

PRE-PROFESSIONAL PROGRAMS

The University offers extended opportunities for students to prepare for professions requiring the added specialized preparation of the professional school. Admission to the professional school for some fields requires or gives preference to applicants who already have earned the bachelor's degree; for other fields the University can provide from one to three years of the preparation required for admission or transfer to the professional school. In select programs, students may earn the bachelor's degree from this University on three years' preprofessional work and satisfactory completion of the first year of professional school. Students should recognize that admission to professional schools is based on qualitative standards as well as curricular requirements and remains the prerogative of the particular school.

Students interested in preprofessional programs should seek detailed information, recommended courses of study, and continued program guidance from the advisory sources indicated in the following descriptions:

Agriculture and Forestry

Students interested in such fields as agricultural education, animal or poultry husbandry, dairying, farm management, horticulture, forestry, and related fields may obtain from one to two years of the basic coursework at this University before transferring to the school offering a degree program in the field. Interested students should contact the Department of Biology.

Architecture

Students interested in studying architecture may obtain up to two years of basic coursework at the University before transferring to a school offering a degree program in architecture. Architecture is a profession combining both rational and intuitive thinking skills. As such, a student should exhibit abilities to understand and appreciate technical knowledge, social insight, and the discipline of artistic creativity. Interested students should contact the Department of Art for program information.

Course	Title	Hours
Year One		
1st Term		
AR 221	Drawing I	3
AR 231	Design I	3
EN 111	First-Year Composition I	3
HI 101	Survey of World Civilization to 1500	3
Elective		3
		Hours 15
2nd Term		
AR 222	Drawing II	3
AR 232	Design II	3
EN 112	First Year Composition II	3

HI 102	Survey of World Civilization since 1500	3
MA 125	Calculus I	4
		Hours 16
Year Two		
1st Term		
AR 281	Art History Survey I	3
AR 323		3
EC 251	Principles of Macroeconomics	3
EN 231	Literature of the World I	3
PH 241	General Physics I	4
		Hours 16
2nd Term		
AR 282	Art History Survey II	3
AR 481W	Modern Architecture	3
EN 232	Literature of the World II	3
PH 242	General Physics II	4
PY 201	General Psychology	3
		Hours 16
		Total Hours 63

Engineering

Students who wish to prepare for a career in one of the many fields of engineering have two options at the University, a 3+2 dual degree program and a pre-engineering program. For advisors in specific areas, see the Department of Mathematics.

1. Dual Degree Engineering Program (DDEP). The DDEP program is a 3+2 year curriculum plan offering students the opportunity to earn two bachelor's degrees in 5 years. One undergraduate degree will be in a participating major at UNA and the other degree will be awarded in engineering from a partner institution. Degree programs participating in the DDEP at UNA are Chemistry, Computer Science, Mathematics, and Physics. The specific curriculum for each DDEP student will depend on 4 factors. Each student will select a major program at UNA, a partner engineering school, and an engineering major to determine their program of study. Additionally, DDEP students may participate in the UNA Honors Program. Each DDEP student must meet the admission requirements for transfer students at the selected engineering institution.^b
2. Pre-engineering Program (PREP). The pre-engineering program allows students to complete one to two years of the coursework common to most engineering programs. Through the program outlined below¹ and advisement from a pre-engineering advisor each term, students will prepare for transfer to an appropriate engineering school.

¹ Students not eligible for a listed course should consult their pre-engineering advisor

Course	Title	Hours
Year One		
1st Term		
MA 125	Calculus I	4
CH 111 & 111L	General Chemistry and General Chemistry Laboratory	4
CS 155	Computer Science I	3
EN 111	First-Year Composition I	3
HI 101	Survey of World Civilization to 1500	3
		Hours 17
2nd Term		
MA 126	Calculus II	4
CH 112 & 112L	General Chemistry and General Chemistry Laboratory	3
CS 255	Computer Science II	3
EN 112	First Year Composition II	3
HI 102	Survey of World Civilization since 1500	3
		Hours 16
Year Two		
1st Term		
MA 227	Calculus III	4
PH 251	Technical Physics I	4
MA 325 or CS 245	Introduction to Discrete Mathematics or Introduction to Discrete Structures	3
EN 231	Literature of the World I	3
EG 100	Introduction to Engineering	3
		Hours 17
2nd Term		
MA 238	Applied Differential Equations I	4
PH 252	Technical Physics II	4
MA 431	Advanced Linear Algebra I	3
EN 232	Literature of the World II	3

Elective ¹	Hours	3
		17
	Total Hours	67

¹ Recommended electives are Principles of Macroeconomics (EC 251), Global Environments and Societies (GE 102), United States Government and Politics (PS 241), General Psychology (PY 201), Introductory Sociology (SO 221)

Pre-Health Professions

Medicine (allopathic and osteopathic), Dentistry, Optometry, and Podiatry

Most professional schools in these fields require a bachelor's degree for admission. Although some schools permitting early admission do take highly qualified students, most give preference to applicants with four years of preparatory college work. There are common general science and mathematics requirements for admission to these health professions schools. However, there is some variability in required pre-requisites. Students may major in any discipline; some may have additional coursework for health professions school that is not part of their major. Consultation with the Pre-Health Professions Advisor will be necessary to ensure that students have the required coursework for application. Students must excel academically, volunteer extensively, have significant shadowing experience, and score high enough on the appropriate admissions test in order to be competitive for admission.

