University of Mary			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								
ENR 200	2	Computer for Math & Engineering	ENGR 200	2	Computer Applications in Engineering			
ENR 201	3	Statics	ENGR 201		Statics			
ENR 203		Mechanics of Materials	ENGR 203		Mechanics of Materials			
PHI 308	3	Ethics	ENGR 340	3	Professional Integrity in Engineering			
Must be taken at UND			GEOE 210		Earth Dynamics and Petrophysics			
Must be taken at UND			GEOL 407		Petroleum Geology			
Must be taken at UND			ME 306	3	Fluid Mechanics			
EME 341	3	Thermodynamics	ME 341		Thermodynamics			
Required courses for PTRE within other departments								
CHE 111	4	General Inorganic Chemistry I	CHEM 121/L		General Chemistry I and lab			
CHE 112	4	General Inorganic Chemistry II	CHEM 122/L		General Chemistry II 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
		Engineering Physics I: Classical Mechanics			
PHY 251/251L	4	and lab	PHYS 251	4	University Physics I
		Engineering Physics II: Electromagnetism			
PHY 252/252L	4	and Optics and lab	PHYS 252	4	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.