

Chemical Engineering Electives							
Course	Title	Pre/Co-reqs	Fall	Winter	Spring	Summer	Notes
CMEN 435	Polymer science and engineering	CMEN 332 (co-req)					
CMEN 450X-001	Undergraduate research	-					X=A is 1 SCH, X=B is 2 SCH X=C is 3 SCH Can take 450A for 3 quarters for a total of 3 SCH
CMEN 404	Advanced transport phenomena	CMEN 313					
CMEN 455	Bioprocess engineering	MATH 242 & BISC 130					
Economic / Cost and Six Sigma Electives							
Course	Title	Pre/Co-reqs	Fall	Winter	Spring	Summer	
INEN 300	Engineering economics	-				Hybrid	Prepares for economic analysis in CMEN 431 Only 2 SCH
INEN 301	Industrial cost analysis	-					
INEN 400	Engineering statistics I	MATH 242					
INEN 401	Engineering statistics II	INEN 400					A six sigma green belt is earned for ≥B in INEN 400 and INEN 401 or EMGT 466
INEN 403	Des of Exp for Six Sigma	INEN 401					
INEN 420	Six Sigma Black Belt Project	INEN 403					A six sigma black belt is earned for ≥B in INEN 400, 401, 403, and 420
EMGT 466	Six Sigma & Quality Control						INEN 401 Equivalent
Chemistry Electives							
Course	Title	Pre/Co-reqs	Fall	Winter	Spring	Summer	
CHEM 311	Physical chemistry I	CHEM 252, MATH 242, PHYS 201					A chemistry minor by taking courses for the CMEN degree plus 11 SCH of 300 or 400 level CHEM courses
CHEM 313	Physical chemistry I lab	CHEM 252, MATH 242, PHYS 201					
CHEM 312	Physical chemistry II	CHEM 311					
CHEM 314	Physical chemistry II lab	CHEM 311 & CHEM 312 (co-req)					
CHEM 351	Biochemistry I	CHEM 252					
CHEM 353	Biochemistry I lab	CHEM 351 (co-req)					
CHEM 352	Biochemistry II	CHEM 351					
CHEM 354	Biochemistry II lab	CHEM 353					
CHEM 424	Adv Physical Chemistry	CHEM 312 & MATH 245					
CHEM 466	Instrumental analysis	CHEM 312					CHEM 311 can count as the prerequisites for CMEN students 4 SCH
Other Electives							
Course	Title	Pre/Co-reqs	Fall	Winter	Spring	Summer	
BIEN 450C	Biomedical engineering entrepreneurship	-					

CVEN 314	Environmental Engineering	CHEM 102					
ENGR 454	Modern energy grand challenges	ENGR 220 and 222				online	
ENGR 494A	Eco-car leadership	Signature from Instructor					Can be taken x3 to earn 3 SCH
INEN 315	Computer-aided engineering	ENGR 122					
INEN 406	Project management fundamentals	INEN 300					2 SCH
INEN 409	Work Design	INEN 300					
INEN 416	Introduction to project management	INEN 300					
MATH 301	Functions and Modeling	MATH 242 + Signature					A mathematics minor by taking the MATH courses required for the CMEN degree plus 9 SCH of 300 or 400 level MATH or STAT courses (other than STAT 402) No more than 6 SCH may be in statistics and a grade of "C" or better must be earned.
MATH 302	Intro to Geometry and Math Foundations	MATH 242					
MATH 307	Fundamentals of mathematics	MATH 243					
MATH 308	Introduction to linear algebra	MATH 243					
MATH 311	Discrete mathematics I	MATH 242					
MATH 313	Introductory numerical analysis	MATH 245 (or co-req)					
MATH 401	College Geometry	MATH 243					
MATH 407	Partial differential equations	MATH 245					
MATH 414	Numerical analysis I	MATH 245					
MATH 415	Numerical analysis II	MATH 245					
MATH 420	Math methods for engineers & scientists	MATH 245					
MATH 445	Theory of functions of complex variables	MATH 244					
MATH 470	Introduction to topology	MATH 244					
MEEN 478	Engineering acoustics	MATH 245					
MEEN		-					
MSE 405	Nanotechnology principles	-					
NSE 300	Intro to programming for engineers & scientists	ENGR 122 and MATH 243					
STAT 405	Statistical methods	MATH 242					