Pre-Professional Programs

UNCG’s eight Pre-Professional Programs offer all courses required for admission to medical or dental schools, to pharmacy, veterinary, occupational or physical therapy schools, or as needed, for entrance into law school. A two-year pre-engineering curriculum prepares students to transfer to schools with engineering programs.

The Pre-Professional Programs are not majors in which degrees can be earned, but programs of study chosen as second majors at UNCG. Students following one of these programs must select another academic area of study as their first major. Students interested in pursuing one of the Pre-Professional curricula are urged to seek advising early in their academic careers. Pre-Dentistry (PRED), Pre-Medicine (PREM), and Pre-Veterinary Medicine (PVET)

Students should declare the appropriate Pre-Professional second major, upon which they will be assigned to a member of the Pre-Professional Committee for assistance in planning their program of study as their secondary advisor. They will also be automatically enrolled in the Pre-Professional Programs group in Canvas, which will provide resources and communication about upcoming events, opportunities, and deadlines.

The admission requirements vary slightly among the various schools and programs. For specific information, students should review the Web sites of the medical, dental, and veterinary medical schools that they are interested in applying to. Other sources of information are current volumes of Medical School Admission Requirements and Admission Requirements of American Dental Schools.

The Pre-Professional Programs constitute a core of courses that must be completed before admission to the professional schools. They can be successfully incorporated into almost any major. It has been shown in the case of medical schools that the choice of major does not significantly affect the student’s probability of admission. Students should consider any major that they find interesting and in which they feel they can do well. Nearly all students accepted to medical, dental, and veterinary schools have completed a bachelor’s degree.

The achievement of outstanding academic credentials should not be accomplished at the cost of totally sacrificing extracurricular activities. Most professional programs prefer students who have participated in nonacademic activities and actively pursued a range of interests.

In addition to the core of preparatory courses, virtually all professional schools require some form of standardized test prior to consideration of a student’s admission application. These tests are usually taken in the spring before application is made. Medical schools require the Medical College Admission Test (MCAT), dental schools the Dental Admission Test (DAT), and veterinary schools the Graduate Record Examination (GRE) Aptitude Test.
Applications to professional schools are made a year before expected matriculation, usually between June 15 and November 15. This means that the course work included on the standardized entrance test must be completed by the end of the junior year of college in order to move straight from college to professional schools without a “gap” year. Early application is strongly recommended, as interviews and acceptances go first to the earliest applicants.

The American Medical College Application Service (AMCAS) is the agent for most medical schools, and the American Association of Dental Schools Application Service (AADSAS) is the agent for many dental schools. The Veterinary Medical College Application Service (VMCAS) is the agent for most veterinary medical schools. Application information is available from the committee. Veterinary, medical, and dental schools not subscribing to one of the application services must be contacted individually.

Students interested in other post college health careers such as Physician Assistant, Optometry, Podiatric Medicine, Chiropractic Medicine, Genetic Counseling, etc. should declare a Pre-Professional second major, to be assigned a member of the Health Careers Advisory Committee for assistance in planning their programs of study.

Pre-Medicine Requirements
Allopathic and osteopathic medical schools generally require the categories below.

General Biology with Laboratory
BIO 111 Principles of Biology I
BIO 112 Principles of Biology II
General Chemistry with Laboratory
CHE 111 General Chemistry I
CHE 112 General Chemistry I Laboratory
CHE 114 General Chemistry II
CHE 115 General Chemistry II Laboratory
Organic Chemistry with Laboratory
CHE 351 Organic Chemistry I
CHE 352 Organic Chemistry II
CHE 354 Organic Chemistry Laboratory

Biochemistry
One of the options listed below.
Option A
CHE 420 Chemical Principles of Biochemistry
Option B
CHE 556 Biochemistry I CHE 557 Biochemistry II

Physics with Laboratory
One of the options listed below.
Option A
PHY 211 General Physics I PHY 212 General Physics II
Option B
PHY 291 General Physics I with Calculus PHY 292 General Physics II with Calculus

Mathematics
A few schools require mathematics through calculus, while standardized tests often require statistics.
MAT 191 Calculus I
STA 108 Elementary Introduction to Probability and Statistics
or
STA 271 Fundamental Concepts of Statistics

College Writing
ENG 101 College Writing I ENG 102 College Writing II

Behavioral Sciences
PSY 121 General Psychology
SOC 101 Introduction to Sociology

Other courses that are often recommended include those detailed below.
Human Physiology with Laboratory BIO 277 Human Physiology
Cell Biology and Genetics BIO 355 Cell Biology
BIO 392 Genetics
Functional Microscopic Anatomy with Laboratory BIO 472 Histology

Pre-Dentistry Requirements
Dental school preparatory course requirements are usually much like those for medical school; however, they may also require anatomy in addition to the classes listed above.
Anatomy with Laboratory BIO 271 Human Anatomy

Pre-Veterinary Medicine Requirements
Veterinary school course requirements are considerably more extensive than those for medical or dental schools. In addition to specifying all the above courses in mathematics, chemistry, and biology, these programs typically require, or recommend, more courses in animal science, general microbiology, animal nutrition, and possibly some business courses. Several hundred hours of work experience with animals or in a veterinarian’s practice is required. Students interested in veterinary school should make contact with the school and with the advisory committee at an early stage of their undergraduate careers.