

Pre-Professional Programs

The purpose of pre-professional programs is to provide students with the intellectual and academic backgrounds they will need before continuing their educations in degrees not offered at Minnesota State University, Mankato. Acceptance to professional educational institutions is contingent upon academic performance, so students enrolling in pre-professional programs should be highly motivated and realize they are expected to maintain standards of excellence. Advisors play an important role in guiding the students enrolled in such programs so students are urged to contact the advisor before enrolling.

PRE-AGRICULTURE

College of Science, Engineering & Technology
Advisors: Alison Mahoney, Ph.D.

Specific course requirements may vary based on the university and program area within agriculture. Students should identify their transfer institution early, and consult with advisors at that university.

Required for Program (56 credits):

| | | |
|------|-----|-------------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| BIOL | 201 | Ecology and Human Society (3) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| ENG | 101 | Composition (4) |
| ENG | 271 | Technical Communication (4) |
| ENG | 285 | Practical Grammar (2) |
| MATH | 112 | College Algebra (4) AND |
| MATH | 113 | Trigonometry (3) OR |
| MATH | 115 | Precalculus Mathematics (4) |
| PHYS | 211 | Principles of Physics I (4) |
| PSYC | 101 | Psychology (4) |
| SPEE | 102 | Public Speaking (3) |

PRE-CHIROPRACTIC

College of Science, Engineering & Technology
Advisor: Jim Rife

Required General Education (26 credits):

| | | |
|------|-----|---------------------|
| ENG | 101 | Composition (4) |
| PSYC | 101 | Psychology (4) |
| SPEE | 102 | Public Speaking (3) |

An additional 15 elective credits from Humanities or Social Sciences

Recommended General Education (3 credits):

| | | |
|------|-----|-------------------------|
| HLTH | 321 | Medical Terminology (3) |
|------|-----|-------------------------|

Recommended Support Courses (7 credits):

| | | |
|------|-----|----------------------|
| MATH | 112 | College Algebra (4)* |
| MATH | 113 | Trigonometry (3)* |

Required for Major (Core, 34 credits):

| | | |
|------|-----|------------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| CHEM | 331 | Organic Chemistry II Lab (1) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |

Required Electives (20 credits):

A minimum of 90 hours are required to complete this program. The student should consult with the pre-chiropractic advisor in selecting the remaining 20 elective credits.

*There are no requirements for mathematics in this program; however, the student needs adequate training in mathematics to take the courses in

chemistry and physics.

This program meets the requirements for admission to the Northwestern College of Chiropractic in Bloomington Minn. Other colleges may have different requirements. Students in the pre-chiropractic program should regularly consult with the pre-chiropractic advisor.

PRE-DENTAL

College of Science, Engineering & Technology

Advisory Team: M. Bentley, Ph.D., J. Thoemke, Ph.D., E. Williams, Ph.D.

Specific course requirements for admission to dental school vary somewhat among the different dental schools in the United States. To be eligible for admission at a particular dental school, the student must fulfill the requirements of that school. Students are encouraged to keep themselves apprised of requirements for specific schools by consulting appropriate Web site.

*The following list of courses is consistent with the courses required for admission to the University of Minnesota Dental School.

English: ENG 101, SPEE 100 and an additional 4 credits of writing intensive course work in English, (students are encouraged to take ENG 271 and PHIL 222 as electives)

Biology: BIOL 105, 106 (students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology: BIOL 211, 220, 230, 270, 316, 320, 435, 475)

Physics: PHYS 211 (4), 212 (4) or PHYS 221 (5), 222 (5)

Chemistry: CHEM 201 (5), 202 (5), 320 (5), 321 (2), 331 (1), CHEM 360 (3), (students are encouraged to take CHEM 305 as an elective).

