College of Engineering & Applied Science – B.I. Electrical Engineering

Academic Advising Hours:
Location: Main Hall 208
Hours: Monday–Friday: 9am-4pm Appointments Only (except Wednesday afternoons)
              Drop-in Advising every Wednesday from 1pm-4:30pm
              Call: (719) 255-3260
Website: www.uccs.edu/advising

General Academic Information

Academic Policies
It is the responsibility of each student to know and follow all Academic policies established by the University and the College of Engineering & Applied Science (EAS) that are set forth in the Catalog (catalog.uccs.edu).

Course Prerequisites
Students are responsible for knowing and completing all course prerequisites. Course prerequisites are strictly enforced for all classes at UCCS. **See your degree audit for specific course prerequisites.**

Residency, Restrictions, and Limitations
Students must be admitted into the College of Engineering and Applied Science as well as complete at least the final 30 credit hours of coursework exclusively at UCCS. Only three hours of Independent Study may count toward the degree. Credit for work experience, Military Science, and ROTC – when granted – is generally not applicable to degree fulfillment.

Probation/Suspension
Students whose full-time semester's or cumulative GPA falls below 2.0 will be placed on probation for the next semester in which they are enrolled in the College of Engineering & Applied Science and will be notified by email and mail. If, after that semester, the semester or cumulative GPA is still below 2.0, the student will be suspended from the college. PLEASE NOTE: *While on probation, registration for the subsequent semester will be blocked until final grades are posted for the current semester. This is to verify that the minimum semester GPA for each student has been fulfilled.*

UCCS Bachelor of Innovation, Electrical Engineering Major Degree Requirements
> A minimum of 128 hours must be completed with a cumulative CU grade point average of 2.0.
> The last 30 hours of the degree must be completed while registered in the College of Engineering and Applied Science at UCCS.

> Courses numbered below 1000 do not count towards degree completion.

> This guide is provided for student use only. It does not represent an official documentation of a student's progress towards completion of their degree program. The EE program requires a minimum 2.0 GPA in all ECE course work taken in order to graduate. Students must also complete an Exit Interview with the ECE Department during their final semester to graduate.

Compass Curriculum
Compass Curriculum is the campus-wide general education program at UCCS. The Compass Curriculum has multiple components many of which will coincide with the degree requirements listed in this guide. Please visit the Compass Curriculum website at www.uccs.edu/compasscurriculum, review your degree audit, or check out the Compass Curriculum advising guide for specific course details. The required components are listed below and referenced in the guide.

REQUIRED COMPASS CURRICULUM COMPONENTS:

Component	Course
Gateway	GPS 1010
Explore – Arts, Humanities and Cultures	INOV 1010
Explore – Society, Behavior and Health	ENTP 1000
Explore – Physical and Natural World	PES 1110
Navigate	INOV 3010
Summit	ENTP 4500
Writing Intensive Course (WIC)[1] *Two courses with at least one upper-division (3000+ level).*	INOV 2010 INOV 3010
Inclusiveness[1]	INOV 1010
Sustainability[1]	ENTP 1000

[1] Can count towards other requirements within the Compass Curriculum or within a student's degree program.

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

Department website: www.uccs.edu/ece

Degree Requirements	Courses		
Electrical Engineering Core Courses (43 hours)	Complete all of the following courses:		
	ECE 1001	Intro to Robotics	3
You must be admitted into the College of Engineering in order to take any ECE coursework.	ECE 1021	Computer Based Modeling	3
	ECE 1411*	Logic Circuits I	2
	ECE 2050	Intro to Physical Electronics	3
	ECE 2205	Circuits and Systems I	4
	ECE 2411*	Logic Circuits II	2
Courses marked with an asterisk (*) must be passed with a C or better.	ECE 2610*	Intro to Signals and Systems	4
	ECE 3020	Semiconductor Devices	3
	ECE 3110	Electromagnetic Fields I	3
	ECE 3205	Circuits and Systems II	4
	ECE 3210	Electronics I	3
	ECE 3230	Electronics Lab I	1
	ECE 3420	Microprocessor Systems Lab	1
	ECE 3430	Intro to Microcomputer Systems	3
	ECE 4890	Senior Seminar (Must be taken prior to ECE 4898)	1
	ECE 4898	Senior Project	3
Electrical Engineering Electives (8 hours)	Complete 6 hours from the following courses		
	ECE 3220	Electronics II	3
	ECE 3120	Electromagnetic Fields II	3
	ECE 4020	Semiconductor Devices II	3
	ECE 4242	Advanced Digital Design Methodology	3
	ECE 4340	VLSI Circuit Design I	3
	ECE 4480	Computer Architecture & Design	3
	ECE 4510	Feedback Control System	3
	ECE 4625	Communications Systems	3
	ECE 4650	Modern Digital Signal Processing	3
	ECE 4910	Power Systems II	3
	Complete 2 hours from the following lab courses		
	ECE 3240	Electronics Lab II	1
	ECE 3440	Microcomputer Systems Lab	1
	ECE 4040	Intro VLSI Fabrication Lab	1
	ECE 4150	Microwave Measurement Lab	1
	ECE 4200	Advanced Digital Design Lab	1
	ECE 4530	Control Systems Lab	1
	ECE 4560	Digital Control Lab	1
	ECE 4670	Communications Lab	1
	ECE 4680	Signal Processing Lab	1
Innovation Core (24 hours)	Complete all of the following courses:		
	ENTP 1000	Introduction to Entrepreneurship	3
	INOV 1010	The Innovation Process	3
	BLAW 2010	Business and Intellectual Property Law	3
	INOV 2010	Innovation Team: Analyze and Report	3
	INOV 2100	Technical Writing, Proposals, and Presentations	3

