

Principia College			UND		
Civil Engineering requirements					
ENGR 160	2	Intro Engineering Profession	CE 101	1	Intro to Civil Engineering
Must be taken at UND			CE 103	3	Graphical Communication
ENGR 306	3	Fluid Mechanics	CE 306	3	Fluid Mechanics
Must be taken at UND			CE 313/313L**	3	General Surveying and lab
ENGR 351	3	Structural Mechanics	CE 351	4	Structural Mechanics
Must be taken at UND			CE 411	1	Civil Engineering Materials Lab
Must be taken at UND			CE 412/412L	3	Soil Mechanics and lab
Must be taken at UND			CE 414	3	Foundation Engineering
Must be taken at UND			CE 416	3	Transportation Engineering
Must be taken at UND			CE 421	3	Hydrology
Must be taken at UND			CE 423/423L	4	Hydraulic Engineering and lab
Must be taken at UND			CE 431/431L	4	Environmental Engineering I and lab
Must be taken at UND			CE 432	3	Environmental Engineering II
Must be taken at UND			CE 444	3	Contracts and Specifications
Must be taken at UND			CE 451	3	Steel Design
Must be taken at UND			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					
CSCI 171	4	Introduction to Programming	ENGR 200	2	Computer Applications in Engineering
ENGR 201	3	Engineering Mechanics: Statics	ENGR 201	3	Statics
ENGR 202	3	Engineering Mechanics: Dynamics	ENGR 202	3	Dynamics
ENGR 203	3	Mechanics of Materials	ENGR 203	3	Mechanics of Materials
ENGR 340	3	Professional Integrity in Engineering	ENGR 340	3	Professional Integrity in Engineering
Must be taken at UND			ENGR 460	3	Engineering Economy
ERTH 225	3	Environmental Geology	GEOE 203	4/3	Earth Dynamics
Required courses for CE within other departments					
CHEM 131	4	Fundamentals of Chemistry I	CHEM 121/L	4	General Chemistry I and lab
CHEM 132***	4	Fundamentals of Chemistry II	CHEM 122/L	4	General Chemistry II and lab
MATH 181	4	Calculus I	MATH 165	4	Calculus I
MATH 182	4	Calculus II	MATH 166	4	Calculus II
MATH 283	4	Multivariable Calculus	MATH 265	4	Calculus III
MATH 380	3	Differential Equations	MATH 266	3	Intro to Differential Equations

PHYS 201 + 202	4	Physics for Scientists/Engrs I + II	PHYS 251	4	University Physics I
MATH 364	3	Mathematical Statistics	MATH 321	3	Applied Statistical Methods

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

**These courses have different course designations for students in online programs, and are indicated with C & CL

***CHEM 132 satisfies the second lab science requirement

Notes