

# Articulation Agreement

## University of North Dakota and Northland Community & Technical 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.

133 credits are required to graduate with a chemical engineering degree from UND.

\*Meets elective requirements

NCTC	Course/Credits/Title	UND	Course/Credits/Title
<b><u>I. Communication - COM</u></b>			
ENGL 1111	3 Composition I	ENGL 110	3 College Composition I
ENGL 2207 or	3 Technical Writing	ENGL 130	3 Comp II: Writing for Public Audiences
ENGL 1112	3 Composition II	ENGL 130	3 Comp II: Writing for Public Audiences
<b><u>II. Social Science - SS</u></b>			
Elective Credit	9 Credit from at least two depts.	Elective Credit	9 Credit from at least two depts.
<b><u>III. Arts and Humanities - FA/HUM</u></b>			
PHIL 1102 or	3 Intro to Ethics or	ChE 340	3 Professional Integrity in Engineering
PHIL 2240	3 Ethics and Business		
Elective Credit	6* Credit from at least two depts.	Elective Credit	6* Credit from at least two depts.
*must include 3 credits designated as Fine Arts and 3 credits designated as Humanities			
<b><u>IV. Mathematics, Science &amp; Technology - MST</u></b>			
CHEM 1121	5 General Chemistry I (Q)	CHEM 121/L	3/1 General Chemistry I/Lab
CHEM 1122	5 General Chemistry II (Q)	CHEM 122/L	3/1 General Chemistry II/Lab
MATH 2231	4 Calculus I	MATH 165	4 Calculus I
MATH 2232	4 Calculus II	MATH 166	4 Calculus II
<b><u>Other Program Requirements</u></b>			
CHEM 2211	5 Organic Chemistry I	CHEM 341/L	4/1 Organic Chemistry I/Lab
CHEM 2212	5 Organic Chemistry II	*CHEM 342/L	4/1 Organic Chemistry II/Lab
MATH 2233	4 Calculus III	MATH 265	4 Calculus III
PHYS 2211	5 Physics I	PHYS 251/L	4 University Physics I/Lab
PHYS 2212	5 Physics II	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.