

Articulation Agreement

University of North Dakota and Anoka-Ramsey Community College

All locations, MN

Degree: Bachelor of Science in Chemical Engineering

Major: CHEMICAL ENGINEERING

The following information was updated according to the 2017-2019 UND CATALOG - Students satisfactorily completing the courses below may transfer them to UND in fulfillment of the corresponding course requirements for this degree. Essential Studies equivalencies, courses, and major requirements may change. 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.

Students planning to transfer to UND are encouraged to have phone or email contact with a UND adviser. Students may call the Advising Office at 1-800-CALL-UND ext. 3411 or (701) 777-3411.

*Other ARCC courses may satisfy these requirements. Contact the department for details.
133 credits are required to graduate with a chemical engineering degree from UND.

*Meets elective requirements

ARCC	Course/Credits/Title	UND	Course/Credits/Title
<u>I. Communication - COM</u>			
ENGL 1104	3 Technical Writing	ENGL 130	3 Comp II: Writing for Public Audiences
ENGL 1121	4 College Writing & Critical Reading	ENGL 110	3 College Composition I
<u>II. Social Science - SS</u>			
Elective Credit	9 Credit from at least two depts.	Elective Credit	9 Credit from at least two depts.
<u>III. Arts and Humanities - FA/HUM</u>			
Elective Credit	6 Credit from at least two depts.	Elective Credit	6 Credit from at least two depts.
PHIL 1110	3 Intro to Ethics	ChE 340	3 Professional Integrity in Engineering
<u>IV. Mathematics, Science & Technology - MST</u>			
CHEM 1061	4 Principles of Chemistry I (Q)	CHEM 121/L	3/1 General Chemistry I/Lab
CHEM 1062	4 Principles of Chemistry II (Q)	CHEM 122/L	3/1 General Chemistry II/Lab
MATH 1400	5 Calculus I	MATH 165	4 Calculus I
MATH 1401	5 Calculus II	MATH 166	4 Calculus II
<u>Other Program Requirements</u>			
CHEM 2061	5 Organic Chemistry I	CHEM 341/L	4/1 Organic Chemistry I/Lab
CHEM 2062	5 Organic Chemistry II	*CHEM 342/L	4/1 Organic Chemistry II/Lab
CSCI 1115	3 Visual Basic Programming	*Elective Credit	3 Technical Elective II
ENGR 1100	2 Intro to Engineering	ChE 102	2 Intro to Chemical Engineering
ENGR 2219	4 Linear Circuits I	ENGR 206	3 Fund of Electrical Engineering
ENGR 2243	3 Mechanics of Materials	*ENGR 203	3 Material Science Elective

MATH 2210	4	Differential Equations	MATH 266	3	Elementary Differential Equations
MATH 2220	5	Multivariable Calc & Vector Analysis	MATH 265	4	Calculus III
MATH 2230	3	Probability and Statistics	*Elective Credit	3	Technical Elective I
PHYS 1327	6	College Physics I/Lab	PHYS 251/L	4	University Physics I/Lab
PHYS 1328	6	College Physics II/Lab	PHYS 252/L	4	University Physics II/Lab

A complete list of approved Essential Studies courses can be found online at <http://und.edu/academics/essential-studies/approved-courses.cfm>

When choosing your Essential Studies (General Education) Courses in Communication, Fine Arts and Humanities, Social Science, and Math, Science and Technology, you will need to consider how you will meet the special emphasis requirements. Courses listed above that meet a special emphasis requirement are marked as follows: Oral Communication requirement (O), Social-Cultural Diversity requirement: United States (U), Social-Cultural Diversity requirement: Global (G), Quantitative Reasoning requirement (Q), and Advanced Communication requirement (A). To learn more please go to <http://und.edu/academics/essential-studies> or check with your adviser.

All students-including transfers-are required to take an Essential Studies upper division Capstone (C) course at UND. Approved Capstone courses are taken in the senior year of a student's undergraduate program.

Additional classes will be required to earn the above degree; a minimum of 120 credits is required to graduate from UND. A complete listing of program requirements can be found in the [Academic Catalog](#) and [Four Year Plans](#).

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