

# ENGINEERING (CHEMICAL ENGINEERING) - DOCTOR OF PHILOSOPHY

<b>First Year</b>		
<b>Fall</b>		
CHME 501	Graduate Thermodynamics for Chemical Engineers	3
CHME 516	Graduate Numerical Methods in Chemical Engineering	3
CHME Elective		3
<b>Credits</b>		<b>9</b>
<b>Spring</b>		
CHME 506	Graduate Transport Phenomena(s)	3
CHME 542	Graduate Reactor Analysis and Design (s)	3
CHME 594	Professional Communication in Chemical Engineering	2
CHME 690	Graduate Seminar	1
<b>Credits</b>		<b>9</b>
<b>Summer</b>		
Qualifying Exam		
<b>Credits</b>		<b>0</b>
<b>Second Year</b>		
<b>Fall</b>		
Grad Electives		6
CHME 698	Ph.D. Research	3
<b>Credits</b>		<b>9</b>
<b>Spring</b>		
Grad Elective		6
CHME 698	Ph.D. Research	3
<b>Credits</b>		<b>9</b>
<b>Third Year</b>		
<b>Fall</b>		
CHME 698	Ph.D. Research	6
Comprehensive Exam		
<b>Credits</b>		<b>6</b>
<b>Spring</b>		
CHME 700	Doctoral Dissertation	9
<b>Credits</b>		<b>9</b>
<b>Fourth Year</b>		
<b>Fall</b>		
CHME 700	Doctoral Dissertation	3
<b>Credits</b>		<b>3</b>
<b>Spring</b>		
Dissertation Defense		
<b>Credits</b>		<b>0</b>
<b>Total Credits</b>		<b>54</b>

During the Third Year - Fall semester students may need to take additional coursework that doesn't contribute to the 54 credit hour total in order to maintain full-time status