

LCMC Plan for Combined B.S. in Mechanical 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
ME 101: Intro to Mechanical Engineering	3	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
Core Elective	4	SC	
Core Elective	4	SC	
ME 201C: Student Design Lecture	1	UND	
ENGR 202 or ENGR 206 ⁴	3	UND	
ENGR 200: Comp. Appl. in Engineering	2	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	
ME 341: Thermodynamics	3	UND	
ENGR 460: Engineering Economy	3	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 or ENGR 206 ⁴	3	UND	
ENGR 203: Mechanics of Materials	3	UND	
MATH 321: Applied Statistical Methods	3	UND	

FOURTH YEAR FALL	Credits	Taken	UND Course
PHYS 340 or PHYS 310 or Core Elect. ⁵	4	SC	Tech Elect. ⁵
ME 301: Materials Science	3	UND	
ME 306: Fluid Mechanics	3	UND	
ME 322: Design of Machinery	3	UND	
ME Technical Elective	3	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁶	4	SC	Tech. Elec. ⁶
ME 323/L: Machine Component Design	4	UND	
ME 418: Manufacturing Processes	3	UND	
ME 474: Fund. Of Heat and Mass Trans.	3	UND	
ME Technical Elective	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course
PHYS 310 or PHYS 340 or Core Elect. ⁵	4	SC	Tech Elect. ⁵
ME 480: Mechanical Engr. Seminar	3	UND	
ME 487: Engineering Design	2	UND	
ME Technical Elective	3	UND	
ME Technical Elective	3	UND	

FIFTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁶	4	SC	Tech. Elec. ⁶
ME 488: Engineering Design	3	UND	
ENGR 340: Prof. Integrity in Engr.	3	UND	Note ⁷
ME Technical Elective	3	UND	
ME Technical Elective	3	UND	

SUMMER COURSE REQUIREMENTS			
Course	Credits	When to Take	Taken
ME 201L: Student Design Lab	1	After Second Year Spring	On UND's campus
ME 418L: Manufacturing Processes Lab	1	After Fourth Year Spring	On UND's campus
ME 483: Mechanical Measurements Lab	3	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 ENGR 202: Dynamics is taken in odd years. ENGR 206: Fundamentals of Electrical Engineering is taken in even years.
	⁵ PHYS 310 will be taken in odd years. PHYS 340 will be taken in even years. Only one course of either PHYS 340, PHYS 310, PHYS 360, or PHYS 320 (3-4 credits) can apply to UND's requirements for Mechanical Engineering Technical Electives.
	⁶ PHYS 360 will be taken in odd years. PHYS 320 will be taken in even years. Only one course of either PHYS 340, PHYS 310, PHYS 360, or PHYS 320 (3-4 credits) can apply to UND's requirements for Mechanical Engineering Technical Electives.
	⁷ ENGR 340: Professional Integrity in Engineering has been approved to transfer to Simpson College to fulfill the SC Core Ethics requirement.

Plan created November 2023 using requirements from the 2023-2024 UND catalog