Mathematics: MATH 112

Psychology: PSYC 101

Although a minimum of 87 semester credits are required for admission to the D.D.S. program at the University of Minnesota, most students enrolled have completed four or more years of college. To receive a baccalaureate degree from Minnesota State University, Mankato, the student must complete the requirements for general education, a major and possibly a minor. Dental schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in dentistry. Students should pursue majors and minors in subjects of their own choosing, as dental schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of dental school is derived primarily from the disciplines of biology, chemistry, physics, mathematics and psychology. Sciences must include both lecture and laboratory instruction. Courses in biology, chemistry, and physics may be considered outdated by dental schools if taken more than five years before the time of application. Elective courses should be selected to achieve as broad and liberal an education as possible. Students who plan to enter dental school must take the Dental Admission Test (DAT). Typically, students begin the application process to dental school during the summer following their junior year. For their application to be complete, they must report their DAT scores.

PRE-ENGINEERING

College of Science, Engineering & Technology

Advisor: Louis Schwartzkopf, Ph.D.

Choose one of the following options:

MSU OPTION

This option is open to students who will be entering the Engineering program at Minnesota State University, Mankato.

Required General Education (17 credits):

| | | |
|------|-----|-------------------------|
| MATH | 121 | Calculus I (4) |
| ENG | 101 | Composition (4) |
| PHYS | 221 | General Physics I (5) |
| CHEM | 201 | General Chemistry I (5) |

Required Support Courses (11 credits):

| | | |
|------|-----|---|
| MATH | 122 | Calculus II (4) |
| SPEE | 233 | Public Speaking for Technical Professionals (3) |

Pre-Professional Programs

| | | |
|------|-----|-------------------------------------|
| COMS | 171 | Introduction to C++ Programming (2) |
| EE | 101 | Introduction to Engineering I (1) |
| ME | 103 | Introduction to Engineering III (1) |

TRANSFER OPTION

This option is designed for students who plan to transfer from Minnesota State University, Mankato, after two years. Some engineering fields may require somewhat different courses or may not require all of these courses. Contact the pre-engineering advisor to obtain course listings for specific engineering fields at the University of Minnesota or other universities.

Required General Education (17 credits):

| | | |
|------|-----|-------------------------|
| MATH | 121 | Calculus I (4) |
| ENG | 101 | Composition (3) |
| PHYS | 221 | General Physics I (5) |
| CHEM | 201 | General Chemistry I (5) |

Required Support Courses (35 credits):

| | | |
|------|-----|---|
| MATH | 122 | Calculus II (4) |
| MATH | 223 | Calculus III (4) |
| MATH | 247 | Linear Algebra I (4) |
| MATH | 321 | Ordinary Differential Equations (4) |
| ENG | 271 | Technical Communications (4) |
| SPEE | 233 | Public Speaking for Technical Professionals (3) |
| PHYS | 222 | General Physics II (5) |
| CHEM | 202 | General Chemistry II (5) |
| COMS | 171 | Introduction to C++ Programming (2) |

Required Core (8 credits):

| | | |
|----|-----|-------------------------------------|
| EE | 101 | Introduction to Engineering I (1) |
| ME | 103 | Introduction to Engineering III (1) |
| ME | 212 | Statics (3) |
| ME | 214 | Dynamics (3) |

PRE-FORESTRY

College of Science, Engineering & Technology

Advisors: Alison Mahoney, Ph.D.

First Year

| | | |
|------|-----|--------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| ENG | 101 | Composition (4) |
| MATH | 112 | College Algebra (4) |
| MATH | 113 | Trigonometry (3) |

Second Year

| | | |
|------|-----|------------------------------|
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |
| PSYC | 101 | Psychology (4) |
| SPEE | 102 | Public Speaking (3) |

PRE-LAW

Advisor: Doran Hunter, Ph.D.

A student's grade-point average and score on the Law School Admission Test are the primary factors on which law schools base their admission decisions. Law schools generally do not require a particular major field or any particular prescribed courses as prerequisites for admission. Most law schools merely require a bachelor's degree.

