

# Mathematics

Mathematics is the study of quantitative relationships. Major branches include arithmetic, algebra, geometry, trigonometry, calculus, probability, and statistics. Math majors develop the ability to explore, conjecture, and reason as well as use math to solve complex problems. Cottey alumnae have been successful in diverse areas including actuarial science, chemical engineering, dentistry, mathematics, meteorology, operations research, physical therapy, veterinary medicine and science/math teaching.

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## Career Opportunities

The study of mathematics is excellent preparation for a host of employment opportunities in areas of business, finance, insurance, communications, electronics, science, computers, medicine, and law.

The majority of math majors work in the private, for-profit sector of the economy, and many find themselves in the corporate or business world. The other major career area for math majors is in education.

Of those students who graduate with a major in Mathematics, almost half of them will earn a postgraduate degree in general mathematics, computer science, or education. Of those earning a professional degree, they are typically concentrated in medicine or law.

Employment opportunities are very strong for math majors and they are often given preferential treatment in employment and graduate school admission over other majors.

## Internship and Directed Study Opportunities

As a mathematics major, your chances to gain real world learning experiences through internships and directed studies are very important.

Students at Cottey College participate in internships throughout the year with a variety of businesses, organizations, and non-profit agencies. A successful internship provides students with an opportunity to apply their classroom learning to the workplace.

Employers and graduate schools agree that students who have put classroom concepts and skills to work in a “real world” environment are more realistic and productive than those who have not.

With the assistance of faculty and the transfer and career planning coordinator, mathematics majors can find a variety of local and national internship experiences.

Opportunities exist locally to intern

## Get Involved

Want to have fun and develop your leadership skills and your resume at the same time? Then get involved at Cottey College and in the Nevada community.

Cottey College has more than 35 student clubs and organizations in which to be involved. Plus, the Nevada and surrounding community offer an abundance of service opportunities.

Here are a few activities on campus you might consider pursuing as a mathematics major: Cottey Computer Club (CCC), Cottey Big Sisters which provides volunteer experiences working with area youth, AIDS Activists Coming Together (AACT) to educate themselves and others about AIDS/HIV awareness and prevention.

Activities off campus include: volunteering at the YMCA, Nevada Veterinary Clinic, or with the Chamber of Commerce.

with the Nevada Veterinary Clinic, County Health Dept. as well as various health care facilities, non-profit organizations, and government agencies.

Directed study opportunities are available in all disciplines. Under the supervision of faculty, students can pursue academic credit on a topic or project that is related to, but beyond the scope of, regular course offerings.

Directed study topics can be tailored to your interests, whether it is conducting individual scientific research, studying girls' punk music, or conducting advanced computer programming.

# Mathematics (4-Semester Sample Schedule)

Students should consult the catalog of the college to which they plan to transfer for specific requirements in their major. This suggested schedule is designed to provide the Associate in Science degree candidate with the appropriate Cottey College core curriculum and enough coursework in their field to complete the 62 hours required for an A.S. degree. *Schedules may vary based on available classes and interests.*

First Year Fall Semester	Credit Hrs.	First Year Spring Semester	Credit Hrs.
ENG101 English Composition I	3	ENG102 English Composition II	3
MAT103 College Algebra or higher MAT201 Calculus I**	4	*MAT202 Calculus II	4
*CSC 110 computer science	3	Social Science	3
ECO, HIS, or POL	3	Physical Activity	1
Electives	3	Electives	3 to 4

Second Year Fall Semester	Credit Hrs.	Second Year Spring Semester	Credit Hrs.
Humanities	3	Fine arts theory	3
2nd sci or math MAT203 Calculus III	4	*MAT 204 Differential Equations	3
Lab Science	4 or 5	*Lab Science	4
Electives	3	Electives	7
Physical Activity	1		

\* Courses recommended for major

\*\* A student who is not prepared to enroll in Calculus I should plan one of the following math sequences, based on her current level of preparation.

MAT120 Precalculus	MAT103 College Algebra	MAT101 Intermediate Alg.
MAT201 Calculus I	MAT104 Trigonometry	MAT103 and MAT 104
MAT202 Calculus II	MAT201 Calculus I	MAT201 Calculus I
MAT203 Calculus III	MAT202 Calculus II	MAT202 Calculus II

OTHER RELEVANT COURSES ALSO HIGHLY RECOMMENDED AS ELECTIVES:

CSC any course with CSC 110 as prerequisite  
 PHY201 General Physics I (also PHY202)

## Faculty Advising

Preparing a class schedule, investigating majors, and researching transfer institutions can be confusing for a first-year student. At Cottey College, academic advising assists the individual student in clarifying and achieving her educational goals.

Each student is assigned a full-time faculty member as an academic advisor. Together the advisor and student devise a balanced academic program, which encompasses the student's educational

and career ambitions. The advisor reviews all registration decisions, the advisee's academic progress, and suggests transfer and career options.

This personalized approach to student advising allows the student to take responsibility for her own academic program, while tapping into faculty expertise.

For more information contact:  
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