

College of Engineering & Mines Curriculum Information

LCMC Plan for Combined B.S. in Chemical Engineering from University of North Dakota (UND) and B.S. in Chemistry from Baker University (BU)

FIRST YEAR FALL	Credits	Taken	UND Course
CH 137/L: General Chemistry I/Lab	4	BU	CHEM 121/L
BK 101: Baker Experience	1	BU	
BC 110: Freshman Seminar I	3	BU	
MA 171: Calculus I	4	BU	MATH 165
LR 100: Introduction to Leadership	3	BU	LEAD 101

FIRST YEAR SPRING	Credits	Taken	UND Course
CH 138/L: General Chemistry II	4	BU	CHEM 122/L ¹
BC 120: Freshman Seminar II	3	BU	
MA 172: Calculus II	4	BU	MATH 166
CHE 102: Intro. to Chemical Engr.	2	UND	

SECOND YEAR FALL	Credits	Taken	UND Course
CH 251/L: Organic Chemistry I/Lab	4	BU	CHEM 341/L
PC 225: General Physics I	4	BU	PHYS 251
MA 372: Differential Equations	3	BU	MATH 266
ENGR 206: Fund. Of Electrical Engr.	3	UND	

SECOND YEAR SPRING	Credits	Taken	UND Course
CH 252/L: Organic Chemistry II/Lab	4	BU	ACS Elective
PC 226: General Physics II	4	BU	Note ²
MA 271: Calculus III	4	BU	MATH 265
CHE 201: Chem. Engr. Fundamentals	3	UND	

THIRD YEAR FALL	Credits	Taken	UND Course
CH 361/L: Physical Chemistry I/Lab	4	BU	CHEM 470 ³
CH 370: Biochemistry	3	BU	ACS Elective
PC 325: General Physics III	4	BU	Note ²
Core- Fine Arts	3	BU	
CH 475: Adv. Topics- Material Science	3	BU	Mat. Sci. Elect.

THIRD YEAR SPRING	Credits	Taken	UND Course
CH 340: Analytical Chem. Methods	3	BU	Note ³
CH 362/L: Physical Chemistry II/Lab	4	BU	
Core- Fine Arts	3	BU	
CHE 103: Computing Tools for ChE	3	UND	
CHE 206: Unit Ops. In Chem. Engr.	3	UND	

FOURTH YEAR FALL	Credits	Taken	UND Course
Core- Humanities	3	BU	
Core- Foreign Language	3	BU	
CHE 301: Intro. To Transport Phenom.	4	UND	
CHE 303: Chem. Engr. Thermodyn.	4	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
CH 491: Senior Seminar	2	BU	
CH 341: Instrumental Analysis	4	BU	
CHE 305: Separations	3	UND	
CHE 315: Engr. Stats. And Design...	3	UND	
CHE 321: Chem. Engr. Reactor Design	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course
PH 120: Ethics	3	BU	ENGR 340
Core- Social Sciences	3	BU	
CHE 408: Process Dynamics and...	3	UND	
CHE 411: Plant Design I: Process...	4	UND	

FIFTH YEAR SPRING	Credits	Taken	UND Course
Core- Capstone	3	BU	
Core- Social Science	3	BU	
CHE 413: Plant Design II: Prelim....	3	UND	
CHE 416: Chemical Product Design	3	UND	

SUMMER CLASSES & LABS	Credits	Taken	When to Take
CHE 235: CHE Summer Lab I	3	UND (on-campus)	After Third Year Spring
CHE 335: CHE Summer Lab II	3	UND (on-campus)	After Fourth Year Spring
CHE 431: Chemical Eng Lab IV	3	UND (on-campus)	After Fifth Year Spring
CHE 414: Plant Design II: Conceptual...	2	UND (online/remote)	After Fifth Year Spring

NOTES	¹ CH 138L is a new course to be offered from Baker; existing CH 141 course will not have equivalency to any UND course
	² Both PC 226 and PC 325 must be completed successfully for equivalency to PHYS 252 at UND
	³ Course will go towards fulfilling Physical Chemistry requirement in Chemical Engineering major, either CHEM 466 or CHEM 470
	⁴ CH 340 is a new course to be offered from Baker, and will be equivalent to CHEM 333/L
<i>Plan created February 2023 using requirements from the 2023-2024 UND catalog</i>	