

University of Maryland, Baltimore County

2018-2019 Undergraduate Catalog

[ARCHIVED CATALOG]

Translational Life Science Technology, BS

The B.S. in Translational Life Science Technology combines the theory of a traditional life science degree with real-world applications used by scientists in academic and industry research. Students who complete this degree will have a comprehensive understanding of cell biology, biochemistry, lab instrumentation, statistics, epidemiology and biochemical engineering as they develop the diagnostic, therapeutic and vaccine answers to current and emerging health risks. In addition, students will master critical skills such as analytical thinking, data analysis, the ability to work in a team, and data evaluation.

Major Requirements- 49 credits

- [BTEC 300 - Biotechnology Survey: Legal, Ethical, Regulatory & Biosafety Issues](#) (3.00)
- [BTEC 303 - Applied Cell Biology](#) (4.00)
- [BTEC 310 - Instrumentation & Methods for the Biotechnology Laboratory](#) (3.00)
- [BTEC 330 - Software Applications in the Life Sciences](#) (3.00)
- [BTEC 344 - Epidemiology](#) (3.00)
- [BTEC 350 - Statistics for Translational Life Science](#) (3.00)
- [BTEC 395 - Translational Bioinformatics](#) (4.00)
- [BTEC 430 - Translational Biochemistry and Molecular Biology](#) (4.00)
- [BTEC 444 - Translational Cancer Biotechnology](#) (3.00)
- [BTEC 453 - Biochemical Engineering](#) (4.00)
- [BTEC 462 - Bioprocess Design and Control](#) (4.00)
- [BTEC 470 - Advanced Biomanufacturing](#) (4.00)
- [BTEC 495 - Professional Internship and Project-based Research Experience](#) (3.00)

Supporting Courses-37 credit

- [BIOL 141 - Foundations of Biology: Cells, Energy and Organisms](#) (4.00)
 - [BIOL 142 - Foundations of Biology: Ecology and Evolution](#) (4.00)
 - [BIOL 302 - Molecular and General Genetics](#) (4.00)
 - [BIOL 300L - Experimental Biology Laboratory](#) (2.00)
 - [CHEM 101 - Principles of Chemistry I](#) (4.00)
 - [CHEM 102 - Principles of Chemistry II](#) (4.00)
 - [CHEM 102L - Introductory Chemistry Lab I](#) (2.00)
 - [CHEM 351 - Organic Chemistry I](#) (3.00)
 - [CHEM 351L - Organic Chemistry Laboratory I](#) (2.00)
 - [MATH 155 - Applied Calculus](#) (4.00)
 - [PHYS 111 - Basic Physics I](#) (4.00)
 - OR
 - [PHYS 121 - Introductory Physics I](#) (4.00)
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