CCA to CU-Boulder Transfer Advising Guide for Computer Science (B.S)

https://www.colorado.edu/cs/

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

CCA Course Summary: (the following courses will apply directly to the degree)
*__BOLD__ *denotes admission requirement courses*
***denotes recommended requirement before transferring*

Mathematics:

MAT 201*	**Calculus 1**	**(5 credits)**
MAT 202*	**Calculus 2**	**(5 credits)**
MAT 255	Linear Algebra	(3 credits)

Science:

PHY 211*	**Calc-based Physics 1**	**(5 credits)**
PHY 212	Calc-based Physics 2	(5 credits)
CHE 111	General Chemistry 1	(5 credits)

^CHE 111 will also count for admission requirement, however, PHY 211 is required for degree and preferred

BIO 111	General Biology 1 (natural science elective)	(5 credits)

Engineering/Computer Science:

CSC 160**	Computer Science 1	(4 credits)
CSC 161**	Computer Science 2 (Data Structures)	(4 credits)
CSC165	Discrete Structures	(4 credits)
CSC 225	Computer Architecture and Language	(4 credits)

Humanities and Social Sciences (H/SS):

- Up to nine (9) credit hours at the lower division (100-200) 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

Community College of Aurora (first two years)

Fall Semester 1

Course	Course Title	Credits
MAT 121	College Algebra*	4
ENG 121	English Composition 1*	3
	Free Elective*	3
PHI 112	Ethics	3
	Humanities/Social Science	3
	Total Credits	**16**

Spring Semester 1

Course	Course Title	Credits
MAT 166	Pre-Calculus*	5
CHE 111	College Chemistry 1 (with lab)	5
CSC 119	Intro to Programming*	3
	Total Credits	**13**

Fall Semester 2

Course	Course Title	Credits
MAT 201	Calculus 1	5
CSC 160	Computer Science 1	4
ENG 122	English Composition 2 (H/SS)	3
PHI 113	Logic	3
	Total Credits	**15**

Spring Semester 2

Course	Course Title	Credits
MAT 202	Calculus 2	5
PHY 211	Physics 1	5
CSC 161	Computer Science 2	4
	Total Credits	**14**

CU-Boulder (last three years)

Fall Semester 3

Course	Course Title	Credits
CSCI 3308	Software Dev. Methods	3
PHYS 1120	Physics 2	4
CSCI 2824	Discrete Structures	4
CSCI 2820	Linear Algebra for CS	3
	Total Credits	**14**

Spring Semester 3

Course	Course Title	Credits
CSCI 2400	Computer Systems	4
CSCI 3104	Algorithms	4
	CSCI Core 1	4
	Natural Science Elective	3
	Total Credits	**15**

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
	Humanities/Social Science	3
	Total Credits	**16**

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
	Free Elective	3
	Total Credits	**13**

Updated 12/2018

Suggested Four-Year Course Plan for Computer Science

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

Community College of Aurora (first 2 years)

Fall Semester 1

Course	Course Title	Credits
MAT 201	Calculus 1	5
ENG 121	English Composition I*	3
CSC 119	Intro to Programming	3
CHE 111	General College Chemistry	5
	Total Credits	**16**

Spring Semester 1

Course	Course Title	Credits
MAT 202	Calculus 2	5
ENG 122	English Composition II (H/SS)	3
CSC 160	Computer Science 1	4
PHI 112	Ethics	3
	Total Credits	**15**

Fall Semester 2

Course	Course Title	Credits
MAT 255	Linear Algebra+	3
CSC 161	Computer Science 2	4
PHY 211	Physics 1	5
PHI 113	Logic	3
	Humanities/Social Science	3
	Total Credits	**18**

+can take MAT 255 through CCCOnline, if not offered on campus

Spring Semester 2

Course	Course Title	Credits
CSC 165	Discrete Structures	4
CSC 225	Comp. Arch & Assemb. Lang.	4
	Humanities/Social Science	3
	Natural Science Elective#	5
	Total Credits	**16**

 # Natural Science elective – Choose from:
BIO 111, CHE 112, PHY 212, GEY 111

CU-Boulder (last 2 years)

Fall Semester 3

Course	Course Title	Credits
CSCI 3308	Software Dev. Methods	3
CSCI 3104	Algorithms	4
	CSCI Core 1	4
	Computer Science Elective	3
	Natural Science Elective	3
	Total Credits	**17**

Spring Semester 3

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**

Summer Semester 1

Course	Course Title	Credits
	Engineering Writing Course	3

^WRTG 3030 can be taken online

Fall Semester 4

Course	Course Title	Credits
	Capstone 1	4
	CSCI Core 4	3
	Computer Science Elective	3
	Computer Science Elective	3
	UD Humanities/Social Science	3
	Total Credits	**17**

^ Summer coursework can lighten semester loads

Spring Semester 4

Course	Course Title	Credits
	Capstone 2	4
	CSCI Core 5	3
	CSCI Core 6	3
	Computer Science Elective	3
	UD Humanities/Social Science	3
	Total Credits	**16**