

CHEMICAL PROCESS INDUSTRY - MASTER OF ENGINEERING IN CHEMICAL PROCESS INDUSTRY (ONLINE)

The MECPI is a 30 credit hour coursework and/or project-based degree with flexibility of program design for professionals in the Chemical Process Industry. Proposals for the MECPI may be submitted at <https://chme.nmsu.edu/academics/grad/mecpi-degree-plan-proposal/>. MECPI requirements are as follows:

Prefix	Title	Credits
CHME Coursework		
A minimum of 12 credits of CHME 500+ courses, 6 credits must come from the following:		12
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 595, CHME 596, and CHME 597 cannot be used to fulfill this requirement		
Three credits in Industrial Safety Coursework		3
CHME 548	Industrial Safety (Recommended) ¹	
Professional Communications Course		
CHME 594 & CHME 690	Professional Communication in Chemical Engineering and Graduate Seminar (both are recommended) ²	
Open Electives		
Students are expected to take a minimum of 6 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 MECPI theme or emphasis.		6
Optional Engineering Project Sequence or CHME Coursework ³		6
CHME 595	Chemical Process Design and Business Analysis	
CHME 596	Chemical Process Industries Research	
CHME 597	Advanced Chemical Process Industry Analysis	
A minimum of 3 credits in professional communication		3
Total Credits		30

Students accepted into the MECPI program may use the online MECPI degree plan proposal form (<https://chme.nmsu.edu/academics/grad/mecpi-degree-plan-proposal/>) to request a tailored curriculum personalized to their individual needs based on their current or planned employment in the chemical process industries.

First Year		
Fall		
CHME 501	Graduate Thermodynamics for Chemical Engineers	3
CHME 516	Graduate Numerical Methods in Chemical Engineering	3
CHME 548	Industrial Safety	3
Credits		9
Spring		
CHME 506	Graduate Transport Phenomena(s)	3
CHME 594	Professional Communication in Chemical Engineering	2
CHME 690	Graduate Seminar	1
CHME 595	Chemical Process Design and Business Analysis ²	3
Credits		9
Second Year		
Fall		
CHME 596	Chemical Process Industries Research ²	1
CHME Elective ¹		3
CHME Elective ¹		3
Credits		7
Spring		
CHME 542	Graduate Reactor Analysis and Design (s)	3
CHME 597	Advanced Chemical Process Industry Analysis	2
Credits		5
Total Credits		30

¹ Students are expected to take a minimum of 6 credits of electives from any area such as chemical engineering, other engineering, business, economics, fundamentals sciences, environmental sciences, etc., to be consistent with their personal MECPI theme or emphasis.

² MECPI students may replace the project (CHME 595, 596, 597) with an additional 6 credit hours of CHME coursework (CHME 450 and above).

¹ CHME 548 Industrial Safety is recommended, though other course options with similar content can be proposed.

² CHME 594 Professional Communication in Chemical Engineering and CHME 690 Graduate Seminar are recommended to fulfill this requirement, but students may propose 500+ level communications courses beyond CHME to fulfill this requirement.

³ Students will define and execute an engineering project through their employer while taking the following 3-semester course sequence (after completion of a minimum of 9 credit hours of CHME coursework toward the MECPI)
MECPI students may replace the project with an additional 6 credit hours of CHME coursework.