

University of Mary			UND		
Civil Engineering requirements					
Must be taken at UND			CE 101	1	Intro to Civil Engineering
Must be taken at UND			CE 103	3	Graphical Communication
EME 306	3	Fluid Mechanics	CE 306	3	Fluid Mechanics
ECI 313/313L	3	General Surveying and lab	CE 313/313L	3	General Surveying and lab
ECI 351	4	Structural Mechanics	CE 351	4	Structural Mechanics
ECI 301	2	Civil Engineering Laboratory	CE 411	2	Civil Engineering Materials and Soil Mechanics Lab
ECI 412	3	Soil Mechanics	CE 412	3	Soil Mechanics
Must be taken at UND			CE 412L	1	Soil Mechanics lab
ECI 414	3	Foundation Engineering	CE 414	3	Foundation Engineering
ECI 416	3	Transportation Engineering	CE 416	3	Transportation Engineering
ECI 421	3	Hydrology	CE 421	3	Hydrology
ECI 423	3	Hydraulic Engineering	CE 423	3	Hydraulic Engineering
Must be taken at UND			CE 423L	4	Hydraulic Engineering lab
Must be taken at UND			CE 431	3	Environmental Engineering I
Must be taken at UND			CE 431L	4	Environmental Engineering I lab
Must be taken at UND			CE 432	3	Environmental Engineering II
Must be taken at UND			CE 444	3	Contracts and Specifications
ECI 451	3	Steel Design	CE 451	3	Steel Design
ECI 453	3	Reinforced Concrete	CE 453	3	Reinforced Concrete
Must be taken at UND			CE 482	3	Civil Engineering Design I
Must be taken at UND			CE 483	3	Civil Engineering Design II
Program Required Technical Electives (6 credits total required)*					
College of Engineering and Mines Requirements					
ENR 200	2	Computer for Math & Engineering	ENGR 200	2	Computer Applications in Engineering
ENR 201	3	Statics	ENGR 201	3	Statics
ENR 202	3	Dynamics	ENGR 202	3	Dynamics
ENR 203	3	Mechanics of Materials	ENGR 203	3	Mechanics of Materials
PHI 308	3	Ethics	ENGR 340	3	Professional Integrity in Engineering
Must be taken at UND			ENGR 460	3	Engineering Economy
ECI 203	4	Earth Dynamics and Geophysics	GEOL 101/L or GEOE 203	4/3	Introduction to Geology and lab or Earth Dynamics

Required courses for CE within other departments					
CHE 111	4	General Inorganic Chemistry I	CHEM 121/L	4	General Chemistry I and lab
MAT 209	4	Calculus with Analytic Geometry I	MATH 165	4	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
EEL 318	3	Engineering Data Analysis	MATH 321	3	Applied Statistical Methods
PHY 251/251L	4	Engineering Physics I: Classical Mechanics and lab	PHYS 251	4	University Physics I
CHE 112 or PHY 252/252L	4/4	General Inorganic Chemistry II or Engineering Physics II: Electromagnetism and Optics and lab	CHEM 122/L or PHYS 252	4	General Chemistry II and lab or University Physics II

Students transferring to UND with a completed 4-year accredited baccalaureate degree will have all Essential Studies requirements waived.

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

