CAMPBELL UNIVERSITY
COLLEGE OF ARTS AND SCIENCES

MATHEMATICS

COLLEGE OF ARTS AND SCIENCES

MATHEMATICS

1-800-334-4111 • WWW.CAMPBELL.EDU

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1-800-334-4111, ext. 5722 • 910-814-5722
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THE CAMPBELL PROGRAM

Campbell's mathematics program is designed to help students develop the abilities to solve complex problems, think abstractly, formulate logical arguments, and create and analyze mathematical models. These skills are valued by employers in a wide range of fields; therefore mathematics majors are in great demand. Professional schools such as business, law, and medicine also value these abilities and recognize that they are well-developed in mathematics students.

With a degree in mathematics, you will be qualified for many desirable careers. In "The Jobs Rated Almanac," author Les Krantz ranked 250 jobs based on the following six criteria: income, stress, physical demands, potential growth, job security, and work environment. Mathematician currently ranks #1 on the list. Actuary and statistician careers, which also require a significant understanding of mathematics, rank 2nd and 3rd on the list.

Our program will provide you a strong mathematical foundation through our three-semester calculus sequence, followed by exposure to a breadth of mathematical ideas in courses such as linear algebra, discrete mathematics, probability and statistics, geometry, and abstract algebra.

THE CAMPBELL APPROACH

Upper-level mathematics courses have a low student-faculty ratio, allowing students a more personal learning experience. Faculty and students are able to get to know one another, leading to a more comfortable and relaxed learning environment. We also recognize that students develop a deeper understanding of concepts by sharing knowledge with each other, so there are opportunities for students to become tutors for all levels of mathematics and teaching assistants for calculus.

THE CAMPBELL FACULTY

The department includes six full-time mathematics faculty members. Faculty typically reserve two hours a day outside of class to work with students, but many also adhere to an open door policy in which you are encouraged to drop in at other times as well. You will have an advisor within the department who will help you develop a plan for meeting your academic goals. Our faculty is dedicated to helping you succeed in our program and preparing you for whatever path you choose after graduation.

THE CAMPBELL STUDENT

A successful mathematics student is bright, inquisitive, disciplined, and enthusiastic about the subject. There is more to getting an education than attending class, so there are many opportunities for you to become involved in the department. In addition to working as a tutor, students are encouraged to be active in the Math/ITS club. This club provides fun and educational programs for students with majors or minors in mathematics or ITS.

There is a very strong market for high school math teachers, so some of our students choose to complete our certification program. Other students choose to pursue a career in a variety of other fields, from actuarial science to cryptology to bioinformatics. Still others choose to further their education in a graduate program in mathematics or a related discipline. The real strength of a major in mathematics is its versatility, so your options are nearly infinite!

The Campbell Advantage

Whether you plan to pursue a career immediately or attend graduate school, as about 15% of our majors do, you'll likely reap immeasurable benefits from your years at Campbell because…

- Our mathematics program has a proven track record for guiding and placing graduates in well- paying positions.
- Our faculty is determined to help you succeed and will offer unsurpassed levels of personal support.
- Our university is noted for its dedication to quality liberal arts education, free enterprise, and our Christian Mission.

MATHEMATICS: BACHELOR OF SCIENCE

Requirements for a Major in Mathematics

The candidate must complete, with a "C" average or better, a minimum of 33 semester hours, with 18 of the semester hours at the 300 level or above and including Math 224, 333, 341, 342, and 441. Students may receive advanced placement for Math 122 or 223.

Requirements for a Minor in Mathematics

A student must complete, with a "C" average or better, 18 semester hours including Math 122, 223, 224, and two additional approved courses above the 224 level.

Requirements for Teacher Licensure in Mathematics

Students who desire licensure to teach mathematics in the secondary schools of North Carolina must complete with a "C" or better, at least thirty-six semester hours in mathematics, including MATH 224, 333,340, 341, 342, 441, 443, 453, and a capstone project. Students must acquire and maintain a 2.5 GPA to be admitted into the teacher education program and complete the professional education requirements.

Mathematics and the General College Curriculum

Successfully complete Mathematics 122 or two mathematics courses numbered 111 and above as selected by the major department.

Advanced Placement

Advanced placement is determined on an individual basis and will be contingent upon successful completion of a higher-level course with a "C" or better. Students completing Mathematics 122 may also receive major credit for Mathematics 112. Students completing Mathematics 223 may also receive major credit for Mathematics 112 and 122. Students completing Mathematics 224 may also receive major credit for Mathematics 111, 112, and 223. Students taking Mathematics 335 may also receive major credit for Mathematics 160. Those interested in advanced placement should make inquiry in the Mathematics/ITS department.

