



Transfer Pathway Advising Guide



Red Rocks Community College to University of Colorado Boulder

College of Engineering and Applied Science

Electrical Engineering, B.S.

Web: <http://ecee.colorado.edu>

This is a suggested guide of coursework only and does not guarantee direct admission to the program

Red Rocks Community College – 2 years

Fall Semester		Spring Semester	
MAT 121 College Algebra	4	MAT 122 Trigonometry	3
H/SS Elective _____	3	H/SS Elective _____	3
ENG 121 - English Composition 1	3	H/SS Elective _____	3
H/SS Elective _____	3	H/SS Elective _____	3
Total	13	Total	12

**Preparatory Year (if needed) – Only H/SS classes from the first year are directly applicable to this specific degree
ENG 121, ENG 122 and COM 115 are not considered H/SS electives and only count for free electives in this major*

use the summer to make up any math course if starting below MAT 121

Fall Semester		Spring Semester	
MAT 201 Calculus 1	5	MAT 202 Calculus 2	5
CSC 160 Computer Science 1	4	PHY 211 Physics 1	5
CHE 111 General Chemistry 1	5	CSC 161 Computer Science 2	4
Total	14	Total	14

**BOLD courses are required for admission. Other courses may be suggested – please consult with your advisor for more details*

University of Colorado Boulder – Last 3 years

Fall Semester		Spring Semester	
APPM 2360 Diff Eq with Linear Algebra	4	APPM 2350 Calculus 3 for Engineers	4
PHYS 1120 Physics 2	4	ECEN 2260 Circuits as Systems	3
PHYS 1140 Experimental Physics	1	ECEN 2270 Electronics Design Lab	3
ECEN 2250 Intro to Circuits & Electronics	3	ECEN 2350 Digital Logic	3
ECEN 24XX Sophomore Elective 1	3	GEEN 3400 Jr Engineering Projects (or acceptable substitute)	3
Total	15	Total	16

Fall Semester		Spring Semester	
ECEN 3XXX Advanced Analog Elective 1	3	ECEN 3XXX Advanced Analog Elective 3	3
ECEN 3XXX Advanced Analog Elective 2	3	ECEN 3360 Digital Design Lab	3
ECEN 3350 Prog of Digital Systems	3	Technical Electives	6
ECEN 3810 Probability	3		
Upper Division H/SS Elective _____	3		
Total	15	Total	12

Fall Semester		Spring Semester	
ECEN 4610 Capstone (Part 1)	3	ECEN 4620 Capstone (Part 2)	3
Technical Electives	9	Upper Division H/SS Elective _____	3
		Technical Electives	8
Total	12	Total	14

* When selecting humanities and social sciences (HSS) electives, students should consult the CCCS H/SS equivalencies document at:
<http://www.colorado.edu/engineering/admissions/transfer/co-community-colleges>

Transfer Credit and Contact Information:

- ❖ Visit the Office of Admissions to see how your transfer courses will be accepted at CU-Boulder
<http://www.colorado.edu/admissions/undergraduate/apply/transfer/transfercredit>
- ❖ The College of Engineering and Applied Science transfer student webpage is a good course and contact resource
<http://www.colorado.edu/engineering/admissions/transfer/co-community-colleges>

College of Engineering and Applied Science Admissions Criteria:

- ❖ For guaranteed admission, transfer applicants from a Colorado Community College should have a minimum cumulative GPA of 3.30, with at least 24 credit hours completed.
- ❖ Grades earned in individual mathematics, science, engineering, and language arts courses must all be "B" or higher.
- ❖ Students must have completed at least two semesters of college-level calculus, AND two semesters of calculus-based physics and/or college-level chemistry, to be considered for admission.
- ❖ Students who do not meet the above requirements, but whose credentials are close, should see the competitive transfer criteria listed at: www.colorado.edu/admissions/undergraduate/apply/transfer/admissioncriteria
- ❖ For more details, see the Office of Admissions web site for transfer students at www.colorado.edu/admissions/undergraduate/apply/transfer

Program Overview:

Electrical engineers work to improve our lives through technology ranging from the smallest conveniences to the biggest challenges in energy, health, safety, and even space exploration. From consumer technologies such as cell phones, computers, and smart cars to industrial technologies such as aerospace guidance systems, robotics, optics, telecommunications, medical instruments, manufacturing, and power distribution, electrical engineers work at the forefront of technological innovation to design and improve electrical and electronic systems, devices, and instruments.

As an electrical engineer, you could develop components for some of the most fun things in our lives (MP3 players, digital cameras, or roller coasters) as well as the most essential (medical tests or communications systems). The largest of the engineering fields, electrical engineering ranges from the macro to the micro: from huge power grids that light up cities to devices smaller than a millimeter that tell a car's airbags when to inflate.

Special Curriculum Notes:

- ❖ All pre-requisite courses require a grade of C- or higher
- ❖ Curriculum requirements and information can be found online in the Help! Guide at ecee.colorado.edu
- ❖ Students will complete two areas of Electrical Engineering concentration within the major (see Tracks pages in the online Help! Guide)
- ❖ The Electrical Engineering BS degree is accredited by ABET.