



FRCC (all campuses) to CU-Boulder Transfer Advising Guide for Computer Science (B.S.)

[Computer Science \(B.S.\) website](#)

Program Overview:

From designing the technologies that keep our cell phones and iPods working to developing large-scale software that powers business and industry, computer scientists use their technical and creative skills to improve people’s lives in almost every area imaginable. The complex software and hardware systems created by computer scientists impact all aspects of society and influence or transform work done in areas as diverse as medicine, education, and business.

Admission Requirements:

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

FRCC Course Summary: (the following courses will apply directly to the degree)

**BOLD denotes admission requirement courses*

***denotes recommended requirement before transferring*

NOTE: Some courses may only be taught at the Boulder County campus. Please check with FRCC advisors.

Mathematics:

MAT 2410*	Calculus 1	(5 credits)
MAT 2420*	Calculus 2	(5 credits)
MAT 2540	Linear Algebra	(3 credits)

Science:

PHY 2111*	Calc-based Physics 1	(5 credits)
PHY 2112	Calc-based Physics 2	(5 credits)
CHE 1111	General Chemistry 1	(5 credits)
<i>^CHE 1111 will also count for admission requirement, however, PHY 2111 is required for degree and preferred</i>		
BIO 1111	General Biology 1 (natural science elective)	(5 credits)

Engineering/Computer Science:

EKG 1000	Introduction to Engineering	(1 credit – free elective)
CSC 1060**	Computer Science 1	(4 credits)
CSC 1061**	Computer Science 2 (Data Structures)	(4 credits)
CSC 2065	Discrete Structures	(4 credits)
CSC 2025	Computer Architecture and Language	(4 credits)

Humanities and Social Sciences (H/SS):

- Up to nine (9) credit hours at the lower division (1000-2000) level
 - Six (6) credit hours the upper-division level – *typically taken at CU Boulder*
 - Additionally, a total of at least six (6) credit hours of Logic and Ethics is required
- Please consult our [CCCS humanities and social science list](#) when selecting these classes

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

This is a suggested guide of coursework only and is subject to change. Always consult with your academic advisor for graduation planning purposes.

*denotes courses that do not apply directly to degree, other than as free electives

Front Range Community College (first two years)

Fall Semester 1

Course	Course Title	Credits
MAT 1440	Pre-Calculus*	5
ENG 1021	English Composition 1 (H/SS)	3
EGG 1000	Intro to Engineering*	1
PHI 1012	Ethics	3
CSC 1019	Intro to Programming*	3
	Total Credits	15

Spring Semester 1

Course	Course Title	Credits
MAT 2410	Calculus 1	5
CHE 1111	College Chemistry 1 (with lab)	5
CSC 1060	Computer Science 1	4
	Total Credits	14

Fall Semester 2

Course	Course Title	Credits
MAT 2420	Calculus 2	5
PHY 2111	Physics 1	5
PHI 1013	Logic	3
	Humanities/Social Science	3
	Total Credits	16

Spring Semester 2

Course	Course Title	Credits
MAT 2540	Linear Algebra	3
PHY 2112	Physics 2	5
CSC 1061	Computer Science 2	4
	Total Credits	12

CU-Boulder (last three years)

Fall Semester 3

Course	Course Title	Credits
CSCI 3308	Software Dev. Methods	3
CSCI 2824	Discrete Structures	4
CSCI 2400	Computer Systems	4
CSCI 3104	Algorithms	4
	Total Credits	15

Spring Semester 3

Course	Course Title	Credits
	Humanities/Social Science	3
	CSCI Core 1	4
	Natural Science Elective	3
	Computer Science Elective	3
	Total Credits	13

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

Fall Semester 4

Course	Course Title	Credits
CSCI 3155	Principles of Prog. Lang.	3
	Approved Statistics Course	3
	CSCI Core 2	3
	CSCI Core 3	3
	Computer Science Elective	3
	Total Credits	15

Spring Semester 4

Course	Course Title	Credits
	CSCI Core 4	3
	Computer Science Elective	3
	Engineering Writing Course	3
CSCI 3308	Software Dev. and Tools	3
	Total Credits	12

Fall Semester 5

Course	Course Title	Credits
	Capstone 1	4
	CSCI Core 5	3
	Computer Science Elective	3
	UD Humanities/Social Science	3
	Total Credits	14

Spring Semester 5

Course	Course Title	Credits
	Capstone 2	4
	CSCI Core 6	3
	UD Humanities/Social Science	3
	Computer Science Elective	3
	Total Credits	13