College of Engineering & Mines Curriculum Information



LCMC Plan for Combined B.S. in <u>Electrical Engineering</u> from University of North Dakota (UND) and B.S in <u>Physics-Engineering</u> from Simpson College (SC)

FIRST YEAR FALL	Credits	Taken	UND Course
PHYS 191: General Physics	4	SC	PHYS 2511
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 2521
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
Core Elective or PHYS 230 ²	4	SC	
MATH 251: Calculus III	4	SC	MATH 265
CHEM 101: Chemistry I	4	SC	CHEM 121/L
EE 101: Intro. To Electrical Engineering	1	UND	

SECOND YEAR SPRING	Credits	Taken	UND Course
PHYS 210 or PHYS 271	2-4	SC	
Elective or MATH 345 ³	4	SC	MATH 266 ³
Core Elective	4	SC	
EE 201/L: Intro to Digital Elec./Lab	4	UND	

THIRD YEAR FALL	Credits	Taken	UND Course
Core Elective or PHYS 230 ²	4	SC	
MATH 255: Linear Algebra	4	SC	MATH 207
EE 206/L: Circuit Analysis/Lab	4	UND	
EE 304: Comp. Aided Meas. and Cont.	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
EE 313/L: Linear Elec. Circuits/Lab	4	UND	
ENGR 460: Engineering Economy	3	UND	

FOURTH YEAR FALL	Credits	Taken	UND Course
PHYS 340 or PHYS 310 or Core Elect. ⁴	4	SC	Non-EE Elec. ⁴
EE 314/L: Signals & Systems/Lab	4	UND	
EE 316: Electric and Magnetic Fields	3	UND	
EE 321/L: Electronics I/Lab	4	UND	
EE Elective	3	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁶	4	SC	Non-EE Elec. ⁵
EE 405/L: Control Systems I/Lab	4	UND	
EE 409: Distributed Networks	3	UND	
EE 421/L: Electronics II/Lab	4	UND	

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FIFTH YEAR FALL	Credits	Taken	UND Course
PHYS 310 or PHYS 340 or Core Elect. ⁴	4	SC	Non-EE Elec. ⁴
EM 480: Senior Design I	3	UND	
EE 318: Engineering Data Analysis	3	UND	Note ⁶
ENGR 340: Prof. Integrity in Engr.	3	UND	
EE Elective	3	UND	

FIFTH YEAR SPRING	Credits	Taken	UND Course
PHYS 360 or PHYS 320 or Core Elect. ⁶	4	SC	Non-EE Elec. ⁵
EE 481: Senior Design II	3	UND	
EE 452/L: Embedded Systems/Lab	4	UND	
EE Elective	3	UND	
EE Elective	3	UND	

SUMMER COURSE REQUIREMENTS

No Summer Course Requirements for this Degree Pairing

NOTES	¹ Course is approved as a substitute for major, not as direct equivalency.
	² Core Elective will be taken in odd years. 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 PHYS 310 will be taken in odd years. PHYS 340 will be taken in even years. Two courses from PHYS 340, PHYS 310, PHYS 360, or PHYS 320 (total of six credits) will apply to non-Electrical Engineering electives.
	⁵ PHYS 360 will be taken in odd years. PHYS 320 will be taken in even years. Two courses from PHYS 340, PHYS 310, PHYS 360, or PHYS 320 (total of six credits) will apply to non-Electrical Engineering electives.
	⁶ 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