Students should select a major field which interests them and which will provide them with a basis for an alternative vocational choice should their plans to finish law school not be realized. Even though no particular pre-law major is best for all students, there must be substantial academic content in the pre-law education. In addition, students should supplement their major field by taking intellectually demanding courses that will develop broad educational foundations and mental skills required of the successful law student or lawyer the ability to analyze, reason, read carefully, think abstractly, and speak and

write precisely. Elective courses might include accounting, statistics, corporate finance, constitutional law and history, jurisprudence, logic, political theory, and at least one course in English composition beyond the freshman level.

Students should contact the pre-law advisor for more detailed assistance on the manner in which their particular needs and interests may best be shaped into a suitable pre-law program.

The Pre-Law Association, a student-sponsored organization, is available for the purpose of encouraging communication and interaction among pre-law students on campus.

PRE-MEDICINE

College of Science, Engineering & Technology

Advisory Team: M. Bentley, Ph.D., J. Thoenke, Ph.D., E. Williams, Ph.D.

Specific course requirements for admission to medical school vary somewhat among the different medical schools in the United States. To be eligible for admission at a particular medical school, the student must fulfill the requirements of that school. Students are encouraged to keep themselves informed of requirements for specific schools by consulting appropriate web sites. The University of Minnesota (Twin Cities) requirements and the Minnesota State course offering are as follows:

General Biology or Zoology with laboratory

(7 credits minimum):

BIOL 105(4) and BIOL 106 (4)

Students are encouraged to take additional electives from the following list to enhance their knowledge in basic biology:

BIOL 211, 220, 230, 270, 316, 320, 435, 474

Chemistry with laboratory (general, inorganic and organic chemistry, 14 credits minimum):

General chemistry: CHEM 201 (5), CHEM 202 (5)

Organic chemistry: CHEM 320 (5), CHEM 321 (2),

CHEM 331 (1)

Biochemistry: CHEM 360 (3)

Students are encouraged to take CHEM 305 as an elective.

Physics with laboratory (8 credits minimum):

PHYS 211 (4) and PHYS 212 (4) OR

PHYS 221 (5) and PHYS 222 (5)

Mathematics (introductory course in calculus or upper level statistics):

MATH 121 (4) or MATH 354 (3), HLTH 475

English or literature (one year):

ENG 101 (4), and an additional 4 credits of writing intensive coursework in English. Students are encouraged to take ENG 271 as an elective.

Social and Behavior Sciences and Humanities

(18 credits minimum):

Students are encouraged to include PSYC 101 and PHIL 222 among these electives.

The completion of a baccalaureate degree is required for admittance to a medical school in most cases. Medical schools look most favorably upon the academically well-rounded student who has a strong scholastic record and unique life experiences that engender a commitment to a career in medicine. Students should pursue majors in subjects of their own choosing, as medical schools accept applicants from all academic majors, provided admission prerequisites are met. Majoring in one of the sciences—biology, biochemistry, chemistry, physics, etc.—has the advantage of incorporating many or all of the courses listed above. Furthermore, the technical language of medical science is derived primarily from the disciplines of biology, chemistry, physics, mathematics, and psychology. Students who plan to enter medical school must take the Medical College Admission Test (MCAT). Typically, students begin the application process to medical school during the summer following their junior year. For their application to be complete, they must report their MCAT scores. MCATs are offered during April and August. If you have questions, please contact your pre-medicine advisor.

PRE-MORTUARY SCIENCE

College of Science, Engineering & Technology

Advisor: Marie Pomije, Ph.D.

Required for Program:

| | | |
|------|-----|--|
| ACCT | 110 | Accounting for Non-Business Majors (3) |
| BIOL | 105 | General Biology I (4) |
| BIOL | 220 | Human Anatomy (4) |
| BIOL | 270 | Microbiology (4) |
| CHEM | 201 | General Chemistry I (5) |
| COMS | 100 | Introduction to Computer Science (4) |
| ECON | 202 | Principles of Microeconomics (3) |
| ENG | 101 | English Composition (4) |
| HIST | 150 | Historical Perspectives (3) |
| MATH | 112 | College Algebra (4) |
| PSYC | 101 | Psychology (4) |
| SOC | 101 | Introduction to Sociology (3) |
| SPEE | 102 | Public Speaking (3) |

Additional electives to meet the 60 credit transfer requirement.

