DATA ANALYTICS & SYSTEMS ENGINEERING B.I.

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
- 130 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): BI in Data Analytics and Systems Engineering (DASE) - (uccs.edu)

Major Requirements			
DASE Required courses (35 hours) • A minimum GPA of 2.0 must be maintained on all courses taken toward the major. *You must be admitted into the College of Engineering in order to take any CS, MAE, ECE, or ENGR coursework.*	**Course/Area**	**Course Title**	**Credit Hours**
	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 Programming	3
	CS 3300	Introduction to Software Engineering	3
	MGMT 3300	Introduction to Management and Organization	3
	ECE 4890	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
BI Innovation Core (24 hours)	INOV 1000 **or** INOV 1001	Introduction to Entrepreneurship **or** Social Entrepreneurship	3
	INOV 1010 **or** INOV 1011	The Innovation Process **or** Social Innovation	3
	INOV 2010	Innovation Team: Analyze and Report	3
	INOV 2100	Technical Writing, Proposals, and Presentations	3
	INOV 2500	Business Law and Innovation	3
	INOV 3010	Innovation Team: Research and Execute	3
	INOV 4010	Innovation Team: Design and Lead	3
	INOV 4500	Entrepreneurship and Strategy	3
BI 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 degree audit or Academic Catalog for specific courses: http://catalog.uccs.edu/* **Business, Creative Communication, Globalization, Inclusive Education, or Custom (for Veterans and Transfer students only)**		15

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General Education and Elective Requirements

Core Writing Requirement (3 hours)	• ENGL 1310, 1308, or 1305 *(Students choosing ENGL 1305 must complete ENGL 1300 first.)* • Writing Portfolio – PORT 3000 (0 credits) or PORT 4000 (1 credit) or alternative – See Degree Audit
Mathematics (21 hours)	• MATH 1350 • MATH 1360 • MATH 2350 • CS 2150 • CS 2300 • ECE 3610 **or** MATH 3810
Basic Science (11 hours)	• 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 (3 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	INOV 1010 **or** INOV 1011 (included in BI Core)
Explore – Society, Behavior and Health	INOV 1000 **or** INOV 1001 (included in BI Core)
Explore – Physical and Natural World	PES 1110 (included in Basic Science requirement)
Navigate	INOV 3010 (included in BI Core)
Summit	INOV 4500 (included in BI Core)
Writing Intensive Courses (WIC) *Two courses with one upper-division (3000+ level)*	• INOV 2010 (included in BI Core) • INOV 3010 (included in BI Core)
Inclusiveness	INOV 1010 **or** INOV 1011 (included in BI Core)
Sustainability	INOV 1000 **or** INOV 1001 (included in BI Core)

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
	CS 1150	3		CS 1450	3
	INOV 1000 **or** INOV 1001	3		INOV 1010 **or** INOV 1011	3
	GPS 1010	3		MATH 1360	4
	MATH 1350	4		PES 1110	4
	TOTAL	16		**TOTAL**	17

Year Two

√	FALL	Hours	√	SPRING	Hours
	INOV 2500	3		CS 2080	3
	CS 2150	3		CS 3050	1
	CS 2300	3		CS 3080	3
	DASE 2020	3		ECE 3610 *(spring only)* **or** MATH 3810	3
	ENGL 1310	3		INOV 2010	3
	MATH 2350	4		INOV 2100	3
	TOTAL	19		**TOTAL**	16

Year Three

√	FALL	Hours	√	SPRING	Hours
	DASE 3030 **or** MGMT 3300	3		DASE 4460	3
	CS 3300	3		DASE Track Course	3
	DASE Track Course	3		INOV 3010	3
	Cross-Discipline Core Course	3		Cross-Discipline Core Course	3
	Basic Science Elective	4		Basic Science Elective	3
				PORT 3000	0
	TOTAL	16		**TOTAL**	15

Year Four

√	FALL	Hours	√	SPRING	Hours
	ECE 4890	1		ECE 4899	3
	DASE Track Course	3		INOV 4500	3
	DASE Track Course	3		DASE Track Course	3
	INOV 4010	3		DASE Track Course	3
	Cross-Discipline Core Course	3		Cross-Discipline Core Course	3
	Cross-Discipline Core Course	3			
	TOTAL	16		**TOTAL**	15