

MASTER OF SCIENCE IN BIOMEDICAL SCIENCES (M.S.)

Purpose

The Master of Science in Biomedical Sciences program serves to provide advanced and rigorous training in the basic medical sciences to students who require a post-baccalaureate academic enhancement as a prelude to medical school and other professional health programs. It also helps prepare students for doctoral programs and careers in the biomedical sciences. Courses are taught from a biblical worldview.

Program Learning Outcomes

The student will be able to:

- Apply scientific knowledge to problem solving in the biomedical sciences.
- Synthesize and interpret information from the biomedical science literature.
- Defend ethical decisions in biomedicine based on biblical principles.

Program Specific Admission Procedures

In addition to the General Admission Procedures outlined in this Catalog, applicants to the Master of Science in Biomedical Sciences program must have:

1. An earned baccalaureate degree or its equivalent from an institution accredited by an agency recognized by the U.S. Department of Education (e.g., SACSCOC, TRACS, ABHE, etc.);
2. Official college transcript documenting the minimum GPA requirement and course prerequisites should be submitted. Minimum GPA for the one-year program is 2.75 and the minimum GPA for the two-year program is 2.75.

Prerequisite courses include:

- a. one year of general chemistry with lab
 - b. one year of biology with lab
 - c. one semester organic chemistry with residential lab (2 semesters recommended)
 - d. one semester physics with residential lab (2 semesters recommended)
 - e. At least four of the following courses;
 - i. One year of Anatomy/Physiology **or** one semester of Physiology **or** one semester of Anatomy
 - ii. One semester of Genetics
 - iii. One semester of Microbiology
 - iv. One semester of Cell Biology
 - v. One semester of Biochemistry
 - vi. One semester of Biostatistics is recommended but not required
 - f. Students who have not completed four of the courses in (e.) will be required to enroll in BIOM 500 Introduction to Biomedical Sciences (3 c.h.) and receive a minimum grade of B-.
3. Accept on caution (Residential)
 - a. For all new graduate applicants who apply to the 1-year Biomedical Sciences track and who do not meet the GPA, test score or prerequisite requirements, a cautionary acceptance can be considered on a case-by-case basis (by the department) for a student who has a GPA between 2.50-2.74. If accepted, these

students will be required to successfully complete BIOM 500 Introduction to Biomedical Sciences (3 c.h.) as a prerequisite for BIOM 515 Human Physiology (5 c.h.).

- b. For all new graduate applicants who apply to the 2-year Biomedical Sciences track and who do not meet the GPA, test score or prerequisite requirements, a cautionary acceptance can be considered on a case-by-case basis (by the department) for a student who has a GPA between 2.50-2.74. If accepted, these students will be required to successfully complete BIOM 500 Introduction to Biomedical Sciences (3 c.h.) as a prerequisite for BIOM 515 Human Physiology (5 c.h.).
4. Students must submit one of the following tests with a minimum score
 - a. MCAT - New scoring system (2015 and later): composite score of 490; Old scoring system (prior to 2015): score of 18 for the two-year program. MCAT - New scoring system (2015 and later): composite score of 493; Old scoring system (prior to 2015): score of 20 for the one-year program
 - b. GRE Verbal 140, Quantitative 145; or
 - c. DAT – 14.5 average
 - d. PCAT – 50th percentile or higher
5. Contact information for recommendations (Residential)
 - a. Applicants to the MS Biomedical Sciences program are required to submit contact information for three (3) recommendations - which may be academic, professional or personal.
6. TOEFL Scores for students who speak English as a second language (score of 600 paper-based test; 250 computer-based test, 80 internet-based test).

Acceptance to the one year M.S. in Biomedical Science track may be granted based on a recommendation from Liberty University's College of Osteopathic Medicine.

Note: Students intending to apply for admission to Liberty University's College of Osteopathic Medicine (LUCOM) will need to meet LUCOM's admission standards.

Transfer Credit

Students may transfer up to 18 hours of graduate course work from an accredited institution. In order to be eligible for transfer, course work must have a minimum grade of B-, and must have been completed in the past 10 years. Credits from a prior degree on the same academic level earned through Liberty University are considered transfer credits.

Program of Study Delivery Format: Residential Only

- Biomedical Sciences (M.S.)

Career Opportunities

- College Professor
- Chemical Technician
- Environmental Biologist
- Forensic Biologist
- Medical Technologist