

Biotechnology/Biomanufacturing Degree (BTD)

Biotechnology uses living organisms, usually microscopic, to manufacture drugs or other chemicals for the purpose of enhancing medical care or altering a process which improves living conditions for the general population. Careers in biotechnology/biomanufacturing will continue to advance. The biotechnology/biomanufacturing curriculum will offer excellent academic and skill development for anticipated positions in the biotechnology industry. For more information, please call 978-630-9572.

Number	Suggested Course Order	Cr	Semester	Grade	Prerequisites/Notes
BIO109	Biology I	4			FYE101, MAT092, RDG098, or placement
BTC101	Introduction to Biotechnology	4			ENG098, FYE101, MAT096, RDG098, or placement
BTC102	Basic Solution and Media Preparation	3			ENG098, FYE101, MAT096, RDG098, or placement
ENG101	English Composition I	3			ENG098, FYE101, RDG098, or placement
	General Elective	3			Electives: Any course (see page 65 for exceptions)
CHE203	Introduction to Inorganic, Organic, and Biochemistry	4			ENG098, FYE101, MAT096, RDG098, or placement
BTC185	Industrial Microbiology	4			BTC101
CIS127	Computer Technologies	3			ENG098, FYE101, RDG098, or placement
ENG102	English Composition II	3			ENG101
MAT143	Statistics	3			MAT096 or placement
BTC190	Principles of Protein Purification	4			BTC101, BTC102 (or co-requisite), CHE203
BTC110	Biotechnology Experience: Concepts and Procedures	4			BTC101, BTC102, CHE203
HUM212	Medical Ethics	3			ENG101
	Health Elective	2/3			Electives: BIO101, BIO103, BIO112, BIO230, CHC101, CHC108, CHC220, EXS102, EXS201, PER126, PER127, PER130
BTC120	Biotechnology Experience: Biomanufacturing	4			BTC101, BTC102; BTC190 (co-requisite)
BTC200	Biotechnology Seminar (Capstone Course)	3			BTC101, 102, 110, 120 (or co-requisite)
	Professional Elective	3/4			Electives: BIO170, BTC180, CHE107, CHE108, ENG106, MAS208, MAT163 or higher
	Social Science Elective	3			Electives: ANT, ECO, GEO, HIS, POL, PSY, SOC, SSC
Total: 60/62 credits					

See page 82 of the college catalog for program competencies and technical standards.

Campus/format: A majority of this program can be completed during the day or evening at the Devens Campus. All biotechnology classes are offered at the Devens Campus.

Helpful hints: Biotechnology/biomanufacturing will require a substantial background and interest in science and mathematics. Potential students should recognize the need for a strong background and may be required, through testing and an interview with the admissions office, to enroll in math and science courses as prerequisites.

Special requirements: Technical standards must be met with or without accommodations. Students will need a grade of C or better in all BTC courses.

Career options: Graduates can pursue technician-level positions throughout the biomanufacturing industry.

Earning potential: \$17.17 per hour.