

Chemical Engineering (MR)

Degree Requirements

Code	Title	Hours	Counts towards
Required Courses			12
CHE 711	Chemical Engineering Process Modeling		
CHE 713	Thermodynamics I		
CHE 715	Transport Phenomena		
CHE 717	Chemical Reaction Engineering		
Elective Courses			18
Select a minimum of six elective courses approved in conjunction with the academic committee			

CHE Courses

Code	Title	Hours	Counts towards
CHE 543	Polymer Science and Technology	3	
CHE 551	Biochemical Engineering	3	
CHE 560	Chemical Processing of Electronic Materials	3	
CHE 562	Fundamentals of Bio-Nanotechnology	3	
CHE 563	Fermentation of Recombinant Microorganisms	2	
CHE 568	Conventional and Emerging Nanomanufacturing Techniques and Their Applications in Nanosystems	3	
CHE 577	Advanced Biomanufacturing and Biocatalysis	3	

CHE 596	Special Topics in Chemical Engineering (Core Chemical Engineering Concepts I (required of all non ChE majors; not available for others))	1-3
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CHE 596	Special Topics in Chemical Engineering (Core Chemical Engineering Concepts II (required of all non ChE majors; not available for others))	1-3
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CHE 596	Special Topics in Chemical Engineering (Colloid Science & Nanoscale Engineering)	1-3
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CHE 596	Special Topics in Chemical Engineering (Green Chemical Engineering)	1-3
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CHE 596	Special Topics in Chemical Engineering (Molecular Cell Engineering)	1-3
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CHE 596	Special Topics in Chemical Engineering (Chemical Process Engineering)	1-3
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CHE 596	Special Topics in Chemical Engineering (Polymer Rheology and Processing)	1-3
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CHE 596	Special Topics in Chemical Engineering (Drug Delivery Concepts)	1-3
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CHE 597	Chemical Engineering Projects	1-3
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CHE 761	Polymer Blends and Alloys	3
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CHE 775	Multi-Scale Modeling of Matter	3
MA 501	Advanced Mathematics for Engineers and Scientists I	3

Faculty

Full Professors

Ruben G. Carbonell

Michael David Dickey

Peter S. Fedkiw

Jan Genzer

Christine S. Grant

Carol K. Hall

Jason M. Haugh

Hasan Jameel

Robert M. Kelly

Saad A. Khan

Fanxing Li

Gregory N Parsons

Walter James Pfaendtner

Behnam Pourdeyhimi

Balaji M. Rao

Sindee Lou Simon

Richard J. Spontak

Orlin Dimitrov Velez

Phillip R. Westmoreland

Associate Professors

Milad Abolhasani

Adriana San Miguel Delgadillo

Chien Ching Lilian Hsiao

Albert Jun Qi Keung

Stefano Menegatti

Erik Emilio Santiso

Qingshan Wei

Assistant Professors

Nathan Crook

Artem Rumyantsev

Wentao Tang

Practice/Research/Teaching Professors

Cristina Boi

Lisa G. Bullard

Matthew Ellis Cooper

Kirill Efimenko

Gary Louis Gilleskie

Hassan Golpour

Gregory McKenna

Luke Neal

John H. van Zanten

Adjunct Faculty

Anthony L. Andrady

Orlando J. Rojas

Emeritus Faculty

Joseph M. DeSimone

Richard M. Felder

Michael Carl Flickinger

Keith Gubbins

Harold B. Hopfenberg

Harold Henry Lamb

Phooi K. Lim

Steven W. Peretti

Hubert Winston