PROGRAM OVERVIEW

Apart from the specialized mathematical skills that students acquire, the degree also reflects general skills that are valued by many employers. These skills include problem solving, critical thinking, analysis, facility with data, the ability to process quantitative information, and perhaps most important of all, the ability to learn new skills and concepts quickly.

A bachelor's degree in mathematics prepares students for jobs in statistics, actuarial sciences, mathematical modeling, mathematics education, as well as for graduate school leading to a research career in engineering, mathematics or statistics. A strong background in mathematics is also necessary for research in many areas of computer science and social science.

ACADEMIC ADVISING

The College of Liberal Arts and Sciences (CLAS) supports students to graduation using a dual-advising system. CLAS students have two academic advisors with whom they should meet regularly to discuss academic and degree progress: a CLAS Academic Advisor and a major/faculty advisor.

For questions related to CU Denver Core Curriculum, CLAS, general graduation requirements, university/college academic policies, or campus resources contact:

CLAS Academic Advising
clas_advising@ucdenver.edu
Find your CLAS Advisor here
North Classroom (NC) Building 1030
303-315-7100

For questions related to major requirements, major course prerequisites, or evaluation of transfer coursework in your major contact:

Florian Pfender
florian.pfender@ucdenver.edu
Visit the department website here
Student Commons Building (SCB) 4307
303-315-1715

GENERAL GRADUATION REQUIREMENTS & POLICIES

All CU Denver CLAS students are required to complete the following minimum general graduation requirements to be eligible to apply for graduation:

1. Complete a minimum of 120 semester hours passed
2. Achieve a minimum 2.0 CU cumulative grade point average (GPA)
3. Complete a minimum of 45 upper-division (3000- to 4000-level) semester hours
4. Complete all college and major requirements
5. Residency: complete a minimum of 30 CLAS hours at CU Denver

Credits exceeding the following maximum hour restrictions will not be applied toward the minimum 120 hours required for graduation:

- 56 semester hours in major department/prefix courses
- 16 semester hours Pass/Fail
- 12 semester hours of Independent Study
- 9 semester hours of internship credit
- 8 semester hours of physical education credit

CAREER RESOURCES

The Mathematics B.S. degree prepares students for a wide range of career choices. With a mathematics degree, you gain the skills to do well in finance, statistics, engineering, computers, teaching or accountancy. Mathematics students develop such skills as critical thinking, oral and written communication, arguing logically and rigorously, thinking abstractly, formulating and solving problems, analyzing data, analyzing mathematical models, quantitative and computer proficiency, and the ability to work both alone and in groups. Related occupations for Mathematics graduates include:

- Accountant
- Actuary
- Computer Programmer
- Demographer
- Economist
- Financial Planner
- Mathematician
- Nuclear Scientist
- Market Research Analyst
- Statistician
- Surveyor
- Treasurer
- Surveyor
- Actuary
- Computer Programmer
- Demographer

Some careers and occupations require additional training or education. Interested in learning more about career and occupational options for this major? Visit the CU Denver Career Center located in the Tivoli Student Union (TV) Suite 267 to speak with a career counselor. The Career Center also provides Career Briefs, overviews of careers related to specific CU Denver majors, which include related links and resources to the particular field and show potential jobs related to the major. Access Career Briefs here.

PROGRAM REQUIREMENTS & POLICIES

Students are responsible for meeting with the major/faculty advisor in the department to confirm major requirements. Students completing the Mathematics B.S. Degree are required to complete the following minimum program requirements:

1. Complete a total of at least 42 MATH semester hours.
2. Complete at least 15 upper-division (3000- to 4000-level) semester hours in MATH in residence at CU Denver.
3. Achieve a grade of C- or better in all courses counted toward the MATH major.
4. Achieve a minimum GPA of 2.25 for all MATH courses applying to MATH requirements.
The following academic plan is a sample pathway to completing degree requirements for this major. Students should tailor this plan based on previously completed college coursework (e.g., AP, IB, CLEP, dual/concurrent enrollment, and transfer credit), course availability, and individual preferences related to course load, schedules, or add-on programs such as minors or double-majors.