This program has been designed to meet the transfer requirements of the University of Minnesota's Mortuary Science Program. Students should note that the University of Minnesota changed program requirements in the 2001-2002 academic year. The transfer program requires a total of 60 semester credits completed while maintaining a minimum GPA of 2.5 on a 4.0 scale. The courses listed above are specified by the University of Minnesota; additional courses should be selected with the help of an advisor.

The American Board of Funeral Service Education (ABFSE) accredits Mortuary Science Programs throughout the United States. Accredited programs are found on their Web site: www.abfse.org. Students interested in Mortuary Science are strongly encouraged to consult the Web site to locate programs in their geographic area of interest and then to consult with an advisor at that institution in their freshman year.

PRE-OCCUPATIONAL THERAPY

Advisor: Mark Schuck

This pre-professional program encompasses the prerequisite courses needed to apply to most professional occupational therapy programs. These programs may accept students after their sophomore or junior year, or after obtaining a bachelor's degree in any area as long as all the listed prerequisite courses are completed.

Recommended Courses:

| | | |
|------|-----|--|
| ENG | 101 | Composition (4) |
| SPEE | 100 | Fundamentals of Speech Communication (3) |
| BIOL | 100 | Our Natural World (4) |
| BIOL | 220 | Human Anatomy (4) |
| BIOL | 230 | Human Physiology (4) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |
| MATH | 112 | College Algebra (4) |
| STAT | 154 | Elementary Statistics (3) |
| HLTH | 101 | Health and the Environment (3) |
| HLTH | 210 | First Aid and CPR (3) |
| HLTH | 321 | Medical Terminology (3) |
| SOC | 101 | Introduction to Sociology (3) |
| TECH | 180 | Technology and You (3) |
| PSYC | 101 | Psychology (4) |
| PSYC | 433 | Child Psychology (4) or |
| PSYC | 436 | Adolescent Psychology (4) |
| PSYC | 455 | Abnormal Psychology (3) |
| ART | 230 | Fibers (3) |
| ART | 231 | Multi-Media Art Exploration (3) |
| ART | 330 | Fibers (3) |

Choose one of the following:

| | | |
|------|-----|-------------------------------|
| CHEM | 100 | Chemistry in Society (4) |
| CHEM | 105 | Introduction to Chemistry (3) |

PRE-OPTOMETRY

College of Science, Engineering & Technology

Advisor: Mike Lusch, Ph.D.

The following prerequisite courses satisfy most colleges and schools of optometry. By the end of their first year at Minnesota State University, Mankato, however, students should check the specific requirements of the college or school of optometry they plan to attend to ascertain exactly what is required for admission. A third year or a bachelor's degree may be needed to be admitted to some colleges.

First Year

| | | |
|------|-----|--------------------------|
| BIOL | 220 | Human Anatomy (4) |
| BIOL | 230 | Human Physiology (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| ENG | 101 | Composition (4) |
| MATH | 112 | College Algebra (4) |
| MATH | 113 | Trigonometry (3) |
| MATH | 121 | Calculus I (4) |

Second Year

| | | |
|------|-----|--------------------------------|
| BIOL | 270 | Microbiology (4) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 360 | Principles of Biochemistry (4) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |
| PSYC | 101 | Psychology (4) |
| STAT | 154 | Elementary Statistics (3) |
| ENG | 271 | Technical Communication (4) |

Third Year

| | | |
|------|-----|---|
| ECON | 100 | An Introduction to the U.S. Economy (3) |
| HIST | 150 | Any topic (3) |
| POL | 100 | Introduction to Politics (3) |

