Colorado Community College to UNC Transfer Guide*
Computer Science A.S. / Mathematics B.S. – Computer Science Concentration
2023-2024 Catalog

*Guide for students transferring to the University of Northern Colorado from a Colorado community college for the purpose of completing a bachelor's degree. Courses marked as (**bold**) are UNC equivalent courses (if applicable) upon transfer. UNC Liberal Arts Curriculum (LAC) is waived with completion of AA/AS degree (if an AA/AS degree is not completed, additional liberal arts courses may be required). This guide is based on UNC degree and Colorado general education requirements from the above catalog term.

This four-year plan is a **recommended schedule** and not reflective of every student's individual academic context. Some requirements may vary by college. Some degrees have Statewide Transfer Articulation Agreements in place; please see https://cdhe.colorado.gov/transfer-degrees for details. This guide is for planning purposes only. Students should consult with their academic advisor for course sequence guidance.

COMMUNITY COLLEGE – 60 Credits

YEAR 1 – FALL: 15 credits		YEAR 1 – SPRING: 15 credits	
ENG 1021 English Composition I (GT-CO1) ***ENG 122 College Composition**	3 credits	ENG 1022 English Composition II (GT-CO2) ***ENG 123 College Research Paper**	3 credits
MAT 2410 Calculus I (GT-MA1) ***MATH 131 Calculus I**	5 credits	MAT 2420 Calculus II (GT-MA1) ***MATH 132 Calculus II**	5 credits
CSC 1060 Computer Science I ***CS 1XX (Substitute for CS 120)**	4 credits	CSC 1061 Computer Science II ***CS 1XX (Substitute for CS 160)**	4 credits
Arts & Humanities (GT-AH*)	3 credits	Arts & Humanities (GT-AH*)	3 credits

YEAR 2 – FALL: 14 credits		YEAR 2 – SPRING: 16 credits	
CSC 2025 Computer Architecture/Assembly	4 credits	CSC 1065 Discrete Structures ***MATH 228 Discrete Mathematics**	4 credits
History (GT-HI1)	3 credits	Natural & Physical Sciences without Lab (GT-SC2)	3 credits
Natural & Physical Sciences with Lab (GT-SC1)	4 credits	Social & Behavioral Sciences (GT-SS*)	3 credits
Social & Behavioral Sciences (GT-SS*)	3 credits	Elective	6 credits

UNIVERSITY OF NORTHERN COLORADO – 60 Credits

YEAR 3 – FALL: 15 credits		YEAR 3 – SPRING: 15 credits	
CS 200 Object-Oriented Analysis, Design, and Programming	3 credits	CS 301 Algorithms and Data Structures	3 credits
MATH 102[a] Success in Math	1 credits	MATH 221 Elementary Linear Algebra	3 credits
MATH 233 Calculus III	3 credits	Major Elective	3 credits
MATH 350 Probability and Statistics	3 credits	Electives	6 credits
MATH 495[c] Topics in Mathematics or Major Elective	3 credits		
Elective	2 credits		

YEAR 4 – FALL: 15 credits		YEAR 4 – SPRING: 15 credits	
CS 454[b] Data Mining and Knowledge Discovery	3 credits	CS 456[b] Neural Networks and Deep Learning	3 credits

MATH 335 Differential Equations	3 credits	Major Elective	3 credits
MATH 495[c] Topics in Mathematics or Major Elective	3 credits	Electives	9 credits
Major Elective	3 credits		
Elective	3 credits		

Every UNC student must meet the following requirements in order to graduate with a bachelor's degree: earn a minimum of 120 semester credit hours; possess a minimum of a 2.00 cumulative grade point average; meet all degree requirements in the student's major field of study. Each major and/or concentration may have additional requirements necessary for graduation. Students must consult with their major advisor to receive information on any additional graduation requirements. View the UNC Undergraduate Catalog for current degree requirements.

Contact Information –

Department: Department of Mathematical Sciences

Website: www.unco.edu/nhs/mathematical-sciences/

Phone: 970-351-2820

Program Admission Requirements –

Academic Good Standing.

For information about admission to the University of Northern Colorado, please visit https://www.unco.edu/admissions/.

Notes –

Note that CSC 1060 and CSC 1061 will transfer either as CS 120 and CS 160 or CS 160 and CS 200 depending on the language used in the sequence. Here, we have assumed the first possibilities.
a) MATH 102 is a recommended elective
b) CS 454 is only offered in Odd numbered Fall Semesters, CS 456 is only offered in Even Spring semesters.
c) MATH 495 is only offered in Odd Fall semesters