

DATA ANALYTICS & SYSTEMS ENGINEERING B.S



University of Colorado
Colorado Springs

ACADEMIC ADVISING

Partnering with students to successfully navigate college

Location: Main Hall 208

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

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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 Data Analytics and Systems Engineering (DASE): [Home | Bachelor of Science in Data Analytics and Systems Engineering \(uccs.edu\)](http://www.uccs.edu/bachelor-of-science-in-data-analytics-and-systems-engineering)

Major Requirements			
DASE Required Courses (35 hours)	Course/Area	Course Title	Credit Hours
<ul style="list-style-type: none"> • A minimum GPA of 2.0 must be maintained on all courses taken toward the major. <p>Pre-requisites will not be waived. Plan sequences accordingly using electives to take pre-requisites when necessary.</p> <p><i>You must be admitted into the College of Engineering in order to take any CS, MAE, ECE, or ENGR coursework.</i></p>	DASE 1011	Introduction to Data Analytics and System Engineering	3
	DASE 2020	Introduction to Statistics for Data Analytics	3
	DASE 2021	Computer Based Modeling in C	3
	DASE 4460	Intelligent Robotics	3
	CS 1150	Principles of Computer Science	3
	CS 1450	Data Structure and Algorithms	3
	CS 2080	Programing with Unix	3
	CS 3050	Social and Ethical Implications of Computing	1
	CS 3080	Python Programing	3
	CS 3300	Introduction to Software Engineering	3
	MGMT 3300	Introduction to Management and Organization	3
	ECE 4890 or 4891	Senior Seminar	1
	ECE 4899	Senior Design Project	3
DASE Required Track (18 hours) DASE students are required to pick one of the tracks listed as part of their degree program.	Data Analytics Track	Complete 18 credit hours from the courses listed below. DASE 3009, 4435, 4470, 4570, 4710, 4860	18
	Systems Engineering Track	Complete 18 credit hours from the courses listed below. DASE 3009, 4000, 4030, 4570, 4910; ECE 2205, 2610, 3003, 3210; MAE 2055, 3342, 3401, 4421, 4425	18
	General Track	Complete 9 hours from each of the Data Analytics and Systems Engineering Tracks above.	18
Technical Electives (9 hours)	Technical Electives	Complete 9 hours of any 3000+ level courses offered by the College of Engineering and Applied Science.	9

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General Education and Elective Requirements

Core Writing Requirement (6 hours)	<ul style="list-style-type: none"> ENGL 1310 ENGL 1310, 1308, or 1305 (<i>Students choosing ENGL 1305 must complete ENGL 1300 first.</i>) TCID 2090 Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit 	
Mathematics (21 hours)	<ul style="list-style-type: none"> MATH 1350 MATH 1360 MATH 2350 CS 2150 CS 2300 ECE 3610 or MATH 3810 	
Basic Science (11 hours)	<ul style="list-style-type: none"> PES 1110 Complete an additional 7 hours from: BIOL 1300, 1310, 1350, 1360; CHEM 1101, 1102, 1121, 1122, 1201, 1401, 1402, 1411, 1412; PES 1120, 1160, 2160. 	
Compass Curriculum (9 hours) <ul style="list-style-type: none"> 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	See Degree Audit
	Explore – Physical and Natural World	PES 1110 (included in Basic Science requirement)
	Navigate	See Degree Audit
	Summit	ECE 4890 or 4891
	Writing Intensive Courses (WIC) <i>Two courses with one upper-division (3000+ level)</i>	See Degree Audit
	Inclusiveness	See Degree Audit
	Sustainability	See Degree Audit
Open Electives (19 hours)	Complete open electives to fulfill the total hours requirement for the degree program. The chosen course(s) can be selected from any discipline but may not include any math course 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.**

Year One	✓	FALL	Hours	✓	SPRING	Hours
		DASE 1011	3		DASE 2021	3
		DASE/CS 1150	3		DASE/CS 1450	3
		ENGL 1310	3		TCID 2090	3
		GPS 1010	3		MATH 1360	4
		MATH 1350	4		PES 1110	4
		TOTAL	16		TOTAL	17

Year Two	✓	FALL	Hours	✓	SPRING	Hours
		CS 2150	3		DASE/CS 2080	3
		CS 2300	3		DASE/CS 3050	1
		DASE 2020	3		DASE/CS 3080	3
		Explore – Arts, Humanities & Cultures Course	3		ECE 3610 (Spring Only) or MATH 3810	3
		MATH 2350	4		Explore – Society, Behavior & Health	3
					Basic Science Elective	4
		TOTAL	16		TOTAL	17

Year Three	✓	FALL	Hours	✓	SPRING	Hours
		DASE 3030 or MGMT 3300	3		DASE 4460	3
		DASE/CS 3300	3		DASE Track Course	3
		DASE Track Course	3		Technical Elective	3
		Open Elective (<i>Writing Intensive</i>)	3		Open Elective (<i>Navigate</i>)	3
		Basic Science Elective	3		Open Elective (<i>Inclusiveness</i>)	3
					PORT 3000	0
		TOTAL	15		TOTAL	15

Year Four	✓	FALL	Hours	✓	SPRING	Hours
		ECE 4890	1		ECE 4899	3
		DASE Track Course	3		DASE Track Course	3
		DASE Track Course	3		DASE Track Course	3
		Technical Elective	3		Technical Elective	3
		Open Elective (<i>Writing Intensive</i>)	3		Open Elective	4
		Open Elective (<i>Sustainability</i>)	3			
		TOTAL	16		TOTAL	16