PRE-OSTEOPATHIC MEDICINE AND SURGERY

College of Science, Engineering & Technology

Advisor: Jim Rife

Required General Education (7 credits):

| | | |
|------|-----|---------------------|
| ENG | 101 | Composition (4) |
| SPEE | 102 | Public Speaking (3) |

Recommended Support Courses (7 credits):*

| | | |
|------|-----|---------------------|
| MATH | 112 | College Algebra (4) |
| MATH | 113 | Trigonometry (3) |

Required for Major (34 credits):

| | | |
|------|-----|------------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| CHEM | 331 | Organic Chemistry II Lab (1) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |

Required Electives (42 credits):

Electives to yield a total of 90 semester credits are required.

* There are no requirements for MATH in this program; however, the student needs adequate training in math to take courses in chemistry and physics. Colleges of osteopathic medicine and surgery require a minimum of 90 semester hours for admission. Most students admitted to a college of osteopathic medicine and surgery have completed undergraduate degrees. A few exceptional students are admitted after three years as an undergraduate. Students interested in osteopathic medicine will find that majoring in Human Biology (BS), Physiology (BS) or Biochemistry (BA) will provide them with adequate undergraduate training. The Medical College Admissions Test is required for all applicants to colleges of osteopathic medicine and surgery. Students in this program should regularly consult with the advisor.

PRE-PHARMACY

College of Science, Engineering & Technology

Advisor: Marie Pomije, Ph.D.; Terry Salerno, Ph.D.; Trent Vorlicek, Ph.D.

Pre-Professional Programs

Required for Program:

| | | |
|------|-----|----------------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 220 | Human Anatomy (4) |
| BIOL | 270 | Microbiology (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| CHEM | 331 | Organic Chemistry II Lab (1) |
| ECON | 202 | Principles of Microeconomics (3) |
| ENG | 101 | Composition (4) |
| ENG | xxx | Literature Course Elective (3) |
| HIST | xxx | History elective (3) |
| HUM | xxx | Humanities elective (3) |
| MATH | 121 | Calculus I (4) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |
| PSYC | 101 | Psychology (4) |
| SPEE | 102 | Public Speaking (3) |

Sixty to 64 credits of coursework including the above are typically required by pharmacy programs. Substitutions for both science and non-science courses should be chosen after studying the requirements of particular pharmacy schools. Please contact a pre-pharmacy advisor.

PRE-PHYSICAL THERAPY

Advisor: Mark Schuck

The pre-Physical Therapy curriculum is primarily a science-oriented curriculum which would meet the requirements for admission to most schools of physical therapy. Most physical therapy schools now require a bachelor's degree prior to application for admission, although a few still accept students following two or three years of college preparation.

Recommended Courses:

| | | |
|------|-----|--|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| BIOL | 220 | Human Anatomy (4) |
| BIOL | 230 | Human Physiology (4) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |
| MATH | 112 | College Algebra (4) |
| MATH | 113 | Trigonometry (3) |
| STAT | 154 | Elementary Statistics (3) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| SPEE | 100 | Fundamentals of Speech Communication (3) |
| HP | 265 | Orientation to Occupational and Physical Therapy (1) |
| ENG | 101 | Composition (4) |
| PSYC | 101 | Psychology (4) |
| PSYC | 433 | Child Psychology (4) OR |
| PSYC | 436 | Adolescent Psychology (4) |
| PSYC | 455 | Abnormal Psychology (3) |
| HLTH | 101 | Health and the Environment (3) |
| HLTH | 210 | First Aid and CPR (3) |
| HLTH | 321 | Medical Terminology (3) |
| COMS | 100 | Introduction to Computer Science (4) |
| MATH | 121 | Calculus I (4) |

PRE-PODIATRIC MEDICINE AND SURGERY

College of Science, Engineering & Technology

Advisor: Jim Rife

The minimum requirements for admission to a college of podiatric medicine and surgery are the same as for osteopathic medicine and surgery. A minimum of 90 semester hours are required for admission; however, most students admitted to a college of podiatric medicine and surgery have completed undergraduate degrees. Students interested in podiatric medicine will find that majoring in Human Biology (BS), Physiology (BS) or Biochemistry (BA) will provide them with adequate undergraduate training. The Medical College Admissions Test is required for all applicants to colleges of podiatric medicine and surgery. Students in this program should regularly consult with the advisor.

