

Articulation Agreement

University of North Dakota and Normandale Community College

Bloomington, MN

Degree: Bachelor of Science

Major: COMPUTER SCIENCE

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. 4974 or (701) 777-4974.

Because of language changes and the rapidity of change in Computer Science, transfer students are urged to speak with their adviser at UND to determine their best starting point in UND's Computer Science curriculum.

NCC		Course/Credits/Title	UND		Course/Credits/Title
<u>I. Communication - COM</u>					
COMM 1101	3	Fundamentals of Public Speaking (O)	COMM 110	3	Fundamentals of Public Speaking
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 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 II (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 1111	4	Programming in C	CSCI 130	4	Introduction Scientific Programming
CSCI 2002	4	Algorithms and Data Structures	CSCI 242	3	Algorithms and Data Structures
CSCI 2011	4	Discrete Structure Computer Science	MATH 208	3	Discrete Math
CSCI 2021	4	Machine Architecture and Organization	CSCI 370	4	Computer Architecture
CSCI 2033	4	Elem Computational Linear Algebra	MATH 207	2	Intro to Linear Algebra
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.

Articulation Agreement

University of North Dakota and Normandale Community College

Bloomington, MN

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Major: COMPUTER SCIENCE

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<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	3	Fine Arts Elective	Elective Credit	3	Fine Arts Elective
LANG 1100	5	FREN/GERM/JPNSE/SPAN	LANG 101	4	First Year Language I
LANG 1200	5	FREN/GERM/JPNSE/SPAN	LANG 102	4	First Year Language II
<u>IV. Mathematics, Science & Technology - MST</u>					
CSCI 1111	4	Introduction to Programming in C	CSCI 160	4	Computer Science I
CSCI 2002	4	Structure of Computer Programming 2	CSCI 161	4	Computer Science II
MATH 1100	4	College Algebra and Probability (Q)	MATH 103	3	College Algebra
<u>Other Program Requirements</u>					
LANG 2100	5	FREN/GERM/JPNSE/SPAN	LANG 201	4	Second Year Language I
LANG 2200	5	FRNE/GERM/JPNSE/SPAN	LANG 202	4	Second Year Language I

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