

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

## Purpose

The Master of Science in Biomedical Sciences is a 39-hour graduate-level program that serves primarily as a post-baccalaureate academic enhancement program to improve students' academic record and increase their chances for admission to medical school and other professional programs. The program has two delivery formats: a one-year residential format and a two-year residential format. The one-year program can be completed in 2 semesters (fall, spring). Courses are taught from a biblical worldview and the program includes a required course in biomedical ethics.

## 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

2 Master of Science in Biomedical Sciences (M.S.)

- Forensic Biologist
- Medical Technologist