MATHEMATICS B.S.

Secondary Education Option



ACADEMIC ADVISING

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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

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 Requirements | |
|---|----------------|---|--------------|
| MATH Major (BS) | Course/Area | Course Title | Credit Hours |
| (45 hours) | MATH 1350 | Calculus I | 4 |
| | MATH 1360 | Calculus II | 4 |
| The BS in MATHEMATICS major requires a minimum of 45 credit hours of MATH | MATH 2150 | Discrete Mathematics | 3 |
| course work and a minimum of 31 credit | MATH 2350 | Calculus III | 4 |
| hours of upper-division (3000+ level) | MATH 3110 | Theory of Numbers | 3 |
| MATH course work. | MATH 3130 | Introduction to Linear Algebra | 3 |
| | MATH 3210 | Introduction to Geometry | 3 |
| All MATH courses must have a grade of | MATH 3400 | Introduction to Differential Equations | 3 |
| "C" or better. | MATH 3410 | Introduction to Analysis | 3 |
| | MATH 3480 | Functions and Modeling | |
| | OR | | 3 |
| | UTLS 3480 | Functions and Modeling | |
| | MATH 3810 | Introduction to Probability & Statistics | 3 |
| | MATH 4140 | Modern Algebra | |
| | OR | | 3 |
| | MATH 4310 | Modern Analysis I | 1 |
| | MATH Electives | Complete 6 additional hours of MATH courses numbered 4000 or higher | 6 |
| | T | T | 1 |
| UCCS Teach Courses | UTED 1030 | Inquiry Approaches/Lesson Plan Design for Secondary Math/Science Teaching | 3 |
| (30 hours) | UTED 2010 | Knowing and Learning in Mathematics and Science | 3 |
| A grade of "B-" or better must be earned | UTED 3020 | Classroom Interactions | 3 |
| in all UCCS Teach courses. | UTED 4710 | Project-Based Instruction | 3 |
| | UTED 4720 | Reading in the Content Area | 3 |
| Courses should be taken in the | UTED 4730 | Apprentice Teaching UCCS Teach and Seminar | 12 |
| appropriate semester. See the four-year plan for details. | UTLS 3030 | Perspectives on Science and Math | 3 |

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| G | eneral Education and Elective R | equirements | |
|--|--|--|--|
| Core Writing Requirement (6 hours) | ENGL 1310, 1308, or 1305 (Students choosing EN ENGL 1410 PORT 3000 (0 Credits) – Writing Portfolio | IGL 1305 must complete ENGL 1300 first.) | |
| Reasoning Skills | Included in Major requirements | | |
| Area Requirements (27 hours) • Maximum 2 courses from any one discipline may be applied to the area requirements | Humanities – 9 credit hours of which 3 credits m Social Sciences – 9 credit hours Natural Sciences – 9 credits hours, of which at le NOTE: Cannot select courses from primary majo | ast 1 credit must be from a lab course | |
| Oral Communication, Cultural Diversity, and Global Awareness Requirements LAS Language other than English Requirement | One course from each list (see degree audit). All courses that fulfill these requirements may also count towards other general education or major requirements. Complete two semesters of a language other than English equivalent to 1010 & 1020 with high school, transfer, placement exam, or UCCS coursework. Courses taken to fulfill this requirement may also count toward Compass | | |
| Compace Curriculum | Curriculum Explore - Arts, Humanities and Cultures or | | |
| Compass Curriculum (9 hours) | Component Gateway | Course GPS 1010 | |
| Explore and Navigate courses must be | Explore – Arts, Humanities and Cultures | See Degree Audit | |
| outside major and area requirements Writing Intensive, Inclusiveness, and | Explore – Society, Behavior and Health Explore – Physical and Natural World | UTED 1030 See Degree Audit | |
| Sustainability courses can count | Navigate | HUM 3990 (included in LAS area requirements) | |
| towards other requirements within | Summit | UTED 4730 (included in Education requirements) | |
| degree | Writing Intensive Courses (WIC) Two courses with one upper-division (3000+ level) | HUM 3990 (included in LAS area requirements) UTED 4720 (included in UCCS Teach requirements) | |
| | Inclusiveness Sustainability | See Degree Audit See Degree Audit | |
| General Electives | Complete additional courses to meet total and upper- | Ŭ | |
| (3 hours) | Complete additional courses to meet total and upper- | uivision requirements for your degree program. | |

FOUR-YEAR DEGREE PLAN

| i icu | se note that this is an example degree program and your program | ii iiiay vai y. | Jiu | dents are responsible for completing an course prerequisites | • |
|-------|---|-----------------|-----|--|---|
| 1 | FALL | Hours | 1 | SPRING | H |
| | | | | | |

| a | 1 | FALL | Hours | 1 | SPRING | Hours |
|----|---|--|-------|---|--|-------|
| | | ENGL 1310 | 3 | | ENGL 1410 | 3 |
| Ë | | MATH 1350 | 4 | | MATH 1360 | 4 |
| Ī | | GPS 1010 | 3 | | Social Science Elective (Global Awareness/Inclusiveness) | 3 |
| ea | | Explore – Arts, Humanities & Cultures Course | 3 | | UTED 1030 | 3 |
| > | | General Elective | 3 | | Explore – Physical & Natural World Course | 3 |
| | | TOTAL | 16 | | TOTAL | 16 |

| 0 | 1 | FALL | Hours | 1 | SPRING | Hours |
|-----|---|--|-------|---|--------------------------|-------|
| | | MATH 2350 | 4 | | MATH 3810 | 3 |
| ,š | | MATH 2150 | 3 | | MATH 3110 (Spring Only) | 3 |
| | | UTED 2010 | 3 | | UTED 3020 | 3 |
| Yea | | Humanities Elective | 3 | | Humanities Elective | 3 |
| | | Social Science Elective (Cultural Diversity) | 3 | | Natural Science Elective | 4 |
| | | TOTAL | 16 | | TOTAL | 16 |

| بو | J | FALL | Hours | 1 | SPRING | Hours |
|------|---|------------------------------------|-------|---|--|-------|
| | | MATH 3130 | 3 | | MATH 3400 | 3 |
| ıre | | MATH 3210 | 3 | | MATH 3410 (Spring Only) | 3 |
| ΙĒ | | MATH 3480 or UTLS 3480 (Fall Only) | 3 | | MATH 4000 Elective | 3 |
| Year | | UTED 4720 (Fall Only) | 3 | | UTLS 3030 (Spring Only) | 3 |
| | | Natural Science Elective w/ Lab | 5 | | Social Science Elective (Sustainability) | 3 |
| | | TOTAL | 17 | | TOTAL | 15 |

| | 1 | FALL | Hours | 1 | SPRING | Hours |
|-------|---|-------------------------------|-------|---|-----------|-------|
| _ | | MATH 4140 or 4310 (Fall Only) | 3 | | UTED 4730 | 12 |
| no | | MATH 4000 Elective | 3 | | | |
| ear F | | HUM 3990 | 3 | | | |
| | | UTED 4710 | 3 | | | |
| > | | | | | | |
| | | TOTAL | 12 | | TOTAL | 12 |

NOTE: Students must complete all course requirements other than UTED 4730 before the final semester.