

FOR TRANSFER STUDENTS

PROGRAM OVERVIEW

Advances in technology and rapid growth of the information economy have made computing a ubiquitous and enabling science in nearly all disciplines across engineering, science, business, education, arts, and the humanities. The use of computing technology in diverse fields is only expected to increase as an explosion of available data and increased computing power leads to a boom in many emerging technologies such as artificial intelligence, machine learning, internet of things (IoT), robotics, data analytics, and quantum and cloud computing.

The Computer Science B.A. degree is designed with a modular approach and a large number of free elective credits that allows students to customize their program by combining a strong grounding in computer science with an area of concentration aligned in other academic disciplines aligned with their interest. Students are encouraged to use their free electives to pursue minors and dual majors in other academic disciplines. The program's computer science curriculum includes courses in topics such as algorithm development, programming language concepts, hardware software interfaces, database systems and the structure of computers. Later portions of the program focus on computer architecture, the interrelationship of hardware and software, embedded systems, computer networks and software design. The Computer Science B.A. degree prepares students for fast-paced and high-demand careers in computer science and career fields that rely on computing.

ACADEMIC ADVISING

Students admitted to the College of Engineering, Design and Computing (CEDC) who have declared a major should meet with an advisor in their specific department and should contact that department to schedule an appointment.

Computer Science

ComputerScience@ucdenver.edu

Visit the academic advising website [here](#)

1380 Lawrence Street Center, 8th Floor

303-315-1408

Students admitted to the College of Engineering, Design and Computing as pre-engineers or who are undecided should meet with a college academic advisor.

engineering@ucdenver.edu

Visit the academic advising website [here](#)

303-315-7170

GENERAL GRADUATION REQUIREMENTS & POLICIES

All College of Engineering, Design and Computing (CEDC) students are required to complete the following minimum general graduation requirements:

1. Complete a minimum of 120 semester hours
2. Achieve a minimum 2.0 grade point average (GPA) for all courses attempted, for all required courses and for all courses taken within the student's major department
3. Complete all CU Denver Core, CEDC, and major requirements
4. Complete a minimum of 30 CEDC hours as a declared CEDC student in good standing at CU Denver
5. Complete at least the final two semesters as an enrolled CEDC student

PROGRAM REQUIREMENTS & POLICIES

The following program requirements are based on degree requirements for the current Catalog year at CU Denver and are subject to change. Students are responsible for completing degree requirements based on the Catalog year for which they are admitted.

Students are responsible for meeting with the major/faculty advisor in the department to confirm major requirements. Student completing the Computer Science B.A. degree are required to complete the following minimum program requirements:

1. Complete 24 semester hours of CU Denver Core Curriculum coursework.
2. Complete a minimum of 7 semester hours of math coursework.
3. Complete a minimum of 8 semester hours of science coursework.
4. Complete the 3 semester hour CEDC Design course.
5. Complete a minimum of 43 semester hours of Computer Science coursework with a C- or higher in each pre-requisite course.
6. Complete 35 semester hours of free elective coursework with a C- or higher in each pre-requisite course in an area of concentration.

COURSEWORK THAT CAN BE COMPLETED AT PREVIOUS INSTITUTION

The following is a "bucket" of requirements students can complete prior to transferring to CU Denver, including equivalent Colorado Community College System (CCCS) courses. To determine the equivalencies of courses to be completed at non-CU Denver institutions, students can visit

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www.transferology.com. It is critical students connect with a CU Denver academic advisor to ensure planned courses will transfer *and* apply to CU Denver degree requirements. All non-CU Denver coursework must be completed with a C- or better to be eligible for transfer.

Students interested in completing an Associate (A.A. or A.S.) Degree or a [Colorado Statewide Transfer Articulation Agreement or Degree with Designation \(DWD\)](#) must work with their community/junior college academic advisor to create an academic plan that accounts for all degree or transfer articulation agreement requirements. Colorado Community College Students may also explore the option to complete [Reverse Transfer](#) at CU Denver.

CU Denver Requirements	CU Denver Credits	CCCS Equivalent Courses & Notes	CCCS Credits
CU Denver Core Curriculum Requirements	24		
ENGL 1020 – Core Composition I	3	ENG 1021	3
ENGL 2030 – Core Composition II	3	ENG 1022	3
Arts	3	GT-AH	3
Humanities	3	GT-AH or GT-HI	3
Behavioral Sciences	3	GT-SS	3
Social Sciences	3	GT-SS or GT-HI*	3
International Perspectives	3	Additional GT-AH, HI, SS* (<i>see note below</i>)	3
Cultural Diversity	3	<i>*To be completed at CU Denver. This requirement must be completed with an upper-division course and CCCS courses will not apply.</i>	
Required Mathematics Courses	7		
MATH 1401 Calculus I	4	GT-MA1 (MAT 2410)	5
Any additional 2000+ level math class	3	MAT 135(Statistics) OR MAT 2420 (Calc II)	5
Science	8	One GT-SC1 course and one of the following: BIO 1111 or CHE 1111 or PHY 1111 or PHY 2111	10
Computer Science Core	7		
CSCI 1410/1411 Fundamentals of Computing with lab	4	CSC 1060	4
CSCI 2312 Object-Oriented Programming	3	CSC 1061 only IF taught in C++	4
Free Electives	17	Students select any approved course that will transfer to CU Denver and/or to help them complete their associate's degree.	17
Total Hours:	60		

*The applicability of Guaranteed Transfer (GT Pathways) courses to specific CU Denver Core Curriculum requirements requires completion of a block of five courses: two GT-AH course; one GT-HI course; one GT-SS course; and one additional GT-AH, GT-HI, or GT-SS course.

SAMPLE PLAN – COURSEWORK TO BE COMPLETED AT CU DENVER

Based on successful completion of applicable transfer credits and the complete “bucket” of requirements outlined above, students would have the following remaining to complete at CU Denver. At CU Denver, students must tailor this plan based on the evaluation of previously completed college coursework (e.g., AP, IB, CLEP, dual/concurrent enrollment, and transfer credit), course availability, individual preferences related to course load, summer term courses, part-time or full-time student status, or add-on programs such as minors or double-majors.

Students deviating from this plan must fulfill course prerequisites and must meet with the faculty advisor in their department to confirm degree requirements. Students intending to transfer to CU Denver to pursue a Computer Science B.A. degree should note the following:

1. The College of Engineering, Design and Computing has a competitive admissions process. Student may be admitted to CU Denver but not the College of Engineering, Design and Computing. Such students may work with CU Denver’s Academic Success and Advising Center to identify an alternative major and/or program of study.
2. Colorado Community College students should transfer to CU Denver once they have met the College of Engineering, Design and Computing’s admission requirements. They should not necessarily complete an associate’s degree.



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Year Three	Fall	CRS
	CSCI 2421 Data Structures & Program Design	3
	CSCI 2511 Discrete Structures	3
	Free Elective	3
	Free Elective	3
	Free Elective	3
	TOTAL	15

Spring	CRS
CSCI 3287 Database Systems	3
CSCI 3412 Algorithms	3
CS Elective	3
CS Elective	3
Free Elective	3
TOTAL	15

Year Four	Fall	CRS
	ENGR Cultural Diversity	3
	CS Elective	3
	CS Elective	3
	CS Elective	3
	Free Elective	3
	TOTAL	15

Spring	CRS
CSCI 3508 Software Engineering	3
CS elective	3
CS elective	3
Free elective	3
Free elective	3
TOTAL	15

Total Hours at CU Denver: 60