In 2015, the Medical College Admission Test (MCAT) used for admission to medical and podiatry school, will change substantially. Students who plan to take the MCAT in the 2015 year or later must consult with the Pre-Health Professions Advisor to keep abreast of changes in course requirements for medical school that are reflected in the testing areas for the MCAT.

Required Courses

- English Composition (2 semesters)
- General Chemistry (with lab; 2 semesters)
- Mathematics¹ (2 semesters)
- Organic Chemistry (with lab; 2 semesters)
- Physics (with lab; 2 semesters)
- Principles of Biology (with lab; 2 semesters)

¹ Specific majors may require specific mathematics courses; consult with the advisor in making course selections

Optometry

Since admissions criteria for optometry schools vary somewhat from school to school, it is recommended that students interested in applying to optometry school consult each school's and college's website for specific course requirements. Most schools require that you complete the requirements for a bachelor's degree at your institution. Most students major in the natural sciences in college because of the intensive science course requirements; however, students can major in any discipline as long as they complete the prerequisites for optometry school.

The majority of optometry schools require the following courses:

- Biochemistry (1 semester)
- Calculus
- English Composition (2 semesters)
- General Chemistry (with lab; 2 semesters)

- Organic Chemistry (with lab; 1 semester)
- Physics (with lab; 2 semesters)
- Principles of Biology (2 semesters)
- Psychology (2 semesters)
- Social and Behavioral Science (2 semesters)
- Statistics

Physician Assistant

Requirements for admission to a physician assistant program vary among professional schools. The majority of the programs are available at the master's level. Students interested in this field should consult the Pre-Health Professions Advisor at this University and consult the admissions requirements of the schools to which students are interested in applying. No specific major is required, although most students major in a natural science because of the pre-requisite coursework required. In addition to the required coursework, admission to a physician assistant school requires high scholastic achievement and acceptable scores on the Graduate Record Examination (GRE).

Typical required courses include:

- English Composition (2 semesters)
- General Chemistry (with lab; 2 semesters)
- Human Anatomy and Physiology (2 semesters)
- Mathematics¹
- Microbiology (1 semester)
- Organic Chemistry (with lab; 1 semester)
- Principles of Biology (2 semesters)
- Psychology (2 semesters)
- Statistics

¹ Work with the advisor in selecting the appropriate math courses. Calculus is recommended by many medical schools.

Pharmacy

Students who plan to pursue a program of study that will lead to matriculation to a pharmacy school can do so at this University. Although early admission after two to three years of pre-pharmacy coursework is possible, applicants with a bachelor's degree are more competitive. Pre-pharmacy students typically major in one of the natural sciences (i.e. biology or chemistry). In addition to the required coursework, the successful applicant possesses high academic achievement in coursework and acceptable scores on the Pharmacy College Admission Test (PCAT). Another important characteristic of successful applicants is the completion of the Pharmacy Technician class and subsequent certification. Since each pharmacy school requires different pre-pharmacy coursework, students interested in this field should consult with the Pre-Health Professions Advisor and the individual pharmacy schools' websites for further information.

Typical prerequisite coursework includes:

- Calculus I
- Ethics
- General Chemistry (with lab; 2 semesters)
- Human Anatomy and Physiology (with lab; 2 semesters)
- Microbiology (with lab, 1 semester)
- Organic Chemistry (with lab; 2 semesters)

Veterinary Medicine

Students who wish to pursue a career in veterinary medicine can do so at this University. Although early admission is possible, applicants with a bachelor's degree are given preference. There is no specific major required, although most students major in a natural science (biology, chemistry, etc.). In addition to required course-work, the successful applicant will have high scholastic achievement and acceptable scores on the Graduate Record Examination (GRE). Moreover, significant shadowing/work experience with small and large animals is also highly recommended. Students interested in this field should consult with the pre-health professions advisor and individual schools' websites for additional requirements.

Typical prerequisite coursework includes:

- Animal Nutrition (not Human Nutrition; must be taken elsewhere as an online course)
- Biochemistry
- English Composition (2 semesters)
- Humanities and Fine Arts (12 semester hours)
- History, Social and Behavioral Sciences (12 hours; 1 semester of HI, remainder can be other courses)
- Mathematics (Pre-calculus Trigonometry or higher)
- Organic Chemistry (with lab; 2 semesters)
- Principles of Biology (with lab; 2 semesters)
- Physics (with lab; 2 semesters)

Science Electives:

- Cell Biology
- Comparative Anatomy
- Genetics
- Embryology
- Mammalian or Animal Physiology
- Histology
- Immunology
- Microbiology
- Parasitology.