Required General Education (7 credits):

| | | |
|------|-----|---------------------|
| ENG | 101 | Composition (4) |
| SPEE | 102 | Public Speaking (3) |

Recommended Support Courses (7 credits):*

| | | |
|------|-----|---------------------|
| MATH | 112 | College Algebra (4) |
| MATH | 113 | Trigonometry (3) |

Required for Major (34 credits):

| | | |
|------|-----|------------------------------|
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |
| CHEM | 201 | General Chemistry I (5) |
| CHEM | 202 | General Chemistry II (5) |
| CHEM | 320 | Organic Chemistry I (5) |
| CHEM | 321 | Organic Chemistry II (2) |
| CHEM | 331 | Organic Chemistry II Lab (1) |
| PHYS | 211 | Principles of Physics I (4) |
| PHYS | 212 | Principles of Physics II (4) |

Required Electives (42 credits):

Electives to yield a total of 90 semester credits are required.

* There are no requirements for MATH in this program; however, the student needs adequate training in math to take courses in chemistry and physics.

PRE-THEOLOGY

College of Arts & Humanities

Advisor: Carrie Finn

College courses prior to theological seminary should provide the cultural and intellectual foundations essential to an effective theological education. The emphasis should be on a four-year liberal arts degree program.

The following is regarded by the American Association of Theological Schools as a minimum list of fields with which it is desirable that a student have acquaintance before beginning study in a seminary. Many of these courses will be included in the general education requirements at Minnesota State University, Mankato.

English: literature, composition, speech and related studies. At least four courses.

History: ancient, modern, European and American. At least two courses.

Philosophy: At least two courses.

Natural Science: physics, chemistry, biology. At least one course.

Social Science: psychology, sociology, economics, political science and education. At least four courses including at least one course in psychology.

Foreign Language: one or more of the following: Latin, Greek, Hebrew, German, French (cooperative programs available in Greek and Hebrew). At least two years.

Religion: At least two courses.

Of the various areas, English, philosophy and history are regarded as the most desirable as areas of concentration.

Because of the general nature of this program, students are encouraged to have close contact with a faculty advisor and the seminary that they are considering attending.

PRE-VETERINARY MEDICINE

College of Science, Engineering & Technology

Advisors: P. Knoblich D.V.M., Ph.D.

Specific course requirements for admission to veterinary schools vary somewhat. The following requirements are designed to fit an application to the University of Minnesota Veterinary School. Students should use these requirements as a general guide and look up specific requirements for other Veterinary Schools.

Required for Major (Core, 62-69 credits):

| | | |
|------|-----|------------------------|
| ENG | 101 | Composition (4) |
| BIOL | 105 | General Biology I (4) |
| BIOL | 106 | General Biology II (4) |

BIOL 211 Genetics (3)
BIOL 270 Microbiology (4)
CHEM 201 General Chemistry I (5)
CHEM 202 General Chemistry II (5)
CHEM 320 Organic Chemistry I (5)
CHEM 360 Principles of Biochemistry (4)
PHYS 211 Principles of Physics I (4)
PHYS 212 Principles of Physics II (4)

Choose one of the following options:

MATH 112 College Algebra (4) AND
MATH 113 Trigonometry (3) OR
MATH 115 Pre-calculus (4) OR
MATH 121 Calculus I (4)

Required Electives (12-16 credits):

2 History and Social Sciences (6-8 credits)

2 Arts and Humanities (6-8 credits)

Graduate Record Exam must be taken.
