

# Articulation Agreement

## University of North Dakota and Hibbing Community College

Hibbing, 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.

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

\* Other HCC courses may satisfy these requirements, contact the department for details.

\*Meets elective requirements

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HCC		Course/Credits/Title	UND		Course/Credits/Title
<b><u>I. Communication - COM</u></b>					
ENGL 1060	3	Freshman Composition	ENGL 110	3	College Composition I
ENGL 1070 or	3	Technical Report Writing	ENGL 130 or	3	Comp II: Writing for Public Audiences
ENGL 1090	3	Advanced Composition	ENGL 130	3	Comp II: Writing for Public Audiences
<b><u>II. Social Science - SS</u></b>					
Elective Credit	9	Social Science Elective Credit	Elective Credit	9	Social Science Elective Credit
<b><u>III. Arts and Humanities - FA/HUM</u></b>					
Elective Credit	6	Credit from at least two depts.	Elective Credit	6	Credit from at least two depts.
PHIL 1300	3	Ethics	ChE 340	3	Professional Integrity in Engineering
<b><u>IV. Mathematics, Science &amp; Technology - MST</u></b>					
CHEM 1610	5	General Chemistry 1 (Q)	CHEM 121/L	3/1	General Chemistry I/Lab
CHEM 1611	5	General Chemistry 2 (Q)	CHEM 122/L	3/1	General Chemistry II/Lab
MATH 2101	5	Calculus 1	MATH 165	4	Calculus I
MATH 2111	5	Calculus 2	MATH 166	4	Calculus II
<b><u>Other</u></b>					
BUS 2500	3	Principles of Marketing	*Elective Credit	3	Technical Elective II
CHEM 2710	5	Organic Chemistry 1	CHEM 341/L	4/1	Organic Chemistry I/Lab
CHEM 2720	5	Organic Chemistry 2	*CHEM 342/L	4/1	Organic Chemistry II/Lab
CSCI 1021	3	Visual Basic Programming I	*Elective Credit	3	Technical Elective I
ENGR 1010	2	Intro to Engineering	ChE 102	2	Intro to Chemical Engineering

ENGR 2061	4	Elec Engineering Fundamentals/lab	EE 206/306	3/1	Circuit Analysis/Lab
MATH 2121	5	Calculus 3	MATH 265	4	Calculus III
MATH 2211	5	Diff Equations w Intro Linear Algebra	MATH 266/207	3/2	Elem Diff Equations/Intro to Linear Alg
PHYS 2010	5	General Physics 1	PHYS 251/L	4	University Physics I/Lab
PHYS 2021	5	General Physics 2	PHYS 252/L	4	University Physics II/Lab

### Other Program Requirements

ENGR 2030	3	Mechanics of Materials	*ENGR 203	3	Material Science Elective
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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.