



Arapahoe Community College (ACC) to CU-Denver Transfer Advising Guide for Computer Science (B.S.)

College of Engineering, Design and Computing

[Computer Science and Engineering Department Website](#)

Program Overview:

The computer scientist is a professional who must be prepared to apply his or her skills, knowledge and creativity in a rapidly changing field. The Bachelor of Science in computer science at CU Denver prepares students for such creative work. The emphasis is on fundamental concepts and basic principles with a long useful life. The Computer Science Bachelor of Science program is accredited by the Computing Accreditation Commission of ABET, <http://www.abet.org>. The Program Educational Objectives of the undergraduate computer science program are to produce graduates who:

- Advance professionally as productive, practicing professionals in computer science & related careers through the continued development of their expertise & skills.
- Further develop their knowledge, skill set, and career opportunities through graduate education and/or professional studies.
- Function effectively as a part of a team to succeed in their professional careers.

Admission Requirements:

[Please see this website for more information regarding CU Engineering admission criteria.](#)

ACC Course Options: (the following courses will apply directly to the degree)

<u>Core Curriculum:</u> (Please consult CU Denver Core Curriculum and Transferology)		ACC Credits
ENG 121	English Composition 1	(3 credits)
ENG 122	English Composition 2	(3 credits)
Arts & Humanities	Two Courses (GT-AH1, AH2, AH3, or AH4)	(6 credits)
Social & Behavior Science	Two courses (GT-SS1, GT-SS2, or GT-SS3)	(6 credits)
History	GT-HI1	(3 credits)
 <u>Mathematics:</u>		
MAT 201	Calculus 1	(5 credits)
MAT 202	Calculus 2	(5 credits)
MAT 255	Linear Algebra	(3 credits)
MAT 261	Differential Equations with Engineering Applications	(4 credits)
 <u>Science:</u> (One of the following 3 science sequences will apply directly to the degree.)		
PHY 211 & 212	Physics I and II (Calc based) with lab	(10 credits)
CHE 111 & 112	General Chemistry I and II with lab	(10 credits)
BIO 111 & 112	General Biology I and II with lab	(10 credits)
 <u>Engineering/Computer Science:</u>		
CSC 160	Computer Science 1 (C++ only)	(4 credits)
CSC 161	Computer Science 2 (C++ only)	(4 credits)

Suggested Five-Year Course Plan for Computer Science (B.S.)

This is a suggested guide of coursework only and is subject to change. Students should consult with a CU Denver academic advisor as soon as possible prior to transferring. CU Denver courses may be reverse transferred to earn a community college associate degree. Course credits shown below reflect those awarded by the institution offering the course.

* denotes courses that do not apply to the B.S. degree

Arapahoe Community College (ACC) first two years

Fall Semester 1

Course	Course Title	Credits
MAT 121	College Algebra*	4
ENG 121	English Composition 1	3
	Art/Hum/SS/BS/BI	3
	Art/Hum/SS/BS/BI	3
	Art/Hum/SS/BS/BI	3
	Total Credits	16

Spring Semester 1

Course	Course Title	Credits
MAT 122 or 166	Trigonometry or Pre-Calculus*	3-5
ENG 122	English Composition 2	3
CHE 111/PHY 211/BIO 111	Science 1 with lab	5
ECC 102 or CSC 119	Engineering Methodologies*/Intro to Programming*	3
	Total Credits	14-16

Fall Semester 2

Course	Course Title	Credits
MAT 201	Calculus 1	5
CHE 112/PHY 212/BIO 112	Science 2 with lab	5
CSC 160	Computer Science 1 (C++ only)	4
	Total Credits	14

Spring Semester 2

Course	Course Title	Credits
MAT 202	Calculus 2	5
CSC 161	Computer Science 2 (C++ only)	4
	Art/Hum/SS/BS/BI	3
	Art/Hum/SS/BS/BI	3
	Total Credits	15

CU-Denver (last three years)

Fall Semester 3

Course	Course Title	Credits
CSCI 1411	Fundamentals of Computing Lab	1
CSCI 1510	Logic Design	3
CSCI 2421	Data Structures & Program Design	3
CSCI 2511	Discrete Structures	3
MATH 3195	Linear Algebra/Diff Equations	4
	Total Credits	14

CU-Denver (last three years)...continued

Spring Semester 3

Course	Course Title	Credits
CSCI 2525	Assembly Language & Computer Org.	3
CSCI 3761	Intro to Computer Networks	3
CSCI 3412	Algorithms	3
	CS Elective	3
	Cultural Diversity	3
	Total Credits	15

Fall Semester 4

Course	Course Title	Credits
CSCI 3287	Database Systems	3
CSCI 3415	Principles Programming Language	3
CSCI 3453	Operating Systems	3
	CS Elective	3
	CS Elective	3
	Total Credits	15

Spring Semester 4

Course	Course Title	Credits
CSCI 3508	Software Engineering	3
CSCI 4591	Computer Architecture	3
	CS Breadth	3
	CS Breadth	3
	CS Breadth	3
	Total Credits	15

Fall Semester 5

Course	Course Title	Credits
	CS Breadth: Senior Design 1	3
CSCI 4551	Parallel & Distributed Systems	3
	CS Breadth	3
	CS Breadth	3
	Total Credits	15

Spring Semester 5

Course	Course Title	Credits
	CS Breadth: Senior Design 2	3
CSCI 4034	Theoretical Foundations of Computer Science	3
	CS Breadth	3
	CS Breadth	3
	Total Credits	12