	INOV 3010	Innovation Team: Research and Execute	3
	INOV 4010	Innovation Team: Design and Lead	3
	ENTP 4500	Entrepreneurship and Strategy	3
Cross-Discipline Core (15 hours)	*Complete one of the Cross-Discipline Cores listed below. Each Cross-Discipline Core consists of 15 credit hours. See the BI website for specific courses (innovation.uccs.edu).* **Business** **Creative Communication** **Globalization**		15
Composition Courses (3 hours)	Complete all of the following courses:		
	ENGL 1310	Rhetoric & Writing I	3
	PORT 3000	Writing Portfolio Assessment	0
Mathematics (21 hours) *NOTE: Math courses require a grade of C or better to progress through the Math sequence.*	Complete all of the following courses:		
	MATH 1350	Calculus I	4
	MATH 1360	Calculus II	4
	MATH 2350	Calculus III	4
	MATH 3400	Intro to Differential Equations	3
	ECE 3610	Engineering Probability and Statistics	3
	MATH Elective	MATH elective number 3100 or higher (except MATH 3810)	3
Basic Science (11 hours)	Complete all of the following courses:		
	PES 1110	General Physics I	4
	PES 1120	General Physics II	4
	PES 2130	General Physics III	3
Compass Curriculum (3 hours)	In addition to the courses outlined above a Gateway Seminar (**GPS 1010**) must be completed by all students to complete the Compass Curriculum. To see a list of all Compass Curriculum courses, please visit: www.uccs.edu/compasscurriculum.		

Four-Year Degree Plan – B.I. Electrical Engineering

The following four-year plan lists all the specific course requirements for the Bachelor of Innovation in Electrical Engineering degree at UCCS. The order in which these courses are taken may vary with course availability. **Students are responsible for completing all course prerequisites.** Please note that this is a *suggested* degree program; your program may vary.

Suggested First Year

√	FALL Course	Hours	√	SPRING Course	Hours
	ECE 1001	3		ECE 1021	3
	ECE 1411	2		ECE 2411	2
	MATH 1350	4		INOV 1010	3
	ENTP 1000	3		MATH 1360	4
	GPS 1010	3		PES 1110	4
	TOTAL	15		**TOTAL**	16

Suggested Second Year

√	FALL Course	Hours	√	SPRING Course	Hours
	ECE 2610	4		ECE 2205	4
	ENGL1310	3		ECE 2050	3
	INOV 2010	3		INOV 2100	3
	MATH 2350	4		MATH 3400	3
	PES 1120	4		PES 2130	3
	TOTAL	18		**TOTAL**	16

Suggested Third Year

√	FALL Course	Hours	√	SPRING Course	Hours
	ECE 3020	3		ECE 3110	3
	ECE 3205	4		ECE 3610 (Spring Only)	3
	ECE 3420	1		ECE Elective	3
	ECE 3430	3		ECE Elective Lab	1
	BLAW 2010	3		INOV 3010	3
	MATH Elective 3100+	3		Cross Discipline Core Course	3
				PORT 3000	0
	TOTAL	17		**TOTAL**	16

Suggested Fourth Year

√	FALL Course	Hours	√	SPRING Course	Hours
	ECE 3210	3		ECE 4898	3
	ECE 3230	1		ECE Elective	3
	ECE 4890	1		ECE Elective	1
	INOV 4010	3		ENTP 4500	3
	Cross Discipline Core Course	3		Cross Discipline Core Course	3
	Cross Discipline Core Course	3		Cross Discipline Core Course	3
	TOTAL	14		**TOTAL**	16