Revised 10-21

COMMUNITY COLLEGE OF DENVER

University of Colorado **Denver**

CCD to CU-Denver Transfer Advising Guide for Electrical Engineering (B.S.)

College of Engineering, Design and Computing

Electrical Engineering Department Website

Program Overview:

The Bachelor of Science in Electrical Engineering, provides an ABET-accredited undergraduate education to a diverse group of students of different racial and cultural backgrounds, full-time students as well as those who have considerable work and family commitments outside their academic learning and students with a wide variety of work experiences. The department strives to continually update our program of study to qualify our graduates for technical positions in the Denver metropolitan area and beyond, while also providing sufficient breadth and depth to assure our graduates of success in their chosen profession. The electrical engineering program stresses the rigorous scientific and theoretical foundations of the discipline so our graduates can enter any advanced level educational program with the critical thinking skills needed for success. In addition, the program includes interdisciplinary work. Our graduates are productive engineers who can advance their careers on different professional tracks in the engineering industry.

Admission Requirements:

Please see this website for more information regarding CU Engineering admission criteria.

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

Core Curriculum: (Please consult CU Denver Core Curriculum and Transferology)		CCD Credits
ENG 121	English Composition 1	(3 credits)
ENG 122	English Composition 2	(3 credits)
Arts & Humanities	Two Courses (GT-AH1, AH2, AH3, or AH4)	(6 credits)
Social & Behavior Science	Two courses (GT-SS1, GT-SS2, or GT-SS3)	(6 credits)
History	GT-HI1	(3 credits)
Mathematics:		
MAT 201	Calculus 1	(5 credits)
MAT 202	Calculus 2	(5 credits)
MAT 204	Calculus 3 with Engineering Applications	(5 credits)
MAT 255	Linear Algebra	(3 credits)
MAT 261	Differential Equations with Engineering Applications	(4 credits)
Science:		
PHY 211	Calc-based Physics I	(5 credits)
PHY 212	Calc-based Physics II	(5 credits)
CHE 111	General Chemistry I	(5 credits)
Engineering/Computer Science:		
CSC 160	Computer Science	(4 credits)
EGG 151	Experimental Design	(2 credits)

Suggested Five-Year Course Plan for Electrical Engineering

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This is a suggested guide of coursework only and is subject to change. Students should consult with a CU Denver academic advisor as soon as possible prior to transferring. CU Denver courses may be reverse transferred to count toward a community college associate degree. Course credits shown below reflect those awarded by the institution offering the course.

* denotes courses that do not apply to the B.S. degree
**denotes inter-institutional course offered through CU Denver

Community College of Denver (CCD) first two years

Fall Semester 1

Course	Course Title	Credits
EGG 106	Robotics Design*	1
MAT 121	College Algebra* GT:MA1	4
ENG 121	English Composition I GT:CO1	3
ECO 202	Microeconomics	3
PHI 112 or PHI218	Ethics or Environmental Ethics GT:AH3	3
	Total Credits	**14**

Spring Semester 1

Course	Course Title	Credits
EGG 151	Experimental Design	2
MAT 166	Pre-Calculus* GT:MA1	5
CHE 111	College Chemistry I (with lab) GT:SC1	5
ENG 122	English Composition II GT:CO2	3
	Total Credits	**15**

Fall Semester 2

Course	Course Title	Credits
CSC 160	Computer Science I/Elec 1520	4
MAT 201	Calculus 1	5
Varies	GT-AH1-2, 4	3
Varies	GT-HI1	3
	Total Credits	**15**

Spring Semester 2

Course	Course Title	Credits
ELEC 1510	Digital Logic**	3
MAT 202	Calculus II GT:MA1	5
PHY 211	Physics Calculus Based with Lab GT:SC1	5
COM 220	Intercultural Communication GT-SS3	3
	Total Credits	**16**

CU-Denver (last three years)

Fall Semester 3

Course	Course Title	Credits
MATH 2421	Calculus 3	4
PHYS 2331	Physics II	4
ELEC 2520	Embedded Systems	3
ELEC 2531	Logic Lab	1
ELEC 2132	Circuits I	3
	Total Credits	**15**

Spring Semester 3

Course	Course Title	Credits
MATH 3195	Linear Alg./Differential Eq.	4
ELEC 2142	Circuits Analysis II	3
ELEC 3520	AL-IoT	3
ELEC 2651	Signal processing	3
ELEC 3133	Electromagnetic Fields	3
	Total Credits	**16**

Fall Semester 4

Course	Course Title	Credits
ELEC 3817	Probability and Statistics	3
ELEC 3225	Electronics	4
ELEC 3164/3724	Energy Systems and Lab	4
ELEC 3316	Signal and systems	3
	Total Credits	**14**

Spring Semester 4

Course	Course Title	Credits
ELEC 3701	Machine Learning	3
ELEC 3900	Circuits Design and Fab. Lab	3
ELEC 4xxx/Lab	ELEC 4xxx 1 of the 5 specialty courses and lab	4
ELEC 4xxx	ELEC Specialty 4xxx	3
	Total Credits	**13**

Fall Semester 5

Course	Course Title	Credits
ELEC 4309	Senior Design I Project	3
ELEC 4XXX	ELEC Specialty 4xxx	3
ELEC 4XXX	ELEC Specialty 4xxx	3
	Professional Elective	**3**
	Total Credits	**12**

Spring Semester 5

Course	Course Title	Credits
ELEC 4319	Senior Design II Project	3
	ELEC Specialty 4xxx & Lab	4
ENGR 3400	Technology and Culture	3
	Total Credits	**10**