Physical Therapy

Requirements for admission to a graduate program leading to a doctoral degree in physical therapy (DPT) vary among professional schools. Students interested in this field should contact the Pre-Health Professions Advisor at this University and consult the catalog of the graduate school offering the physical therapy program. No specific major is required, although the most common majors nationwide are exercise science and biology. Students applying to graduate programs must have a bachelor's degree from a regionally accredited college or university. In addition to required coursework, students must also demonstrate high scholastic achievement and acceptable scores on the Graduate Record Examination (GRE). Students must also have significant shadowing/work experience with a licensed physical therapist.

The following courses are usually required before acceptance into a physical therapy doctoral degree program. These courses may be taken as part of your undergraduate degree program or in addition to it. Consult the Pre-Health Professions Advisor at this University and each school's websites for additional information.

- General Chemistry (with lab; 2 semesters)
- Human Anatomy and Physiology (with lab; 2 semesters)
- Introductory Psychology and 2 other psychology courses Physics (with lab; 2 semesters)
- Pre-calculus Trigonometry or Pre-calculus Algebra and Trigonometry
- Principles of Biology (with lab; 2 semesters)
- Statistics

Occupational Therapy

Requirements for admission to a graduate program in occupational therapy vary among professional schools. Students interested in this field should contact the Pre-health Professions Advisor at this University and consult the individual schools' websites for required coursework. No specific major is required. Students applying to graduate programs must have a bachelor's degree from a regionally accredited college or university. In addition to required coursework, students must also demonstrate high scholastic achievement and acceptable scores on the Graduate Record Examination (GRE). Students must also have significant shadowing/work experience with a licensed occupational therapist.

Typical prerequisite coursework includes:

- Human Anatomy and Physiology (with lab; 2 semesters)
- Introductory Psychology plus 2 others (Developmental Psychology, Abnormal Psychology)
- Introduction to Sociology (1 semester)
- Medical Terminology
- Physics (with lab; 1 semester) – may substitute Kinesiology
- Principles of Biology (with lab; 1 semester)
- Statistics (1 semester)

Allied Health

Students may complete the one to three years of preparatory coursework required by schools of allied health at this University. Some schools of allied health programs give preference to applicants with a bachelor's degree. In addition to required coursework, admission to allied health schools require high scholastic achievement. There may also be admission tests that are required. Students interested in a career in an allied health field should contact the Pre-health Advisor at this University and the website of those schools to which the student will transfer for required coursework and other application information.

Law

Admission to accredited schools of law requires from three to four years of college preparatory work, with preference given to applicants with a bachelor's degree even where the degree itself is not a requirement for admission. Law schools are not specific as to preparatory coursework, but applicants will be expected to present a broad preparation, a good scholastic record, and acceptable scores on the Law School Admission Test (LSAT), which should be taken nine months prior to the term for which admission is sought. For students planning to prepare for law, suggested programs include those leading to a Bachelor of Arts degree or Bachelor of Science degree with a major emphasizing fields such as history, political science, or English, or those leading to a Bachelor of Business Administration degree from the College of Business. The minor in Legal Studies allows students to focus their study toward their interest in the law while recognizing the inter-disciplinary character of the American Bar Association's statement on undergraduate education. The minor can easily be paired with just about any major at UNA. In addition to the three required courses, the students are able to select electives

within law-related fields such as business, criminal law, and civil law, among others. The minor provides a mentoring environment likely to lead to a higher rate of success on the Law School Admission Test (LSAT), better preparation for law school in terms of writing and legal reasoning, and a clearer understanding for admittance to a law school. For details on prelaw requirements and programs the student should consult the Department of Politics, Justice, and Law.

Major: No specific major required, but political science, history, English, and business are some of the more common majors.

Minor: Legal Studies

Minor in Legal Studies

Code	Title	Hours
HI/PS 367	United States Constitutional History	3
PHL 202	Logic	3
PS 344	Judicial Process and Behavior	3
Select nine hours from the following list or additional courses with approval of the Chair of the Department of Politics, Justice, and Law (including at least three hours at 300-400 level):		9
BL 240	The Legal Environment of Business	
BL 381	Business law for Entrepreneurs	
CJ 295	Criminal Law	
CJ 430	Criminal Evidence	
CJ 434	Criminal Procedure	
COM 400W	Communication Law and Ethics	
EN 300W		
ENT 470W	Entertainment Industry Law	
PS 495	Government Internship and Practicum	
SO 430	Law and Society	
Total Hours		18

Other Preprofessional Programs

The University's undergraduate courses of study and degree programs provide preparation for admission to professional or graduate schools for a number of other professional and vocational fields, including those in theology, religious education, library science, music, and others. For additional information and recommended courses of study, the student should contact the Office of the Dean of the College of Arts and Sciences.