

LCMC Plan for Combined B.S. in Civil Engineering from University of North Dakota (UND) and B.S. in Physics-Engineering from Simpson College (SC)

FIRST YEAR FALL	Credits	Taken	UND Course
PHYS 191: General Physics	4	SC	PHYS 251 ¹
MATH 151: Calculus I	4	SC	MATH 165
SC 110: Foundations	4	SC	
Core Elective	4	SC	

FIRST YEAR SPRING	Credits	Taken	UND Course
PHYS 191: General Physics II	4	SC	PHYS 252 ¹
MATH 152: Calculus II	4	SC	MATH 166
SC 111: Foundations II	4	SC	
Core Elective	4	SC	

SECOND YEAR FALL	Credits	Taken	UND Course
PHYS 250 or PHYS 230 ²	4	SC	ENGR 201 ²
MATH 251: Calculus III	4	SC	MATH 265
CHEM 101: Chemistry I	4	SC	CHEM 121/L
CE 101: Intro to Civil Engineering	1	UND	

SECOND YEAR SPRING	Credits	Taken	UND Course
PHYS 210 or PHYS 271 or Core Elective	2-4	SC	
Elective or MATH 345 ³	4	SC	MATH 266 ³
CE103: Graphical Communication	3	UND	
ENGR 200: Comp. App. In Engineering	2	UND	
Approved Geology Course ⁴	3	UND	

THIRD YEAR FALL	Credits	Taken	UND Course
PHYS 250 or PHYS 230 ²	4	SC	ENGR 201 ²
MATH 255: Linear Algebra	4	SC	
Core Elective	4	SC	
CE 313: General Surveying	2	UND	

THIRD YEAR SPRING	Credits	Taken	UND Course
PHYS 210 or PHYS 271 or Core Elective	2-4	SC	
Elective or MATH 345 ³	4	SC	MATH 266 ³
ENGR 202: Dynamics	3	UND	
ENGR 203: Mechanics of Materials	3	UND	
ENGR 460: Engineering Economy	3	UND	
ENGR 340: Prof. Integrity in Engr.	3	UND	Note ⁵

FOURTH YEAR FALL	Credits	Taken	UND Course
PHYS 340 or PHYS 310 or Core Elect. ⁶	4	SC	
CE 306: Fluid Mechanics	4	UND	
CE 351: Structural Mechanics	4	UND	
CE 412: Soil Mechanics	3	UND	
CE Technical Elective	3	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁷	4	SC	
CE 423: Hydraulic Engineering	3	UND	
CE 431: Environmental Engr. I	3	UND	
CE 451: Steel Design	3	UND	
Technical Elective	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course
PHYS 310 or PHYS 340 or Core Elect. ⁶	4	SC	
CE 421: Hydrology	3	UND	
CE 432: Environmental Engr. II	3	UND	
CE 453: Reinforced Concrete	3	UND	
CE 482: Civil Engineering Design I	3	UND	

FIFTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁷	4	SC	
CE 414: Foundation Engineering	3	UND	
CE 416: Transportation Engineering	3	UND	
CE 444: Contracts and Specifications	3	UND	
CE 483: Civil Engineering Design II	3	UND	

SUMMER COURSE REQUIREMENTS			
Course	Credits	When to Take	Taken
CE 313L: General Surveying Lab	1	Summer after Fourth Year Spring	On UND's campus
CE 411: Civil Engineering Materials Lab	1	Summer after Fourth Year Spring	On UND's campus
CE 412L: Soil Mechanics Lab	1	Summer after Fourth Year Spring	On UND's campus
CE 423L: Hydraulic Engineering Lab	1	Summer after Fourth Year Spring	On UND's campus
CE 431L: Environmental Engineering Lab	1	Summer after Fourth Year Spring	On UND's campus

NOTES	¹ Course is approved as a substitute for major, not as direct equivalency.
	² PHYS 250: Statics will be taken in odd years and is equivalent to UND's ENGR 201. PHYS 230: Modern Physics is taken in even years.
	³ Elective is taken in odd years. MATH 345: Differential Equations will be taken in even years and is equivalent to UND's MATH 266.
	⁴ Options include either GEOL 101 or GEOE 203. Not all options may be available in a certain semester.
	⁵ ENGR 340: Professional Integrity in Engineering has been approved to transfer to Simpson College to fulfill the SC Core Ethics requirement.
	⁶ PHYS 310 will be taken in odd years. PHYS 340 will be taken in even years.
	⁷ PHYS 360 will be taken in odd years. PHYS 320 will be taken in even years.
<i>Plan created November 2023 using requirements from the 2023-2024 UND catalog</i>	