

Articulation Agreement

University of North Dakota and Normandale Community College

Bloomington, MN

Degree: Bachelor of Science in Mechanical Engineering

Major: MECHANICAL 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.

129 credits are required to graduate with a mechanical engineering degree from UND.

II or III should include 3 total credits as specified to satisfy the Ethics requirements

*must include 3 credit designated as Fine Arts and 3 credits designated as Humanities

+ must include 3 credits of Global Diversity (G) and 3 credits of United States Diversity (U)

NCC	Course/Credits/Title	UND	Course/Credits/Title
<u>I. Communication - COM</u>			
ENGC 1101	4 Freshman Composition	ENGL 110	3 College Composition I
ENGC 2102	3 Business and Technical Writing	ENGL 130	3 Comp II: Writing for Public Audiences
<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	9*# Credit from at least two depts.	Elective Credit	9*# Credit from at least two depts.
*must include 3 credits designated as Fine Arts and 3 credits designated as Humanities			
<u>IV. Mathematics, Science & Technology - MST</u>			
CHEM 1061	5 Principles of Chemistry I (Q)	CHEM 121/L	3/1 General Chemistry I/Lab
CHEM 1062	5 Principles of Chemistry 2 (Q)	CHEM 122/L	3/1 General Chemistry II/Lab
MATH 1510	5 Calculus 1	MATH 165	4 Calculus I
MATH 1520	5 Calculus 2	MATH 166	4 Calculus II
<u>Other Program Requirements</u>			
CSCI 1101	3 Intro to Computing and Problem Solving	ENGR 200	2 Computer Applications in Engineering
ENGR 1020	4 Intro to Engineering Design	ME 201	2 Student Design
ENGR 2001	5 Circuit with Electronics I	ENGR 206	3 Circuit Analysis
ENGR 2231	3 Thermodynamics	ME 341	3 Thermodynamics
ENGR 2235	3 Statics	ENGR 201	3 Statics
ENGR 2236	3 Dynamics	ENGR 202	3 Dynamics

ENGR 2331	3	Deformable Body Mechanics	ENGR 203	3	Mechanics of Materials
MATH 2400	4	Probability Statistics with Calculus	MATH 321	3	Applied Statistical Methods
MATH 2510	5	Calculus 3: Multivariate Calculus	MATH 265	4	Calculus III
MATH 2520	5	Calculus 4: Diff. Equations & Linear Algebra	MATH 266	3	Elementary Differential Equations
PHYS 1121	5	Physics with Calculus 1	PHYS 251/L	4	University Physics I/Lab
PHYS 1122	5	Physics with Calculus 2	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.