

# CHEMICAL ENGINEERING - MASTER OF ENGINEERING IN CHEMICAL ENGINEERING

The Master of Engineering in Chemical Engineering is a 30 credit hour coursework and/or project-based degree with flexibility of program design for professionals seeking advanced coursework in chemical engineering. Individual degree plans are based on consultation between the student and their advisor. Master of Engineering in Chemical Engineering requirements are as follows:

Prefix	Title	Credits
<b>CHME Coursework</b>		
A minimum of 15 credits of CHME 500+ courses (select from CHME 501 to CHME 594) (courses 450+ may also count up to 12 credits):		15
CHME 501	Graduate Thermodynamics for Chemical Engineers	
CHME 506	Graduate Transport Phenomena(s)	
CHME 516	Graduate Numerical Methods in Chemical Engineering	
CHME 542	Graduate Reactor Analysis and Design (s)	
CHME 548	Industrial Safety	
CHME 564	Polymer Science & Engineering	
CHME 565	Rheology and Viscoelasticity	
CHME 567	Nanoscience and Nanotechnology	
CHME 570	Introduction to Nuclear Energy	
CHME 571	Health Physics	
CHME 574	Power Plant Design	
CHME 576	Nuclear Fuel Cycles	
CHME 578	Electrochemistry: Basics & Applications	
CHME 590	Graduate Seminar	
CHME 591	Graduate Special Topics	
CHME 593	Graduate Special Projects	
CHME 594	Professional Communication in Chemical Engineering	
<b>Open Electives</b>		
Students are expected to take an additional minimum of 15 credits of electives from any areas such as chemical engineering, other engineering, business, economics, fundamental sciences, environmental sciences, etc., to be consistent with their personal ME theme or emphasis. Thesis, research, or dissertation credits do not count.		15
<b>Optional Engineering Project Sequence or CHME Coursework <sup>1</sup></b>		
CHME 595	Chemical Process Design and Business Analysis	
CHME 596	Chemical Process Industries Research	
CHME 597	Advanced Chemical Process Industry Analysis	
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> Students will define and execute an engineering project through their employer while taking the following 3-semester course sequence. This may replace 6 credit hours of CHME coursework.