**Sample Academic Plan of Study**

<table>
<thead>
<tr>
<th>Milestones</th>
<th>Fall</th>
<th>CRS</th>
<th>Grade</th>
<th>Spring</th>
<th>CRS</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year One</strong></td>
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<tr>
<td>• Meet your advisors</td>
<td>ENGL1020 – Core Composition I</td>
<td>3</td>
<td></td>
<td>ENGL2030 – Core Composition II</td>
<td>3</td>
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<tr>
<td>• Introduce yourself to faculty in your department</td>
<td>MATH1401†</td>
<td>4</td>
<td></td>
<td>MATH2411†</td>
<td>4</td>
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<tr>
<td>• Create an academic plan and check your Degree Audit with your advisors</td>
<td>CU Core Social Science</td>
<td>3</td>
<td></td>
<td>CU Core Behavioral Science</td>
<td>3</td>
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<tr>
<td>• Visit campus resources</td>
<td>CU Core Arts</td>
<td>3</td>
<td></td>
<td>MATH1410 &amp; MATH1411</td>
<td>4</td>
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<tr>
<td><strong>Year Two</strong></td>
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<tr>
<td>• Meet with your advisors to complete a 60-hour check</td>
<td>MATH2421‡</td>
<td>4</td>
<td></td>
<td>MATH3191‡</td>
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<tr>
<td>• Join a student club or organization</td>
<td>CLAS Biol/Phys Science with Lab</td>
<td>4</td>
<td></td>
<td>MATH3382‡</td>
<td>3</td>
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<tr>
<td>• Begin to research internships</td>
<td>MATH3000‡</td>
<td>3</td>
<td></td>
<td>CLAS Communicative Skills</td>
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<tr>
<td>• Visit the Career Center</td>
<td>CU Core Humanities</td>
<td>3</td>
<td></td>
<td>CU Core Cultural Diversity</td>
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<tr>
<td>• Explore additional major(s) or minors</td>
<td>CU Core Biol/Phys Science with Lab</td>
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<td><strong>Year Three</strong></td>
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<tr>
<td>• Explore research opportunities in your major</td>
<td>MATH4310‡</td>
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<td>Upper-Division MATH Elective</td>
<td>3</td>
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<tr>
<td>• Apply for internships</td>
<td>MATH4779 or 4015 or 6330</td>
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<td></td>
<td>Upper-Division MATH Elective</td>
<td>3</td>
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</tr>
<tr>
<td>• Begin to research professional or graduate programs</td>
<td>CLAS Foreign Language Semester I</td>
<td>5</td>
<td></td>
<td>CLAS Foreign Language Semester II</td>
<td>5</td>
<td></td>
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<tr>
<td>• General Elective</td>
<td>CU Core International Perspectives</td>
<td>3</td>
<td></td>
<td>CLAS Humanities</td>
<td>3</td>
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<tr>
<td><strong>Year Four</strong></td>
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<td>• See advisors for a grad check the semester before you plan to graduate</td>
<td>Upper-Division MATH Elective</td>
<td>3</td>
<td></td>
<td>Upper-Division MATH Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>• Explore independent studies in your major</td>
<td>Upper-Division MATH Elective</td>
<td>3</td>
<td></td>
<td>Upper-Division General Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>• Submit professional or graduate program applications</td>
<td>Upper-Division General Elective</td>
<td>3</td>
<td></td>
<td>Upper-Division General Elective</td>
<td>3</td>
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</tr>
<tr>
<td></td>
<td>CLAS Behavioral Science</td>
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<td></td>
<td>CLAS Social Science</td>
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</tr>
</tbody>
</table>

* Major Course Available  † Prerequisite Enforced  ‡ Prerequisite Recommended