ENGINEERING EDUCATION B.S.

University of Colorado Colorado Springs

ACADEMIC ADVISING

Partnering with students to successfully navigate college
Location: Main Hall 208
Phone: 719.255.3260
Website: Academic Advising

Connect With Your Advisor
Current UCCS Students
- Appointments: www.uccs.edu/advising/current-students

Prospective Students: www.uccs.edu/admissions/contact

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements
- 128 credit hours
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College Engineering & Applied Science at UCCS

Student Responsibilities
Students are required to know and follow:
- All academic policies set forth by the University, College, and academic department in the UCCS Catalog: catalog.uccs.edu
- All course prerequisites designated by the University. Failure to meet course prerequisites may result in an administrative drop of the course from a student's schedule. See degree audit for course prerequisites within the academic major.

DEGREE REQUIREMENTS

Explore Engineering Education: Bachelor of Science in Engineering Education | Bachelor of Science in Engineering Education (uccs.edu)

Major Requirements

	Course/Area	Course Title	Credit Hours
B.S. Engineering Education Core Courses (22-24 hours) • Requires a minimum of 22-24 credit hours of Engineering course work. • A minimum overall 2.0 GPA must be maintained on all Engineering Core Courses. • Any EAS course that is NOT listed as an Introductory or Capstone course may be used toward the Foundations requirement. • Prerequisites are strictly enforced. Plan course sequences accordingly using open electives to take prerequisites when necessary. • *You must be admitted into the College of Engineering in order to take any CS, MAE, ECE, or ENGR coursework.*	MAE 1503	Introduction to Engineering Design	3
	MAE 2200	Materials Engineering	3
	ECE 3610	Engineering Probability and Statistics	3
	Introductory Course	*Complete one additional introductory course from the following:* CS 1120, 1150, ECE 1001, 1021, MAE 1502	3
	Engineering Foundations	*Complete 6 hours of Engineering Foundation courses from the following:* CS 1450, 2060, 2160, 3020, ECE 1411, 2205, 2411, 2610, MAE 2103, 2104, 2301	6
	Engineering Capstone – Complete a minimum of 4 hours of ENGR courses from one of the following options.		
	Computer Science: ENGR 3300 **AND** ENGR 4010	 Software Engineering I **AND** Computer Science Education Seminar	6
	Mechanical Eng: ENGR 4510 **AND** ENGR 4511 **Plus (optional)** MAE 4000	 Engineering Design I **AND** Engineering Design II **PLUS** Mechanical and Aerospace Engineering Seminar (optional)	5-6
	Electrical Eng: ENGR 4890 **AND** ENGR 4899	 Senior Seminar **AND** Senior Design Project	4
UCCS Teach Courses (33 hours) • A grade of "B-" or better must be earned in all UTED courses. • UTLS 3480 must be completed with a "C" or better. • UTED courses should be taken in the appropriate semester. See the four-year plan for details.	UTED 1030	Inquiry Approaches and Lesson Plan Design for Secondary Math and Science	3
	UTED 2010	Knowing and Learning in Mathematics and Science	3
	UTED 3020	Classroom Interactions	3
	UTLS 3030	Perspectives on Science and Math	3
	UTLS 3480	Functions and Modeling	3
	UTED 4710	Project-Based Instruction	3
	UTED 4720	Reading in the Content Area	3
	UTED 4730	Apprentice Teaching UCCS Teach and Seminar	12

ENGINEERING EDUCATION B.S.

University of Colorado Colorado Springs

General Education and Elective Requirements

Core Writing Requirement (6 hours)	• ENGL 1310, 1308, or 1305 *(Students choosing ENGL 1305 must complete ENGL 1300 first.)* • TCID 2090 • Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit
Mathematics (21 hours) **NOTE:** Math courses require a grade of C or better to progress through the Math sequence.	• MATH 1350 • MATH 1360 • MATH 2150 • MATH 2350 • MATH 3130 • MATH 3210
Basic Science (23-24 hours)	• BIOL 1300/1310 **AND** BIOL 1350/1360 • CHEM 1401/1402 • ENSC 1600 • GEOL 1010 **OR** PES 1050 • PES 1110

Compass Curriculum
(6 hours)

- Explore and Navigate courses must be taken in departments other than the major.
- Writing Intensive, Inclusiveness, and Sustainability courses may count toward other requirements within the degree.

Component	Course
Gateway	GPS 1010
Explore – Arts, Humanities and Cultures	See Degree Audit
Explore – Society, Behavior and Health	UTED 1030 (included in UCCS Teach requirements)
Explore – Physical and Natural World	PES 1110 (included in Basic Science requirements)
Navigate	See Degree Audit
Summit	UTED 4730 (included in UCCS Teach requirements)
Writing Intensive Courses (WIC) *Two courses with one upper-division (3000+ level)*	• UTED 4720 (included in UCCS Teach requirements) • ECE 3610 (included in Engineering Core requirements)
Inclusiveness	MAE 1503 (included in Engineering Core requirements)
Sustainability	ENSC 1600 (included in Basic Science requirements)

Open Electives (14-17 hours)	Complete additional courses to fulfill total minimum hours for the degree program. Courses may be selected from any discipline, but may not include any math courses below MATH 1350. Only 3 credit hours of CS course work numbered below CS 1150 may count towards electives.

FOUR-YEAR DEGREE PLAN

Please note that this is an *example* degree program and your program may vary. **Students are responsible for completing all course prerequisites.**

	√	FALL	Hours	√	SPRING	Hours
Year One		ENGL 1310	3		MAE 1503	3
		GPS 1010	3		MATH 1360	4
		MATH 1350	4		PES 1110	4
		Engineering Intro Course	3		Open Elective	3
		UTED 1030	3		Open Elective	3
		TOTAL	16		**TOTAL**	17
Year Two	√	**FALL**	*Hours*	√	**SPRING**	*Hours*
		CHEM 1401	4		ECE 3610 *(spring only)*	3
		CHEM 1402	1		MAE 2200	3
		ENSC 1600	3		TCID 2090	3
		MATH 2350	4		UTED 3020	3
		UTED 2010	3		Engineering Foundation Course	3
		Engineering Foundation course	3		Explore - Arts, Humanities and Cultures Course	3
		TOTAL	18		**TOTAL**	18
Year Three	√	**FALL**	*Hours*	√	**SPRING**	*Hours*
		ENGR Capstone	1-3		ENGR Capstone	3
		GEOL 1010 **OR** PES 1050	3-4		BIOL 1300	3
		MATH 2150	3		BIOL 1310	1
		UTED 4720	3		MATH 3130	3
		UTLS 3480 *(fall only)*	3		UTLS 3030 *(spring only)*	3
		Open Elective[1]	1-3		Open Elective *(Navigate)*	3
					PORT 3000	0
		TOTAL	17		**TOTAL**	16
Year Four	√	**FALL**	*Hours*	√	**SPRING**	*Hours*
		BIOL 1350	3		UTED 4730	12
		BIOL 1360	1			
		MATH 3210	3			
		UTED 4710	3			
		Open Elective	5			
		TOTAL	15		**TOTAL**	12

[1] Dependent on ENGR Capstone and GEOL 1010 or PES 1050 choices.