

Mathematical, Natural and Health Sciences

Chairperson: Pamela Case

Departments

Biology
Chemistry
Mathematical Sciences
Psychology

Majors

Biology (B.S. and B.A.)
• Specialized Program of Study in Equine Science (B.S. and B.A.)
Chemistry (B.S. and B.A.)
• Specialized Program of Study in Biochemistry (B.S.)
Forensic Science (B.A.)*
Mathematics (B.S. and B.A.)
Mathematics with Concentration in Computer Science (B.S.)
3-2 Engineering Program (B.S.)
3-2 Computer Science Program (B.S.)
Psychology (B.A.)

** Please refer to the Interdisciplinary Majors for a complete description*

Minors

Biology
Chemistry
Computer Science
Mathematics
Psychology

Collateral Majors Offered by Other Divisions/Departments

Students interested in Sports Studies or Therapeutic Horsemanship should consult the Social and Behavioral Sciences Division section for descriptions.

Medical School and Health Careers Advising

The MNHS Division provides pre-professional advising to students desiring to enter professional schools in various health fields while benefiting from a small college, values-oriented, liberal arts and sciences education. These advising services are available to students who wish to prepare for admission to professional schools in the areas of medicine, dentistry, veterinary medicine, or one of the allied health professions (hospital administration, medical technology, cytotechnology, optometry, occupational therapy, physical therapy, respiratory therapy, pharmacy, or physicians' assistant programs). Students interested in these professions may obtain guidance regarding admissions requirements, preparation for admissions tests (MCAT, DAT, VCAT, OAT, PCAT, etc.) and applications for admission to appropriate professional schools. Students will also be assisted in the planning and completion of a clinical internship in the chosen area. These internships offer the students an opportunity to examine the profession, testing their personal skills and values against the daily demands of the profession.

The advising services are available to all St. Andrews students regardless of academic major. Generally there are no required majors for admission to professional schools in

the health sciences. While the student must complete the specific courses required for admission to a particular school, an academic major is a matter of personal choice and should reflect academic interests and alternate career goals. Premedical, pre-dental and pre-veterinary are career goals, not majors; therefore, students in these areas should expect to choose a major from one of the College's disciplinary offerings. Students interested in Allied Health professions should consider majoring in one of the scientific disciplines. (B.A. or B.S.).

Graduate School Advising

The departments of the MNHS Division provide advising for those students wishing to prepare for Master's or Doctoral level programs in the respective disciplines. The departmental faculties will provide guidance regarding admissions requirements, GRE preparation, and assistance with application to appropriate graduate schools. Students interested in pursuing graduate education are strongly encouraged to engage in undergraduate research either through Guided Independent Studies, Research Practicum, Summer Research, or Honors Research.

3-2 Engineering Program

Students who follow the 3-2 Engineering Program under the Mathematics major can complete all requirements for a Bachelor's degree from St. Andrews and a Bachelor's degree in a field of engineering from N.C. State University at the end of approximately five years, the first three of which are spent at St. Andrews. Since the sequence of courses to be taken during those three years follows a relatively tight schedule, entering students interested in this program should consult with the program's director before registering. Transfer students interested in the program should also contact the director as soon as possible. Students who successfully complete both phases of the program receive a B.S. degree in Mathematics from St. Andrews and a B.S. degree in a field of engineering from N.C. State University. Please refer to the Department of Mathematical Sciences section and the Professional Programs section of this Catalog for more specific details on the 3-2 Engineering Program.

3-2 Computer Science Program

Students who follow the 3-2 Computer Science Program under the Mathematics major can complete all requirements for a Bachelor's degree from St. Andrews and a Bachelor's degree in computer science from N.C. State University at the end of approximately five years, the first three of which are spent at St. Andrews. Since the sequence of courses to be taken during those three years follows a relatively tight schedule, entering students interested in this program should consult with the program's director before registering. Transfer students interested in the program should also contact the director as soon as possible. Students who successfully complete both phases of the program receive a B.S. degree in Mathematics from St. Andrews and a B.S. degree in computer science from N.C. State University. Please refer to the Department of Mathematical Sciences section and the Professional Programs section of the Catalog for more specific details on the 3-2 Computer Science Program.

Other Courses

Introductory level courses in physics for science majors and pre-professional students are taught. Physics courses offered are described under the Department of Mathematical Sciences. In addition the Division offers special studies courses (X90 series) in natural science that are interdisciplinary in content.