

LEADERS CAN START ANYWHERE... AND FINISH THEIR DEGREE AT UND

When you begin your Chemical Engineering degree at Bismarck State College.

Courses are sequenced to provide guidance and to help ensure that prerequisites are met.

Catalog Year: 2022-2023

Plan of Study: Bachelor of Science in Chemical Engineering.

Begin courses at Bismarck State College		
First Year First Semester		
	ENGL 110 – College Composition	3
	MATH 165 – Calculus I	4
	CHEM 121/121L – General Chemistry I and lab	5
	Humanities course – HIST 101, 102, 103 or 104	3
	Social Science elective	3
Total Credits		18
First Year Second Semester		
	CHEM 122/122L – General Chemistry II and lab	5
	ENGL 120/125 – College Composition <u>or</u> Intro to Professional Writing	3
	MATH 166 – Calculus II	4
	Fine Arts elective	3
	ECON 201 – Principles of Microeconomics	3
Total Credits		18
Second Year First Semester		
	CHEM 241/241L – Organic Chemistry I and lab	5
	MATH 265 – Calculus III	4
	PHYS 251/251L – University Physics I and lab	5
	Enrichment course	2
	CHE 201 Chemical Engineering Fundamentals (taken at UND)	3
Total Credits		19
<p>Apply to UND by April 15</p> <ul style="list-style-type: none"> Complete online application at UND.edu/transfer Request transcripts to be sent to UND from BSC. <p>Apply for scholarships at UND by March 1</p> <ul style="list-style-type: none"> After admission submit application for campus-wide scholarships in UND's Scholarship Central 		
Second Year Second Semester		
	MATH 266 – Differential Equations	3
	PHYS 252/252L – University Physics II and lab	5
	COMM 110 – Public Speaking	3
	CHE 206 – Unit Operations in Chemical Engineering (taken at UND)	3
	CHE 315 – Engineering Statistics and Design of Experiments	3
Total Credits		17
<p>Take next steps to begin at UND</p> <ul style="list-style-type: none"> Begin new student checklist at UND.edu/admitted Attend UND Transfer Student Orientation at UND.edu/orientation 		

Third Year First Semester		
	CHE 301 – Intro to Transport Phenomena	4
	CHE 303 – Chemical Engineering Thermodynamics	4
	CHE 331 – Chemical Engineering Lab II	2
	ENGR 206 – Fundamentals of Electrical Engineering	3
	HUM/AW – Humanities, Analyzing Worldview	3
Total Credits		16
Third Year Second Semester		
	LEAD 101 – Learning Leadership	3
	CHE 232 – Chemical Engineering Lab I	2
	CHE 305 – Separations	3
	CHE 321 – Chemical Engineering Reactor Design	3
	CHE 332 – Chemical Engineering Lab III	2
	ENGR 340 – Professional Integrity in Engineering	3
	CHE 103 – Computing Tools for Chemical Engineering	3
Total Credits		19
Fourth Year First Semester		
	CHE 408 – Process Dynamics and Control	3
	CHE 411 – Plant Design I: Process Design and Economics	4
	CHE 431 – Chemical Engineering Lab IV	3
	CHEM 466 – Fundamentals of Physical and Biological Chemistry	3
	CHE Technical Elective	3
Total Credits		16
Apply to graduate from UND		
	<ul style="list-style-type: none"> After registering for your last semester of courses, apply at UND.edu/commencement 	
Fourth Year Second Semester		
	CHE 412 – Plant Design II: Process Project Engineering	5
	CHE 416 – Chemical Product Design	3
	Advanced Chemical Science elective	3
	Advanced Chemical Science elective	3
	Material Science Elective	3
Total Credits		
TOTAL CREDITS TO GRADUATE		140

This information is provided as guide only. Students are strongly encouraged to meet with their major specific UND advisor.

An official evaluation of transfer credit will be done upon admission to the university. Transfer credits will be evaluated and applied according to the current catalog and the approved Essential Studies list at the first semester of enrollment at UND.

Transfer credit for courses other than those listed above will be evaluated on a course-by-course basis.

Students are required to fulfill UND graduation and GPA requirements to receive a degree and should consult with their UND advisor and the undergraduate catalog for details.