

LCMC Plan for Combined B.S. in Chemical Engineering from University of North Dakota (UND) and B.S in Applied Mathematics & Data Science from Saint Thomas University (STU)

FIRST YEAR FALL	Credits	Taken	UND Course
UNI 101: First Year Experience	1	STU	
MAC 2311: Calculus I	4	STU	See Notes ¹
CHM 1045/L: General Chemistry I/Lab	4	STU	See Notes ²
STA 2023: Applied Statistics	3	STU	
COP 2073: Intro to Data Science	3	STU	
Approved GER Course	3	STU	

FIRST YEAR SPRING	Credits	Taken	UND Course
MAC 2312: Calculus II	4	STU	See Notes ¹
CHM 1046/L: General Chemistry II/Lab	4	STU	See Notes ²
Approved GER Course	3	STU	
CHE 102: Intro to Chemical Engineering	2	UND	
CHE 103: Computing Tools for ChE	3	UND	

SECOND YEAR FALL	Credits	Taken	UND Course
MAC 2311: Calculus III	4	STU	MATH 265
PHY 2048/L: University Physics I/Lab	5	STU	PHYS 251
Approved GER Course	3	STU	
ENGR 206: Fundamentals of EE	3	UND	
CHE 201: ChE Fundamentals	3	UND	

SECOND YEAR SPRING	Credits	Taken	UND Course
MAS 3105: Intro to Linear Algebra	3	STU	
PHYS 2049/L: University Physics II/Lab	5	STU	PHYS 252
MAP 2302: Differential Equations	3	STU	MATH 266
CHE 206: Unit Operations in ChE	3	UND	
LEAD 101: Learning Leadership	3	UND	

THIRD YEAR FALL	Credits	Taken	UND Course
CHM 2210/L: Organic Chemistry I/Lab	4	STU	CHEM 341/L
Approved GER Course	3	STU	
Approved GER Course	3	STU	
CHE 301: Intro to Transport Phenomena	4	UND	
CHE 303: ChE Thermodynamics	4	UND	

THIRD YEAR SPRING	Credits	Taken	UND Course
MAT 310: Advanced Statistics	3	STU	
COP 2030: Prog. For Data Analytics	3	STU	
CIS 401: Topics in Big Data Analysis	3	STU	
CHE 305: Separations	3	UND	
CHE 321: ChE Reactor Design	3	UND	
CHE 315: Engr Stat and Design Exp	3	UND	

FOURTH YEAR FALL	Credits	Taken	UND Course
PHY 3101C: Modern Physics	3	STU	Tech Elect.
Approved Ethics Course	3	STU	See Note ³
CHE 411: Plant Design I: Process...	3	UND	
CHE 408: Process Dynamics...	3	UND	
CHEM 466: Fund of Physical and...	3	UND	
Approved Adv Chem Sci Elective	3	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
Approved Math Elective (4000 level)	3	STU	
Approved GER Course	3	STU	
Approved GER Course	3	STU	
CHE 413: Plant Design II: Preliminary...	3	UND	
CHE 416: Chemical Product Design	3	UND	
Approved Adv Chem Sci Elective	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course
PHY 303: Physics of Materials	3	STU	See Note ⁴
BSC 1010/L: Principles of Biology/Lab	4	STU	
Approved GER Course	3	STU	
Approved GER Course	3	STU	
Approved GER Course	3	STU	

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SUMMER COURSE REQUIREMENTS			
Course	Credits	When to Take	Taken
CHE 235: ChE Summer Lab I	3	After Third Year Spring	On-Campus at UND
CHE 335: ChE Summer Lab II	3	After Fourth Year Spring ⁵	On-Campus at UND
CHE 431: ChE Lab IV	3	After Fourth Year Spring ⁵	On-Campus at UND
CHE 414: Plant Design II: Conceptual...	2	After Fourth Year Spring ⁵	Online from UND

NOTES	¹ MAC 2311 and MAC 2312 must both be completed at a C or higher for equivalency to UND's MATH 165 and 166.
	² CHM 1045, 1045L, 1046, and 1046 must all be completed at a C or higher for equivalency to UND's CHEM 121, 121L, 122, and 122L.
	³ Students may choose from STU's PHI 3609, PHI 3633, PHI 3640, or PHI 3641 in order to fulfill UND's ENGR 340 course requirement.
	⁴ Course will waive Materials Science requirement in Chemical Engineering major.
	⁵ The summer after fourth year spring will be a very heavy courseload. It may serve students better to move courses around to meet prerequisite requirements and take CHE 335 after third year spring.
<i>Plan created October 2023 using requirements from the 2023-2024 UND catalog</i>	