What Mathematicians Do

Actuary	Stock Broker	Supervisor
Cost Estimator	Rate Analyst	Energy Auditor
Accountant	Technical Writer	Chemical Engineer
Surveyor	Credit Analyst	Financial Analyst
Auditor	Computer Security Analyst	Reliability Engineer
Editor	Aircraft Design Engineer	Biostatistician
Attorney	Pension Fund Analyst	Mathematical Economist
Systems Analyst	Safety Consultant	CAD/CAM Engineer
Computer Engineer	Loan Management Officer	Computational Physicist
Geographer	Market Researcher	Systems Engineer
Architect	Meteorological Technician	FBI Special Agent
Meteorologist	Automation Engineer	Software Specialist
Statiscian	Industrial Purchasing	Lead System Programmer
Airline Navigator	Agent	Properties Manager
Astronaut	Automotive Engineer	Space Guidance Manager
Musicologist	Air Traffic Controller	Broadcast Technician
Tax Consultant	Information Analyst	Senior Programmer
Geophysicists	Weapons System Analyst	Internal Consultant
Test Engineer	Corporate Auditor	Quality Control Engineer
Flight Engineer	Systems Support	Surveyor

Curriculum Outline
MATHEMATICS

FRESHMAN YEAR

SEMESTER 1		HRS	SEMESTER 2		HRS
TRIGONOMETRY	MATH 112	3	ANLYT GEOM AND CALC I	MATH 122	4
ENGLISH COMP I	ENGL 101	3	ENGLISH COMP II	ENGL 102	3
SCIENCE ELECTIVE		4	SCIENCE ELECTIVE		4
FOREIGN LANG	201	3	LIFETIME WELLNESS	PE 185	2
WESTERN CIV I	HIST 111	3	WESTERN CIV II	HIST 112	3
CU WORSHIP	CUW 100	0.5	CU WORSHIP	CUW 100	0.5

SOPHOMORE YEAR

SEMESTER 3		HRS	SEMESTER 4		HRS
ANYLT GEOM AND CALC II	MATH 223	4	ANLYT GEOM AND CALC III	MATH 224	4
PROGRAMMING LANG	ITS 250	3	INTRO TO CHRISTIANITY	RELG 125	3
ENGLISH LITERATURE	ENGL LIT	3	ENGLISH LITERATURE	ENGL LIT	3
SOCIAL SCIENCE ELECTIVE		3	SOCIAL SCIENCE ELECTIVE		3
ART/MUSIC/THEATRE	131	3	ELECTIVE		3
CU WORSHIP		0.5	CU WORSHIP		0.5

JUNIOR YEAR

SEMESTER 5		HRS	SEMESTER 6		HRS
PROBABILITY AND STATS I	MATH 341	3	PROBABILITY AND STATS II	MATH 342	3
LINEAR ALGEBRA	MATH 333	3	PE ACTIVITY	PE 111	2
RELIGION ELECTIVE		3	MATH ELECTIVE		3
ELECTIVE		3	ELECTIVE		3
ELECTIVE		3	ELECTIVE		3
ELECTIVE		3	ELECTIVE		3

SENIOR YEAR

SEMESTER 7		HRS	SEMESTER 8	HRS
INTRO TO MODERN ABSRCT ALG	MATH 441	3	MATH ELECTIVE	3
MATH ELECTIVE		3	ELECTIVE	3
ELECTIVE		3	ELECTIVE	3
ELECTIVE		3	ELECTIVE	3
ELECTIVE		3		

English Comp - Students with a SAT verbal score below 450 will be enrolled in ENGL 100; students scoring between 450 and 699 will be enrolled in ENGL 101 and those with a high school average of "B" and a SAT score above 700 will be enrolled in ENGL 102 in their first semester.

English Literature - The ENGL LIT requirement may be satisfied by completing any two of the following literature courses (in any order): ENGL 201, 202, 203, 204 or 205 or a Foreign LANG LIT.

Foreign Language - Students are required to pass a 201 level Foreign Language Course.

Science Elective – Can be chosen from any 4-hour science course with lab.

Social Science - Courses that meet this requirement may be selected from CRIM, ECON, GEOG, POLS, HIST, PHIL, PSYC, and SOCI.

Math Electives - Choose from MATH 300+ Level Courses

Electives- Any course may be used for an elective; however, carefully chosen electives will allow for a minor.

The major requirements outlined within this brochure are intended as a guideline, and the curriculum outlines are only a sample. The most recent copy of the University's Undergraduate Studies Bulletin is the official source related to curriculum guidelines. It is the student's responsibility to consult with his/her academic adviser.