

Principia College			UND		
Petroleum Engineering requirements					
Must be taken at UND			PTRE 201	3	Introduction to Petroleum Engineering
Must be taken at UND			PTRE 301	3	Reservoir Rock Properties
Must be taken at UND			PTRE 311	3	Petroleum Fluid Properties
Must be taken at UND			PTRE 361	1	Petroleum Engineering Lab I
Must be taken at UND			PTRE 401	3	Well Logging
Must be taken at UND			PTRE 405	3	Petroleum Engineering Economy and Law
Must be taken at UND			PTRE 411	3	Drilling Engineering
Must be taken at UND			PTRE 421	3	Production Engineering
Must be taken at UND			PTRE 431	3	Reservoir Engineering
Must be taken at UND			PTRE 445	3	Well Testing
Must be taken at UND			PTRE 451	3	Advanced Drilling Engineering
Must be taken at UND			PTRE 462	1	Petroleum Engineering Lab II
Must be taken at UND			PTRE 465	3	Petroleum Geomechanics
Must be taken at UND			PTRE 471	3	Numerical Reservoir Simulation
Must be taken at UND			PTRE 475	3	Well Completions
Must be taken at UND			PTRE 484	3	Research Design
Must be taken at UND			PTRE 485	3	Senior Design
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 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			GEOE 210	4	Earth Dynamics and Petrophysics
Must be taken at UND			GEOL 407	3	Petroleum Geology
ENGR 306	3	Fluid Mechanics	ME 306	3	Fluid Mechanics
CHEM 311	3	Phys Chem I: Thermodynamics	ME 341	3	Thermodynamics
Required courses for CHE 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

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

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