MATHEMATICS B.S.



ACADEMIC ADVISING

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

GENERAL ACADEMIC INFORMATION

Minimum Graduation Requirements

- 120 credit hours
- 45 upper-division credit hours (3000-4999 level)
- 2.0 CU cumulative GPA
- Residency: Last 30 credit hours of degree must be completed while registered in the College of Letters, Arts, and Sciences at UCCS

Connect With Your Advisor

Current UCCS Students

• Appointments: <u>www.uccs.edu/advising/current-students</u> Prospective Students: <u>www.uccs.edu/admissions/contact</u>

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: <u>catalog.uccs.edu</u>
- 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 Mathematics: B.S. Program | Department of Mathematics (uccs.edu)

		Major Requireme	nts						
Mathematics Major (BS)	Course/Area	Course Title				Credit Ho	ours		
(46 hours)	MATH 1350	Calculus I					4		
	MATH 1360	Calculus II				4			
• Requires a minimum of 46	MATH 2150 Discrete Mathematics								
credit hours of course	MATH 2350 Calculus III								
work for the Statistics,	MATH 3110 Theory of Numbers								
Flexible, and Pure options,	MATH 3130	Introduction to Linear Algebra					3		
and a minimum of 49	MATH 3400								
hours for the Applied	MATH 3410								
Mathematics option.	MATH 3810	Intro to Probability & Statistics					3		
All options require a	MATH 4040	Senior Seminar					1		
minimum of 31 credit hours of upper-division	Required Option All BS Mathematics Majors must select one of the Options below.								
(3000+ level) MATH course	Ar	Applied Mathematics Option* Statistics Option							
work.	MATH 2650	Introduction to Computational Mathematics	3	MATH 4810	Mathematical Statistics I		3		
All MATH courses must	MATH 4310	Modern Analysis I	3	MATH 4820	Mathematical Statistics II		3		
have a grade of "C" or	MATH 4470	Methods of Applied Mathematics	3	MATH 4850	Stochastic Modeling		3		
better.	MATH 4650	Numerical Analysis	3	Math Electives	Complete 6 additional ho MATH 4000+.	urs of	6		
Option Course Recommendations:	Math Electives	Complete 6 additional hours of MATH 4000+.	6						
See the degree audit for		Flexible Option		F	Pure Mathematics Option				
recommended elective courses based on post-graduate goals.	Directed Elective Choose one	MATH 4130, 4140, 4310	3	MATH 4140 (spring only)	Modern Algebra I		3		
*NOTE: The Applied Math	Math Electives	Complete 12 additional hours of MATH 4000+.	12	MATH 4310	Modern Analysis I		3		
option requires completion of CS 1120 and PES 1110, 1120, and 1160.				Math Electives	Complete 9 additional ho MATH 4000+.	urs of	9		

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G	eneral Education and Elective Re	equirements							
Core Writing Requirement	ENGL 1310, 1308, or 1305 (Students choosing ENG	GL 1305 must complete ENGL 1300 first.)							
(6 hours)	• ENGL 1410								
	 PORT 3000 (0 Credits) – Writing Portfolio 								
Reasoning Skills	MATH 1350 (included in major requirements)								
	MATH 3810 (included in major requirements)								
Core Humanities	• HUM 3990								
(3 hours)	 This course also fulfills Navigate and or 	ne Writing Intensive course.							
Natural Sciences Lab	See Degree Audit								
(1 hour)	 This can be taken as part of an Explore 	e – PNW course that has a lab component							
Oral Communication	MATH 4040 (included in major requirements)								
LAS Language other than English	Complete two semesters of a language other than English equivalent to 1010 & 1020 with high school, transfer,								
Requirement	placement exam, or UCCS coursework. Courses taken to fulfill this requirement may also count toward Compass								
	Curriculum Explore - Arts, Humanities and Cultures or general electives. See degree audit for details.								
Compass Curriculum	Component	Course							
(21 hours)	Gateway Program Seminar	GPS 1010							
Explore and Navigate courses must be	Explore – Arts, Humanities and Cultures (2 courses)	See Degree Audit							
outside major requirements	Explore – Society, Behavior and Health (2 courses)	See Degree Audit							
 Writing Intensive, Inclusiveness, and 	Explore – Physical and Natural World (2 courses)	See Degree Audit							
Sustainability courses can count	Navigate	HUM 3990 (included in LAS gen ed requirements)							
towards other requirements within	Summit	MATH 4040 (included in major requirements)							
1	Writing Intensive Courses (WIC) (2 courses)	 HUM 3990 (included in LAS gen ed requirements) 							
degree	Must include one upper-division (3000+ level)	See Degree Audit							
	Inclusiveness (2 courses)	See Degree Audit							
	Sustainability	See Degree Audit							
NOTE: Applied Mathematics Option	Complete CS 1120 and PES 1110, 1120, and 1160.								
Additional Required Courses	• The CS and PES courses will fulfill General Elective hours in the 4-Year Degree Plan below, except for PES								
	1160 which will complete the Natural Science	ce Lab for this Option.							

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.						s
	\checkmark	FALL	Hours	\checkmark	SPRING	Hours

a	ENGL 1310	3	ENGL 1410	3
Ö	MATH 1350	4	MATH 1360	4
Ľ	GPS 1010	3	Explore - Physical & Natural World Course	3
ea	Explore – Arts, Humanities & Cultures Course	3	Explore – Society, Behavior & Health Course	3
>	General Elective	3	General Elective	3
	TOTAL	16	TOTAL	16

	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
0		MATH 2150	3		MATH 3400	3
Š		MATH 2350	4		MATH 3110	3
L L		Explore – Arts, Humanities & Cultures Course	3		Explore - Physical & Natural World Course	3
ea		Explore – Society, Behavior & Health Course	3		Natural Science Lab	1
>		General Elective	3		General Elective	4
		TOTAL	16		TOTAL	14

	1	FALL	Hours	\checkmark	SPRING	Hours
		MATH 3130	3		MATH 3410	3
ee		MATH 3810	3		MATH Option Course	3
Ę		HUM 3990	3		MATH Option Course or UD MATH Elective*	3
		General Elective	3		General Elective	3
Year		General Elective (Inclusiveness)	3		General Elective	3
		TOTAL	15		TOTAL	15

_	\checkmark	FALL	Hours	\checkmark	SPRING	Hours
		MATH 4040	1		MATH Option Course or UD MATH Elective*	3
no		MATH Option Course or UD MATH Elective*	3		MATH Option Course or General Elective	3
L.L.L.L.L.L.L.L.L.L.L.L.L.L.L.L.L.L.L.		MATH Option Course or UD MATH Elective*	3		Upper Division (UD) General Elective	3
ea		General Elective	3		UD General Elective	3
~		General Elective (Inclusiveness)	3		UD General Elective (Sustainability)	3
		TOTAL	13		TOTAL	15

*Course choice depends on which Option is chosen.