

UNIVERSITY OF COLORADO DENVER

PRE-ENGINEERING ADVISING GUIDE FOR COMMUNITY COLLEGE STUDENTS

This guide is designed for Colorado community college students planning to transfer to University of Colorado Denver for a Bachelor of Science degree with a major in pre-bioengineering (Note 1), civil engineering, computer science, electrical engineering, or mechanical engineering. This guide identifies community college courses that will apply to the BS degree in engineering.

If you plan to complete an engineering bachelor's degree at CU Denver, recognize that:

1. A BS degree in engineering is a demanding curriculum that may take 6-7 semesters independent of the credit hours transferred. Community college pre-engineering students should transfer to CU Denver when transfer requirements are met, and preferably prior to completing the associate degree.
2. It is imperative that students contact an engineering advisor at CU Denver by the beginning of the second semester to clarify course work appropriate for the intended engineering major and to identify the community college courses and GPA necessary to meet the competitive admission requirements.

Mathematics Skills: For community college students with strong mathematics skills who are ready to start in Calculus I, early transfer to CU Denver is highly recommended. Students who are not ready for Calculus I may consider working toward an associate degree while communicating with both 2-yr and 4-yr advisors on the selection of courses appropriate for transfer into an engineering program and completion of the associate degree.

Transfer Recommendations: To graduate with a BS in engineering degree in a time frame similar to that of a native CU Denver engineering major, it is important that engineering students begin taking engineering courses during the sophomore year. The CU Denver College of Engineering and Applied Science (CEAS) provides two early transfer programs outlined in this guide. Students who do not start with strong mathematics skills or who wish to continue their education at the community college beyond coursework outlined in this guide should explore with both 2-yr and 4-yr advisors how their graduation timeline, College Opportunity Fund (COF) stipend, and financial aid will be affected.

Guarantees and Limitations: Colorado community college students:

- must realize that outside the two early transfer programs that establish criteria for guaranteed admission, admission directly into CEAS is competitive and not guaranteed.
- are responsible for meeting all CU Denver admission requirements including the University of Colorado Minimum Academic Preparation Standards.
- may transfer to CU Denver at any time. Students with less than 24 hours of transferable credits will be required to supply high school records. Students who do not meet requirements for direct admission to CEAS may be admitted to a pre-engineering program in the College of Liberal Arts and Sciences.
- are guaranteed to have completed all lower division requirements of the CU Denver Core Curriculum with the gtPathways completion stamp on their official transcript.

Contact Information: College of Engineering and Applied Science Student Services

Office phone: 303-556-4768

e-mail address: engineering@ucdenver.edu

website URL: engineering.ucdenver.edu

Transfer Disputes

If disagreement regarding the transferability of credits for coursework occurs between a student and CU Denver, the Colorado Department of Higher Education will facilitate an expeditious review and resolution of the matter pursuant to Commission Policy, Section I, Part T: Student Complaint Policy. For more information, contact the Department at 303-862-3001 or file a complaint at <http://highered.colorado.gov/Academics/Complaints/default.html>

I. Early Admission into College of Engineering and Applied Science

Colorado community college students are guaranteed admission upon meeting the following conditions:

- Minimum B– grade in Calculus I, and
- Minimum overall (all undergraduate institutions) 3.0 Grade Point Average

II. Regular Admission into College of Engineering and Applied Science – 30-35 hours of coursework

Colorado community college students are guaranteed admission upon meeting the following conditions:

- Minimum 2.5 grade average in Calculus I, Calculus II, and Calculus-Based Physics I w Lab, and
- Minimum individual C– course grade in Calculus I, Calculus II, and Calculus-Based Physics I w Lab, and
- Minimum overall (all undergraduate institutions) 2.75 Grade Point Average

III. Coursework Beyond 30-35 Transfer Hours

Community college students seeking to extend transfer beyond the 30-35 hours should consider the prescribed gtPathways general education courses applicable to all engineering majors at CU Denver (below) and the elective courses applicable to specific engineering majors (below).

Associate of Science (AS) gtPathways Courses Applicable to CU Denver Engineering Majors			
Oral communication (COM 115, 125, or 220) is not part of the gtPathways program and is not applicable to general education requirements in CEAS at CU Denver.			
gtPathways Area	Credits	CCCS Course	Course Title and (gtPathways Category)
Written Communication	3	ENG 121	English Communication I (GT-CO1)
	3	ENG 122	English Communication II (GT-CO2)
Arts & Humanities	3		One course (GT-AH1, AH2, AH3, or AH4)
Social & Behavior Science	3	ECO 201	Macroeconomics (GT-SS1)
	3		One course (GT-SS2, or SS3)
History	3		Once course (GT-HI1)
Natural & Physical Sciences	5	PHY 211	Physics: Calculus-based I (GT-SC1)
	5	PHY 212	Physics: Calculus-based II (GT-SC1)
	5	CHE 111 (Note 2)	General College Chemistry I with Lab (GT-SC1)
Mathematics	5	MAT 201	Calculus I (GT-MA1)

Elective Courses Applicable to the Specific CU Denver Engineering Major			
Elective courses not in this table require written confirmation from CU Denver to verify applicability to the engineering major. Courses are listed in prioritized preference (top to bottom) for each major. Transfer credits may be split between engineering major and elective credit.			
Engineering Major	Credits	CCCS Course	Course Title
BioEngineering	5	MAT 202	Calculus II
	4 or 5	MAT 203 or 204	Calculus III or Calculus III with Engineering Apps
	5	CHE 112	General College Chemistry II with Lab
	5	BIO 111	General College Biology I with Lab
	5	BIO 112	General College Biology II with Lab
Computer Science	4	CSC 160	Computer Science I (C++ only)
	5	MAT 202	Calculus II
	4	CSC 161	Computer Science II (C++ only)
Civil, Electrical and Mechanical Engineering	5	MAT 202	Calculus II
	4 or 5	MAT 203 or 204	Calculus III or Calculus III with Engineering Apps

Note 1: Bioengineering students are admitted into a pre-bioengineering status until department requirements are satisfied for the formal bioengineering major.

Note 2: For computer science majors, CHE 111 is accepted toward a campus-level elective, not major, credit.