College of Engineering & Mines Curriculum Information



LCMC Plan for Combined B.S. in <u>Chemical Engineering</u> from University of North Dakota (UND) and B.S. in <u>Chemistry</u> from Concordia University (Austin, TX) (CU-TX)

FIRST YEAR FALL	Credits	Taken	UND Course
CHE 1341: General Chem. I	3	CU-TX	CHEM 121
CHE 1141: General Chem. I Lab	1	CU-TX	CHEM 121L
ENG 1316: Written Comm.	3	CU-TX	
Approved Behavioral Sci. Course	3	CU-TX	
LDR 1100: Life & Leadership	1	CU-TX	
Approved History Course	3	CU-TX	

FIRST YEAR SPRING	Credits	Taken	UND Course
CHE 1342: Chemistry II	3	CU-TX	CHEM 122
CHE 1142: Chemistry II Lab	1	CU-TX	CHEM 122L
REL 1301: New Testament History	3	CU-TX	
ENG 1317: Intro. To Literature	3	CU-TX	
COM 1300: Intro. To Communication	3	CU-TX	

SECOND YEAR FALL	Credits	Taken	UND Course
CHE 2401: Organic Chem. I	4	CU-TX	CHEM 341/L.
CHE 3301: Inorganic Chem.	3	CU-TX	ACS Elective
MATH 2401: Calculus I	4	CU-TX	Note ¹
CHE 102: Intro. To Chemical Eng.	2	UND	
CHE 201: Chem. Eng. Fund.	3	UND	

SECOND YEAR SPRING	Credits	Taken	UND Course
CHE 2403: Organic Chem. II	4	CU-TX	ACS Elective
MTH 2402: Calculus II	4	CU-TX	Note ¹
LDR 2201: Leadership Theory	2	CU-TX	LEAD 101
CHE 103: Comp. Tools for Chem	3	UND	
CHE 206: Unit Operations in Chem	3	UND	

THIRD YEAR FALL	Credits	Taken	UND Course
CHE 3401: Quantitative Analysis	4	CU-TX	
MTH 3410: Calculus III	4	CU-TX	MATH 265
MTH 3317: Differential Equations	3	CU-TX	MATH 266
REL 1311: History and Literature	3	CU-TX	
PHYS 251C: University Physics I	3	UND	Note ²

THIRD YEAR SPRING	Credits	Taken	UND Course
CHE 3404: Instrumental Analysis	4	CU-TX	Tech. Elective
REL 3333: Christian Ethics	3	CU-TX	
CHE 315: Engineering Statistics	3	UND	
PHYS 252C: University Physics II	3	UND	Note ²

FOURTH YEAR FALL	Credits	Taken	UND Course
CHE 4301: Physical Chemistry I	3	CU-TX	
CHE 4201: Physical Chemistry Lab	2	CU-TX	
CHE 301: Intro to Transport	4	UND	
CHE 303: Chemical Eng. Thermo	4	UND	

FOURTH YEAR SPRING	Credits	Taken	UND Course
CHE 4302: Physical Chemistry II	3	CU-TX	
CHE 4401: Chemistry Capstone	4	CU-TX	
CHE 305: Separations	3	UND	
CHE 321: Chem. Eng. Reactor	3	UND	
ENGR 206: Fund. Of Electrical	3	UND	

FIFTH YEAR FALL	Credits	Taken	UND Course	FIFTH YEAR SPRING	Credits	Taken	UND Course
Approved Technology Course	3	CU-TX		Approved Fine Arts Course	3	CU-TX	
CHE 408: Process Dynamics	3	UND		CHE 413: Plant Design II: Prelim	3	UND	
CHE 411: Plant Design I	4	UND		CHE 416: Chemical Product	3	UND	
ENGR 340: Prof. Integrity	3	UND		Material Science Elective	3	UND	

SUMMER COURSE REQUIREMENTS				
Course	Credits	When to Take ³	Taken	
PHYS 251CL: University Physics I Lab	1	After Junior Spring	Remotely from UND	
PHYS 252CL: University Physics II Lab	1	After Junior Spring	Remotely from UND	
CHE 235: CHE Summer Lab I	3	After Junior Spring	On-Campus Lab at UND	
CHE 335: CHE Summer Lab II	3	After Junior Spring	On-Campus Lab at UND	
CHE 431: CHE Lab IV	3	After Fifth Year Spring	On-Campus Lab at UND	
CHE 414: Plant Design II: Conceptual	2	After Fifth Year Spring	Remotely from UND	

NOTES	¹ CU-TX's MTH 240 and 2402 combined is equivalent to UND's MATH 165 and MATH 166. Both must be completed at a "C" or higher for transfer.
	² Course has been approved to transfer back to CU-TX in order to fulfill degree requirements there. Students should connect with CU-TX advisor to confirm steps to have it apply.
	³ Students should be aware that the summer after Junior Spring will be a heavy semester due to number of credits being taken. It may be possible to move certain requirements to the summer after Senior Spring semester.



List does not include requirements for UND's Essential Studies University requirements; students who have completed a 4-year regionally accredited baccalaureate degree will have all Essential Studies requirements waived per <u>UND policy.</u>

The above plan may not reflect the only path to graduation, nor should it be used as the sole advising document. Students are required to complete all requirements as listed in the UND Academic Catalog for graduation purposes and should work with their UND advisor to confirm progress towards completion. Plans reviewed/revised October 2024 for UND's 2024-2025 Academic Catalog requirements' listings.