teaching strategies. The program encourages learners to learn by themselves as an important guideline in order for the learners to understand deeply the learning process in order to gain knowledge and skills, including internationalization and to be both a leader and a good follower.

#### **Applicant Qualifications**

Plan 2.1 Applicants must complete Master's Degree in Chemical Engineering (M.Eng.), or other related fields or

Plan 2.2 Applicants must complete Bachelor's Degree with honors in Chemical Engineering (B.Eng.), or other related fields

Applicants must submit the English Proficiency Test Score as part of their application according to the KMUTT announcement on the English Language Requirement for Doctoral Degree.

#### **Professions after Graduation**

- 1. Research and process development personnel to create products, technology, and innovations in chemical engineering.
- 2. Lecturers/academics in chemical engineering
- 3. Technology managers
- 4. Production process engineers, Operation unit design and production process engineers, Technical consulting and technical services engineers

#### Curriculum

Plan 2.1 for student with Master degree 48 Credits

Plan 2.2 for student with Bachelor degree 73 Credits



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#### **Curriculum Components**

Plan.2 1 for student with Master degree

<ul><li>Compulsory</li></ul>	-	Credits
Elective Course	12	Credits
<ul><li>Dissertation</li></ul>	36	Credits
Plan 2.2 for student with Bachelor degree		
<ul><li>Compulsory</li></ul>	13	Credits
Elective Course	12	Credits

#### COURSE STRUCTURE

Dissertation

#### Plan 2.1 for student with Master Degree

48

Credits

First Year				
First Semester	Credits			
CHE xxx Elective Course 1	3(3-0-9)			
CHE xxx Elective Course 2	3(3-0-9)			
Total 6(6-0-18)				
Second Semester	Credits			
CHE xxx Elective Course 3	3(3-0-9)			
CHE 787 Dissertation	4(0-8-16)			
Total	7(3-8-25)			
Second Year				
First Semester	Credits			
CHE xxx Elective Course 4	3(3-0-9)			
CHE 787 Dissertation	6(0-12-24)			
Total	9(3-12-33)			
Second Semester	Credits			
CHE 787 Dissertation	10(0-20-40)			
Total	10(0-20-40)			



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#### Third Year

First Semester	Credits
CHE 787 Dissertation	10(0-20-40)
Total	10(0-20-40)
Second Semester	Credits
CHE 787 Dissertation	6(0-12-24)
Total	6(0-12-24)

#### Plan 2.2 for student with Bachelor degree

	First Year First Semester						
CHE 644	Applied Chemical Engineering Thermodynamics	3(3-0-9)					
CHE 651	Mathematical Analysis for Chemical Engineering						
CHE xxx	Elective 1	3(3-0-9)					
CHE xxx	Elective 2	<u>3(3-0-9)</u>					
	Total	12(12-0-36)					
First Year Second Semester							
CHE 610	Intermediate Transport Phenomena	3(3-0-9)					
CHE 642	Chemical Reaction Engineering	3(3-0-9)					
CHE 785	Graduate Seminar	1(0-1-3)					
CHE xxx	Elective 3	3(3-0-9)					
	Total	10(9-1-30)					
	Second Year First Semester						
CHE 789	Dissertation	6(0-12-24)					
CHE xxx	Elective 4	3(3-0-9)					
	Total	9(3-12-33)					
Second Year Second Semester							
CHE 789	Dissertation	9(0-18-36)					
	Total	9(0-18-36)					



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		Third Year First Semester	
CHE 789	Dissertation	9(0-18	3-36)
	Total	9(0-18	3-36)
		Third Year Second Semester	
CHE 789	Dissertation	9(0-18	3-36)
	Total	9(0-18	3-36)
		Forth Year First Semester	
CHE 789	Dissertation	9(0-18	3-36)
	Total	9(0-18	3-36)
		Forth Year Second Semester	
CHE 789	Dissertation	6(0-12	2-24)
	Total	6(0-12	2-24)