

# DOCTOR OF PHILOSOPHY IN CHEMICAL ENGINEERING

## Curriculum Structure

### The PhD Program (Total 60 Cr Hrs)

Curriculum Components	Total Courses	Total Cr Hrs
Core Courses	1	3
Elective Courses in Major	3	9
Thesis	1	48
<b>Total</b>	<b>5</b>	<b>60</b>

### Core courses

Core courses	
Course ID	Course Title
DENG 702	Applied Research Methodology

### Concentration Courses

Elective courses	
Course ID	Course Title
CHME 750	Transport Phenomena
CHME 751	Special Topics I
CHME 752	Special Topics II
CHME 753	Advanced Process Dynamics and Control
CHME 761	Bioprocess Engineering
CHME 762	Advanced Chemical Engineering Thermodynamics
CHME 763	Advanced Reaction Engineering

## Study Plan

First Semester (6 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Fall	DENG 702	Applied Research Methodology	3
	CHME XXX	Elective Course I	3
<b>Total</b>			<b>6</b>
Second Semester (6 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Spring	CHME XXX	Elective Course II	3
	CHME XXX	Elective Course III	3
<b>Total</b>			<b>6</b>

Third Semester (12 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Fall	CHME 899	PhD Thesis	12
		Candidacy Exam	
<b>Total</b>			<b>12</b>
Fourth Semester (12 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Spring	CHME 899	PhD Thesis	12
<b>Total</b>			<b>12</b>

Fifth Semester (12 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Fall	CHME 899	PhD Thesis	12
<b>Total</b>			<b>12</b>
Sixth Semester (12 Cr Hrs)			
Term	Course #	Course Title	Cr Hrs
Spring	CHME 899	PhD Thesis	12
		Oral Defense	
<b>Total</b>			<b>12</b>

