Articulation Agreement

University of North Dakota and Rochester Community & Technical College Rochester, MN

Degree: Bachelor of Science in Chemical Major: CHEMICAL ENGINEERING 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.

^{*}Meets elective requirements

RCTC		Course/Credits/Title	UND	Course/Credits/Title						
I. Communication - COM										
ENGL 1109	3	Intro to Technical Communication	ENGL 130	3	Comp II: Writing for Public Audiences					
ENGL 1117	4	Reading & Writing Critically I	ENGL 110	3	College Composition I					
II. Social Science - SS										
Elective Credit	9	Credit from at least two depts.	Elective Credit	9	Credit from at least two depts.					
III. Arts and Humanities - FA/HUM										
PHIL 1125 or	3	Ethics	ChE 340	3	Professional Integrity in Engineering					
PHIL 1130	3	Environmental Ethics			0 , 0					
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										
IV. Mathematics, Science & Technology - MST										
CHEM 1127	4	Chemical Principles I (Q)	CHEM 121/L	3/1	General Chemistry I/Lab					
CHEM 1128	4	Chemical Principles II (Q)	CHEM 122/L	3/1	General Chemistry II/Lab					
MATH 1127	5	Calculus I	MATH 165	4	Calculus I					
MATH 1128	5	Calculus II	MATH 166	4	Calculus II					
Other Program Requirements										
CHEM 2127	5	Organic Chemistry I	CHEM 341/L	4/1	Organic Chemistry I/Lab					
CHEM 2128	5	Organic Chemistry II	*CHEM 341/L	4/1	Organic Chemistry II/Lab					
ENGR 2221	3	Deformable Body Mechanics	ENGR 203	3	Material Science Elective					
ENGR 2213	4	Linear Circuit Analysis I	ENGR 206	3	Fund of Electrical Engineering					

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

^{*}Other RCTC credits may satisfy these requirements. Contact the department for details.

MATH 2237	5	Multivariable and Vector Calculus	MATH 265	4	Calculus III
MATH 2238	5	Differential Equations & Linear Algebra	MATH 266	3	Elementary Differential Equations
PHYS 1127	5	Classical Physics I	PHYS 251/L	4	University Physics I/Lab
PHYS 1128	5	Classical Physics II	PHYS 252/L	4	University Physics II/Lab

 $A \ complete \ list of approved \ Essential \ Studies \ courses \ can \ be \ found \ online \ at \ \underline{http://und.edu/academics/essential-studies/approved-courses.cfm}$

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 <u>Academic Catalog</u> and <u>Four Year Plans</u>.

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