

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. Bristol-Myers Squibb will open a manufacturing plant in late 2009, which will employ approximately 200 individuals possessing an associate's degree in biotechnology or related science knowledge. The biotechnology/biomanufacturing curriculum will offer excellent academic and skill development for anticipated positions. **For more information, please call (978) 630-9433.**

Number	Suggested Course Order	Cr	Semester	Grade	Prerequisites/Notes
BIO109	General Biology	4			MAT092, RDG100 or placement
BTC101	Introduction to Biotechnology	4			ENG100, RDG100, MAT096 or placement
CIS127	Computer Technologies	3			MAT092, RDG100 or placement
CHE203	Introduction to Inorganic, Organic and Biochemistry	4			ENG100, RDG100, MAT096 or placement
ENG101	English Composition I	3			ENG100
HUM212	Medical Ethics	3			MAT092, RDG100 or placement
BIO160	Principles of Biochemistry	4			MAT096 or placement, CHE203
ENG102	English Composition II	3			ENG101
BTC102	Basic Solution & Media Preparation	3			ENG100, RDG100, MAT096 or placement
	General Elective	3			Electives: Any course (see page 64 for exceptions)
BTC110	Biotechnology Experience I: Concepts and Procedures	4			BTC101, BTC102; BIO160
	Professional Elective	3			Electives: CIS or consult advisor
MAT143	Probability and Statistics	3			MAT096
PER126/130	Health, Fitness, & Wellness Elective	2/3			Prerequisites: MAT092, RDG100, or placement Note: PER130 is recommended for transfer
	Social Science Elective	3			Electives: ANT, DSI, PSY, SOC, GEO, HIS, POL, ECO, SSC
BTC120	Biotechnology Experience: Biomanufacturing	4			BTC110
BIO170	Cell Biology	4			BIO109 or BIO205
BTC200	Biotechnology Seminar	3			Completion of all BTC (or co-enrollment) courses and/or permission of instructor
Total: 60/61 credits					

See page 75 of the college catalog for program competencies and technical standards.

Campus/format: This program can be completed during the day or evening at the Devens Campus. Most biotechnology classes are offered at the Devens Campus. Many general education classes must be completed at the Leominster or Gardner Campuses.

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. The curriculum will be offered days and evenings.

Special requirements: Technical standards must be met with or without accommodations.

Career options: Graduates can pursue technician-level positions throughout the biomanufacturing industry (*not just Bristol-Myers Squibb*).

Earning potential: 40,232 to \$53,206 per year.