

Articulation Agreement

University of North Dakota and Anoka-Ramsey Community College

All locations, MN

Degree: Bachelor of Science in Electrical Engineering

Major: ELECTRICAL 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.

135 credits are required to graduate with an electrical engineering degree from UND.

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>			
PHIL 1110	3 Ethics	PHIL 250	3 Ethics in Engineering & Science
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			
<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)	Elective Credit	3 Basic/Applied Science Elective
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>			
ENGR 2240 or	3 Thermodynamics (preferred) or	Elective Credit	6 Non- EE Elective
ENGR 2242 or	3 Dynamics or	Elective Credit	- -
ENGR 2243	3 Mechanics of Materials	Elective Credit	- -
CSCI 1106	4 Fundamentals of Computer Science I	EE 304	3 Computer Aided Meas & Controls
ENGR 1100	2 Intro to Engineering	EE 101	1 Intro to Electrical Engineering
ENGR 2218	4 Digital Logic/Lab	EE 201/202	2/1 Intro to Digital Electronics/Lab

ENGR 2219	4	Linear Circuits I/Lab	EE 206/306	3/1	Circuit Analysis/Lab
ENGR 2220	4	Linear Circuits II/Lab	EE 313/307	3/1	Linear Electric Circuits/Lab
ENGR 2241	3	Statics	Elective Credit	3	Non-EE Elective
MATH 2100	4	Discrete Mathematics	Elective Credit	3	Technical Elective
MATH 2200	4	Linear Algebra	MATH 207	2	Intro to Linear Algebra
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	EE 318	3	Engineering Data Analysis
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.