

FOR TRANSFER STUDENTS

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.

ACADEMIC ADVISING

Students admitted to the College of Engineering, Design and Computing (CEDC) who have declared a major should to 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 Student Services Center (ESSC)

ESSC@ucdenver.edu

Visit the academic advising website [here](#)

North Classroom 2605

303-315-7510

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 128 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.S. 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 46 semester hours of **required computer science & computer science systems core courses**
3. Complete 21 semester hours of **computer science breadth courses**
4. Complete a minimum of 15 semester hours of **computer science technical electives**
5. Complete 22 semester hours of **mathematics and science**

COURSEWORK THAT CAN BE COMPLETED AT PREVIOUS INSTITUTION

The table below shows the courses required for the Computer Science B.S. Degree and shows which required courses can be satisfied by equivalent Colorado Community College System (CCCS) courses that students can complete prior to transferring to CU Denver. To determine the equivalencies of courses to be completed at non-CU Denver institutions, students can visit 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.

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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 121	3
ENGL 2030 – Core Composition II	3	ENG 122	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	12		
MATH1401 Calculus I	4	GT-MA1 (MAT 201)	5
MATH2411 Calculus II	4	GT-MA1 (MAT 202)	5
MATH3195 Linear Algebra and Differential Equations	4	MAT 266	4
Required Science	10	<i>For choice 1 & 2 addtl credits: CS course, science above chosen sequence, math beyond Calc II or ENGR elective (not gen-ed course)</i>	
*Choice 1: BIOL 2051 & 2071; BIOL 2061 & 2081	8	BIO 111 & BIO 112	10
*Choice 2: CHEM 2031 & 2038; CHEM 2061 & 2068	9	CHE 111 & CHE 112	10
Choice 3: PHYS 2311 & 2321; PHYS 2331 & 2341	10	GT-SC1 (PHY 211,212)	10
Computer Science Core	6		
CSCI 1410 Fundamentals of Computing	3	CSC 160 only IF taught in C++	4
CSCI 2312 Object Oriented Programming	3	CSC 161 only IF taught in C++	4
Total Hours:	28		

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.

***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.S. 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.
3. Please note that MAT 121: College Algebra and MAT 166: Pre-Calculus will not transfer into the BSCS degree, but are required to take before Calculus if the student is not Calculus ready.



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Year Two	Fall	CRS
	CSCI 1411 Fundamentals of Computing lab	1
	CSCI 1510 Logic Design	3
	CSCI 2421 Data Structures & Program Design	3
	CSCI 2511 Discrete Structures	3
	Science Choice	3-4
	Science Choice Lab	1
	TOTAL	14-15

Spring	CRS	
CSCI 2525 Assembly Language & Computer Org.	3	
Science Choice	3-4	
Science Choice Lab	1	
CSCI 3412 Algorithms	3	
CS Elective	3	
Cultural Diversity	3	
	TOTAL	16-17

Year Three	Fall	CRS
	CSCI 3287 Database Systems	3
	CS Elective	3
	CSCI 3453 Operating Systems	3
	CS Elective	3
	CSCI 3415 Prin Programming Lang	3
	TOTAL	15

Spring	CRS	
CSCI 3508 Software Engineering	3	
CS Breadth	3	
CSCI 3761 Introduction to Computer Networks	3	
CS Breadth	3	
Math 3195 Linear Algebra/Diff Equations	4	
	TOTAL	16

Year Four	Fall	CRS
	CS Breadth: Senior Design 1	3
	CSCI 4551 Parallel & Distributed Systems	3
	CS Breadth	3
	CS Elective	3
	CS Breadth	3
	TOTAL	15

Spring	CRS	
CSCI 4591 Computer Architecture	3	
CSCI 4034 Theoretical Foundations of Computer Science	3	
CS Elective	3	
CS Breadth	3	
CS Breadth: Senior Design 2	3	
	TOTAL	15

Total Hours at CU Denver: 91-93