

**Biomedical Laboratory &
Clinical Sciences Program**
BACHELOR OF SCIENCE
(128 credits total)

DISTRIBUTION REQUIREMENTS
(48 credits)

ENGLISH: Two courses: MET EN 104 and EN 201

MATHEMATICS: MET MA 120 or GMS BT 208 Essential Math for Biotech

COMPUTER SCIENCE: GMS BT 280 or MET CS 101

NATURAL SCIENCES: MET BI 105 and MET CH 171 OR CH 101

LITERATURE: Any 100- or 200-level literature course or MET HU 221 or HU 210

PHILOSOPHY: 1 course

HISTORY: 1 course

ADDITIONAL: Three courses from distribution course offerings: One course in the humanities (H), one course in the social sciences (S), and one course in either the humanities or social sciences

SPECIALIZATION REQUIREMENTS
(22 credits)

GMS BT 104* Medical Terminology

GMS BT 110 Introduction to Biomedical Laboratory Sciences

GMS BT 342 Cell Biology

GMS BT 405 Biochemistry

GMS BT 413 Techniques in Molecular Biology

MET CH 172 or CH 102 Chem II

SPECIALIZATION ELECTIVES
(30-40 credits)

A grade of C or higher is required. Specialized course choices include, but are not limited to, the following:

GMS BT 106* Medical Terminology II

GMS BT 108 Intro. Math for the Lab

GMS BT 160* Biotechnology I

GMS BT 170* Biotechnology II

GMS BT 201 Anatomy & Physiology I

GMS BT 202 Anatomy & Physiology II

GMS BT 210 Technical Writing for Clinical Research

GMS BT 220 Principles of Instrumentation

GMS BT 240 Current Good Manufacturing Practices and Quality

Assurance

GMS BT 305 Introductory

Biochemistry

GMS BT 320 Laboratory Automation and Robotics

GMS BT 330 Medical Devices

GMS BT 336 Bioinformatics

GMS BT 360 Auditing in Clinical Research

GMS BT 404 Medical Virology

GMS BT 406 Clinical Laboratory

Genetics I: Cytogenetics

GMS BT 407 Clinical Laboratory

Genetics II: Molecular Genetics

GMS BT 408 Immunology Lecture

GMS BT 409 Immunology Laboratory

GMS BT 411 Protein Analysis Lecture

GMS BT 412 Protein Analysis Lab.

GMS BT 426 Medical Microbiology

GMS BT 436 Human Genetics

GMS BT 440† Genetics, Ethics, and the Law

GMS BT 442† Issues in Assisted Reproduction

GMS BT 443 Advanced Molecular Biology Lecture

GMS BT 450 Forensic Toxicology

GMS BT 454 Cell Culture

Techniques

GMS BT 460 Drug Discovery and Biotechnology

GMS BT 465 Cell Signaling in Health and Disease

GMS BT 470 Technologies in Clinical Research

GMS BT 484 Advanced Cell Culture Techniques

GMS BT 510 Ethico-Legal Issues in Bioscience

GMS BT 520 Biology of Cancer

GMS BT 530 Introductory

Pharmacology

GMS BT 540 Regulatory and

Compliance Issues

GMS BT 550 Clinical Data

Management

GMS BT 560 Good Clinical Practices (GCP) in Clinical Research

GMS BT 575 Design and Conduct of Clinical Trials

GMS BT 580 Legal and Ethical Issues in Clinical Research

MET MG415** Project Management

MET CJ 101** Principles of Criminal Justice

*Courses that are 2 credits; unless noted, courses are 4 credits

†Online courses

**Students may select other relevant MET courses after consulting with the program director.

FREE ELECTIVES
(8 credits)

Students may take 8 credits in courses of their choice. The total number of elective credits can be decreased by using transfer credits from another accredited institution.

Course descriptions may be found in the Metropolitan College Bulletin or online at bu.edu/met/courses. See the Metropolitan College Course Schedule or bu.edu/biotech for semesters and times offered.

EXTERNSHIP
(10-20 credits)

This external training component of the degree exposes matriculated students to new skills, whether they are learned in the laboratory, clinical, or manufacturing setting. These credits serve to augment the program's course offerings and enhance the student's resume. Biotechnology firms, clinical laboratories, and biomedical research facilities accommodate students according to mutual needs. A contract signed by the student, externship supervisor, and program director is required. Objectives must be clearly stated. Students pay regular tuition charges for externship credits. Students must register for GMS BT 591/592 Directed Study Biomedical Externship or GMS BT 594/595 Clinical Research Practicum (webreg restricted; permission required). A minimum of 10 externship credits is necessary for the degree. Consult the program director for more details at least six months before the externship is to begin.

