

# Bachelor of Science and the Professional Degree Majors

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The Bachelor of Science and the professional degree programs require and permit greater specialization. Each of these programs has more extensive major and major-related requirements than do comparable majors in the Bachelor of Arts degree program. Unlike the Bachelor of Arts degree, each of these degree programs does not limit the number of electives which may be taken in the major beyond the minimal requirements.

## Natural Sciences and Mathematics

The Bachelor of Science curricula are offered for those who seek an education founded upon the sciences but including instruction in the humanities and social sciences. These curricula, based on the requisites of scientific knowledge, provide a thorough preparation in the field of the student's major interest without neglecting complementary study in other areas. After completing one of these curricula, the student is qualified to pursue graduate or professional studies, or to enter research positions in industry. Bachelor of Science students generally enter Bucknell having already selected a major.

The College of Arts and Sciences offers Bachelor of Science majors in animal behavior, applied mathematical sciences, biology, cell biology/biochemistry, chemistry, computer science, environmental geology, geology, interdisciplinary studies in economics and mathematics, mathematics, neuroscience, and physics.

## Professional Degree Programs

The Bachelor of Science in Business Administration (B.S. B.A.), Bachelor of Science in Education (B.S. Ed.), and Bachelor of Music (B. Mus.) programs provide professional development that is strongly grounded in the larger context of a liberal education. Students in these programs, like those in other Bachelor of Science programs described above, devote a larger proportion of their studies to the major than candidates for the Bachelor of Arts degree.

Students pursuing the B.S. B.A. degree may major in Accounting and Financial Management, Global Management, Managing for Sustainability, or Markets, Innovation and Design. The B.S. Ed. degree leads to certification in Early Childhood Education (Pre-K-4). The B. Mus. program offers majors in vocal performance or music education.

## Pre-Health Professions Preparation

The coursework for admission into the various graduate programs in the health sciences may be completed through work toward either a Bachelor of Arts or a Bachelor of Science degree with a major in practically any department. Most graduate programs require a minimum of undergraduate work equivalent to one year each in biology, inorganic chemistry, organic chemistry, physics, and mathematics; however, requirements vary both by discipline and by program within a discipline. Students planning for such careers should consult the catalogs of the schools of their choice for specific requirements and suggested courses and register with the Pre-Health Professions Adviser as soon as possible after enrollment in Bucknell.

## Integrated B.S./M.S. Degrees

Undergraduate students who have completed three years at Bucknell with a cumulative grade point average of at least 2.80, and who show aptitude for graduate study, may apply for admission to the integrated Bachelor of Science/Master of Science degree program available in the departments of chemistry or mathematics. This program permits selected students to complete all requirements for both degrees in five years.

## Writing Competency

To satisfy the University writing requirement, a student must successfully complete three writing courses: one course designated W1 (which must be taken during the first year and which must be taken before the W2 courses) and two W2 courses (usually taken after the first year, but, in any case, at least one of which must be taken after the first year). Lists of W1 and W2 courses are available from the Registrar's office web page ([www.bucknell.edu/registrar](http://www.bucknell.edu/registrar)) under Course Information.

Writing courses are designed to enhance the student's understanding of the writing process and to emphasize that writing is a way of learning as well as a communication skill. They may be taken in any department, including the student's major.