





# **RRCC to CU-Boulder Transfer Advising Guide for Computer Science (B.S)**

College of Engineering and Applied Science Computer Science Department 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

**RRCC Course Summary:** (the following courses will apply directly to the degree) \*BOLD denotes admission requirement courses (only ONE science course needed for admission) \*\*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)
^CHE111 will also count	t for admission requirement in place of PHY 211	
BIO 111	General Biology 1 (natural science elective)	(5 credits)
GEY 111	Physical Geology 1 (natural science elective)	(4 credits)

#### **Engineering/Computer Science:**

CSC 160**	Computer Science 1	(4 credits)
CSC 161**	Computer Science 2 (Data 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

# **Red Rocks Community College (first two years)**

#### Fall Semester 1

Course	Course Title	Credits
MAT 121	College Algebra*	4
ENG 121	English Composition 1*	3
PHI 112	Ethics	3
	Humanities/Social Science	3
	Total Credits	13

#### **Spring Semester 1**

Course	Course Title	Credits
MAT 122	Trigonometry*	3
CHE 111	College Chemistry 1 (with lab)	5
CSC 119	Intro to Programming*	3
PHI 113	Logic	3
	Total Credits	14

#### 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
	Humanities/Social Science	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