

## B.S. in Civil Engineering from UND and B.S. in Physics from McMurry University (McM) – Odd Year Start

FIRST YEAR FALL	Credits	Taken	UND Course
PHYS 2510: University Physics I	5	McM	PHYS 251
MATH 2421: Calculus I	4	McM	MATH 165
ACAD 1340: Freshman Seminar	3	McM	
ENG 1310: Composition and Rhetoric	3	McM	
PHYS 1200: Introduction to Engineering	2	McM	CE 101

SECOND YEAR FALL	Credits	Taken	UND Course
PHYS 3300: Modern Physics	3	McM	
MATH 2340: Linear Algebra	3	McM	
PHYS 2310: Automated Experiments	3	McM	
MATH 3341: ODE	3	McM	MATH 266
PHYS 3315: Engineering Statistics	3	McM	ENGR 201
Gen. Ed. Course	3	McM	

THIRD YEAR FALL	Credits	Taken	UND Course
CHEM 1410: General Chemistry I	4	McM	* See Comb. Below
PHYS 3335: Mechanics of Materials	3	McM	ENGR 203
PHYS 4300: Classical Mechanics	3	McM	
CSC 1306: Programming for Non-Majors	3	McM	
Gen. Ed. Course	3	McM	
CEC 313: General Surveying	2	UND	

FIRST YEAR SPRING	Credits	Taken	UND Course
PHYS 2520: University Physics II	5	McM	Add. Science Course
MATH 2322: Calculus II	3	McM	MATH 166
ENG 1320: Composition and Literature	3	McM	
Approved Comm. Course	3	McM	
PHYS 2315: Computer Aided Design	3	McM	

SECOND YEAR SPRING	Credits	Taken	UND Course
MATH 3301: Multivariate Calculus	3	McM	MATH 265
PHYS 3325: Engineering Dynamics	3	McM	ENGR 202
PHYS 3270: Adv. Lab	2	McM	
MATH 4351: Calculus-Based Probability and Statistics	3	McM	MATH 321
ENGR 200: Computer Applications in Engineering	2	UND	
Approved Geology Course	3	UND	

THIRD YEAR SPRING	Credits	Taken	UND Course
CHEM 1420: General Chemistry II	4	McM	*See Comb. Below
PHYS 4360: Thermodynamics	3	McM	
PHYS 4302: Classical Mechanics II	3	McM	
PHYS 4175: Research Proposal	1	McM	
PHYS 4344: Heat Transfer	3	McM	CE Tech Elective
CE 103: Graphical Communications	3	UND	

FOURTH YEAR FALL	Credits	Taken	UND Course
PHYS 4325: Fluid Mechanics	3	McM	CE 306
PHYS 4310: Electricity and Magnetism	3	McM	
PHYS 4275: Research Project	2	McM	
ENGR 460: Engineering Economy	3	UND	
CE 351: Structural Mechanics	4	UND	
CE 412: Soil Mechanics	3	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
Gen. Ed. Course	3	McM	
			CE Tech Elective
PHYS 4345: Finite Element Analysis	3	McM	
CE 423: Hydraulic Engineering	3	UND	
CE 431: Environmental Engineering I	3	UND	
CE 414: Foundation Engineering	3	UND	
CE 416: Transportation Engineering	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course
SRLD 1300: Intro to Ethics	3	McM	ENGR 340
Gen. Ed. Course	3	McM	
CE 482: Civil Engineering Design I	3	UND	
CE 432: Environmental Engineering II	3	UND	
CE 453: Reinforced Concrete	3	UND	
CE 421: Hydrology	3	UND	

FIFTH YEAR SPRING	Credits	Taken	UND Course
Gen. Ed. Course	3	McM	
Gen. Ed. Course	3	McM	
CE 483: Civil Engineering Design II	3	UND	
CE 444: Contracts and Specifications	3	UND	See Note^
CE 451: Steel Design	3	UND	

SUMMER LABS (ON UND CAMPUS)	Credits	When to Take
CE 313L: General Surveying Lab	1	After Senior Spring
CE 411: Civil Engineering Materials Lab	1	After Senior Spring
CE 412L: Soil Mechanics Lab	1	After Senior Spring
CE 423L: Hydraulic Engineering Lab	1	After Senior Spring
CE 431: Environmental Engineering I Lab	1	After Senior Spring

NOTES	*CHEM 1410 and CHEM 1420 combined are equivalent to CHEM 121/L and CHEM 122/L at UND
	^Course will transfer back to McMurry to fulfill Engineering Ethics requirement