

University of Mary			UND		
Chemical Engineering requirements					
ENR 101	3	Introduction to Engineering	CHE 102	2	Introduction to Chemical Engineering
Must be taken at UND			CHE 103	3	Computer Tools for Chemical Engineers
Must be taken at UND			CHE 201	3	Chemical Engineering Fundamentals
Must be taken at UND			CHE 206	3	Unit Operations in Chemical Engineering
Must be taken at UND			CHE 232	2	Chemical Engineering Laboratory
Must be taken at UND			CHE 301	4	Introduction to Transport Phenomena
Must be taken at UND			CHE 303	4	Chemical Engineering Thermodynamics
Must be taken at UND			CHE 305	3	Separations
Must be taken at UND			CHE 315	3	Engineering Statistics and Design of Experiments
Must be taken at UND			CHE 321	3	Chemical Engineering Reactor Design
Must be taken at UND			CHE 331	2	Chemical Engineering Laboratory II
Must be taken at UND			CHE 332	2	Chemical Engineering Laboratory III
Must be taken at UND			CHE 408	3	Process Dynamics and Control
Must be taken at UND			CHE 411	4	Plant Design I: Process Design and Economics
Must be taken at UND			CHE 412	5	Plant Design II: Process Project Engineering
Must be taken at UND			CHE 416	3	Chemical Product Design
Must be taken at UND			CHE 431	3	Chemical Engineering Laboratory IV
Advanced Chemical Science Electives (6 credits required)*					
Material Science Elective (3 credits required)*					
Technical Elective (3 credits required)*					
College of Engineering and Mines Requirements					
ENR 206	3	Fundamentals of Electrical Engineering	ENGR 206	3	Fundamentals of Electrical Engineering
PHI 308	3	Ethics	ENGR 340	3	Professional Integrity in Engineering
Required courses for CHE within other departments					
CHE 111	4	General Inorganic Chemistry I	CHEM 121/L	3/1	General Chemistry I and lab
CHE 112	4	General Inorganic Chemistry II	CHEM 122/L	3/1	General Chemistry II and lab
CHE 217	4	Organic Chemistry I	CHEM 341/L	4/1	Organic Chemistry I and lab
Must be taken at UND			CHEM 466	4	Fundamentals of Physical and Biophysical Chemistry
Must be taken at UND			LEAD 101	3	Learning Leadership
MAT 209	4	Calculus with Analytic Geometry I	MATH 165	3/1	Calculus I
MAT 210	4	Calculus with Analytic Geometry II	MATH 166	4	Calculus II
MAT 211	4	Calculus with Analytic Geometry III	MATH 265	4	Calculus III
MAT 334	3	Differential Equations	MATH 266	3	Intro to Differential Equations

PHY 251/251L	4	Engineering Physics I: Classical Mechanics and lab	PHYS 251	4	University Physics I
PHY 252/252L	4	Engineering Physics II: Electromagnetism and Optics and lab	PHYS 252	4	University Physics II

All Essential Studies requirements will be waived upon receipt of an official updated transcript verifying a bachelor's degree has been earned.

*Students are encouraged to work with their academic advisor to choose technical electives that fit with their individual learning plan.