

ACADEMIC ADVISING

Partnering with students to successfully navigate college

Location: Main Hall 208

Phone: 719.255.3260

Website: [Academic Advising](http://www.uccs.edu/academic-advising)

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- Appointments: www.uccs.edu/advising/current-students

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

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 127 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 Mechanical Engineering: [Mechanical and Aerospace Engineering- Bachelor of Science in Mechanical Engineering | College of Engineering and Applied Science \(uccs.edu\)](http://www.uccs.edu/mechanical-engineering)

Major Requirements			
Mechanical Engineering Core Courses (60 hours)	Course/Area	Course Title	Credit Hours
<ul style="list-style-type: none"> • A minimum GPA of 2.0 must be maintained on all MAE course work. <p><i>You must be admitted into the College of Engineering in order to take any MAE coursework.</i></p>	MAE 1502 <i>or</i> MAE 1602	Principles of Mechanical Engineering <i>or</i> Principles of Aerospace Engineering	3
	MAE 1503	Intro to Engineering Design	3
	MAE 2055	Mech-Etronics I	4
	MAE 2103	Statics	3
	MAE 2104	Dynamics	3
	MAE 2200	Materials Engineering	3
	MAE 2301	Engineering Thermodynamics I	3
	MAE 3005	Engineering Measurements Lab	3
	MAE 3130	Fluid Mechanics	4
	MAE 3201	Mechanics of Materials	3
	MAE 3302	Engineering Thermodynamics II	3
	MAE 3401	Modeling & Simulation of Dynamic Systems	3
	MAE 3501	Machine Design I	3
	MAE 4000	Mechanical and Aerospace Engineering Seminar	1
	MAE 4020	Numerical Methods with MATLAB	3
	MAE 4120	Machine Design II	3
	MAE 4310	Heat Transfer	4
	MAE 4421	Automatic Control of Aerospace & Mechanical Systems	3
	MAE 4510	Engineering Design I	2
	MAE 4511	Engineering Design II	3
Technical Electives (12 hours) NOTE: MAE 3342 Engineering Economy can be counted as a business OR a technical elective.	Complete 12 credit hours of upper-division (3000+ level) technical electives. <ul style="list-style-type: none"> • 6 hours must be 4000-level • 6 hours must be from MAE courses • Courses from the following disciplines may be used for technical electives: Computer Science, Electrical Engineering, Mechanical Engineering, Math (with at least MATH 1350 as a prerequisite), Physics (with at least PES 1110 or MATH 1350 as a prerequisite), PES 2130 		12
Computing Course (3 hours)	MAE 1090	Introduction to Structured Programming	3
Business Courses (6 hours)	ENGR 3040	Engineering Ethics	3
	Business Elective	Complete one course from the following: BLAW 2000, 2010, MAE 3342, MKTG 3000, MGMT 3300	3

General Education and Elective Requirements

Core Writing Requirement (6 hours)	<ul style="list-style-type: none"> ENGL 1310, 1308, or 1305 (<i>Students choosing ENGL 1305 must complete ENGL 1300 first.</i>) OR <ul style="list-style-type: none"> ENGL 1410 TCID 2090 PORT 3000 (0 Credits) – Writing Portfolio Assessment 	
Mathematics (18 hours)	<ul style="list-style-type: none"> MATH 1350 MATH 1360 MATH 2350 MATH 3130 MATH 3400 	
Basic Science (13 hours)	<ul style="list-style-type: none"> CHEM 1401/1402 PES 1110 PES 1120 	
Compass Curriculum (9 hours) <ul style="list-style-type: none"> Explore and Navigate courses must be outside major requirements Writing Intensive, Inclusiveness, and Sustainability courses can count towards other requirements within degree 	Component	Course
	Gateway Program Seminar	GPS 1010 (counts towards HUM/SS Electives)
	Explore – Arts, Humanities and Cultures	See Degree Audit (counts towards HUM/SS Electives)
	Explore – Society, Behavior and Health	See Degree Audit (counts towards HUM/SS Electives)
	Explore – Physical and Natural World	PES 1110
	Navigate	ENGR 3040
	Summit	MAE 4511
	Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i>	<ul style="list-style-type: none"> MAE 3005 MAE 3130
	Inclusiveness	MAE 1503
Sustainability	MAE 3302	

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.**

Year One	✓	FALL	Hours	✓	SPRING	Hours
			MAE 1502	3		MAE 1503
		MATH 1350	4		MATH 1360	4
		GPS 1010	3		PES 1120	4
		ENGL 1310	3		CHEM 1401	4
		PES 1110	4		CHEM 1402	1
		TOTAL	17		TOTAL	16

Year Two	✓	FALL	Hours	✓	SPRING	Hours
			MAE 1090	3		MAE 2104
		MAE 2103	3		MAE 2301	3
		MAE 2055	4		MATH 3130	3
		MAE 2200	3		MATH 3400	3
		MATH 2350	4		TCID 2090	3
		TOTAL	17		TOTAL	15

Year Three	✓	FALL	Hours	✓	SPRING	Hours
			MAE 3005	3		MAE 3130
		MAE 3201	3		MAE 3501	3
		MAE 3302	3		MAE 4421	3
		MAE 3401	3		Technical Elective	3
		MAE 4020	3		Explore – Society, Behavior, and Health course	3
					PORT 3000	0
		TOTAL	15		TOTAL	16

Year Four	✓	FALL	Hours	✓	SPRING	Hours
			MAE 4000	1		MAE 4511 (<i>spring only</i>)
		MAE 4120	3		Technical Elective	3
		MAE 4310	4		Technical Elective	3
		MAE 4510 (<i>fall only</i>)	2		Explore – Arts, Humanities & Cultures course	3
		Technical Elective	3		Business Elective	3
		ENGR 3040	3			
		TOTAL	16		TOTAL	15