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!

For more information about the program contact:
1-800-334-4111, ext. 5722 • 910-814-5722
math@campbell.edu
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

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

**MATHEMATICS**

**FRESHMAN YEAR**

<table>
<thead>
<tr>
<th>SEMESTER 1</th>
<th>HRS</th>
<th>SEMESTER 2</th>
<th>HRS</th>
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</thead>
<tbody>
<tr>
<td>TRIGONOMETRY</td>
<td>MATH 112</td>
<td>3</td>
<td>ANLYT GEOM AND CALC I</td>
</tr>
<tr>
<td>ENGLISH COMP I</td>
<td>ENGL 101</td>
<td>3</td>
<td>ENGLISH COMP II</td>
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<td>SCIENCE ELECTIVE</td>
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<td>SCIENCE ELECTIVE</td>
<td>4</td>
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<tr>
<td>FOREIGN LANG</td>
<td>201</td>
<td>LIFETIME WELLNESS</td>
<td>PE 185</td>
</tr>
<tr>
<td>WESTERN CIV I</td>
<td>HIST 111</td>
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<td>WESTERN CIV II</td>
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**SOPHOMORE YEAR**

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<thead>
<tr>
<th>SEMESTER 3</th>
<th>HRS</th>
<th>SEMESTER 4</th>
<th>HRS</th>
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<tbody>
<tr>
<td>ANLYT GEOM AND CALC II</td>
<td>MATH 223</td>
<td>4</td>
<td>ANLYT GEOM AND CALC III</td>
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<tr>
<td>PROGRAMMING LANG</td>
<td>ITS 250</td>
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<td>INTRO TO CHRISTIANITY</td>
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<td>ENGLISH LITERATURE</td>
<td>ENGL LIT</td>
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<td>SOCIAL SCIENCE ELECTIVE</td>
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<td>SOCIAL SCIENCE ELECTIVE</td>
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<tr>
<td>ART/MUSIC/THEATRE</td>
<td>131</td>
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<td>ELECTIVE</td>
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**JUNIOR YEAR**

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<th>HRS</th>
<th>SEMESTER 6</th>
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<tr>
<td>PROBABILITY AND STATS I</td>
<td>MATH 341</td>
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<td>PROBABILITY AND STATS II</td>
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<td>LINEAR ALGEBRA</td>
<td>MATH 333</td>
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<td>PE ACTIVITY</td>
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<td>RELIGION ELECTIVE</td>
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<td>MATH ELECTIVE</td>
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<tr>
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**SENIOR YEAR**

<table>
<thead>
<tr>
<th>SEMESTER 7</th>
<th>HRS</th>
<th>SEMESTER 8</th>
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<tr>
<td>INTRO TO MODERN ABSRCT ALG</td>
<td>MATH 441</td>
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<tr>
<td>ELECTIVE</td>
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</tbody>
</table>

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.