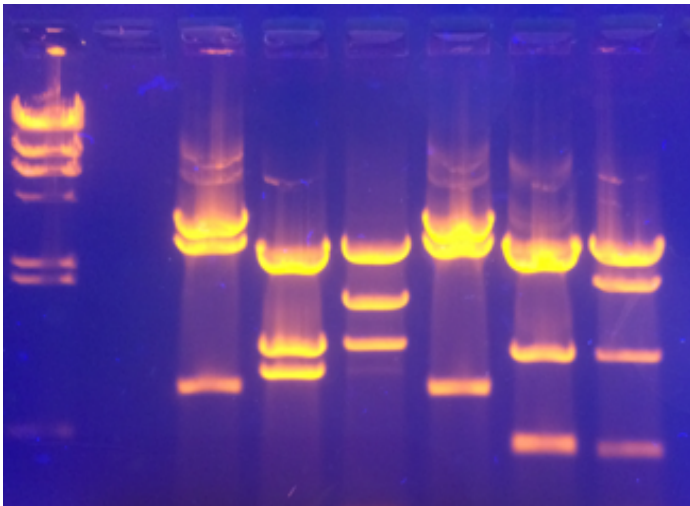




**Enjoy hands-on learning and real-world experience!**

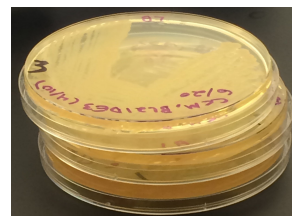
**You've seen the forensic application of Biotechnology on TV shows.**

**Learn how Biotechnology is impacting your life - in the foods that you eat, the clothes that you wear and medications that you use!**



# **Biotechnology @CAPITAL**

Students enrolled in the AS Degree in Biotechnology gain working knowledge of molecular biology, genomics and protein chemistry through cutting edge laboratory experimentation, lectures and an internship.



**Insert Photo Here**



Connecticut  
**Health & Life Sciences  
Career Initiative**

This project is funded in whole by the Connecticut Health & Life Sciences Career Initiative (HL-SCI), a Trade Adjustment Assistance Community College and Career Training grant, as implemented by the U.S. Department of Labor. HL-SCI is an equal opportunity program. Auxiliary aids and services are available upon request to individuals with disabilities.

## Associates Degree in Biotechnology

Biotechnology is the manipulation of living things to make useful products. The main focus of the A.S. degree in Biotechnology is the manipulation of DNA to generate recombinant proteins. The core biotechnology coursework is designed to provide students with hands-on experience in current techniques in biotechnology and working knowledge of standard operating procedures, precise documentation of experimental results, and data analysis. The program is designed to be completed in two years for a student that is enrolled full-time.

Successful graduates of this program will possess a combination of hands-on skills and basic science/math knowledge required for entry-level career opportunities in the biomedical sciences industry, including industrial biotechnology research and production laboratories, pharmaceutical laboratories, and academic research laboratories. The primary program objectives are achieved through lecture courses, laboratory sessions, seminars, and culminate with an internship.

### SUGGESTED COURSE SCHEDULE

#### Semester 1 — 14 CREDITS

ENG*101	Composition	3 credits
BIO*121	General Biology I	4 credits
BIO*130	Basic Techniques in Biotechnology	4 credits
MAT*137	Intermediate Algebra OR	3 credits
MAT*172	College Algebra	

#### Semester 2 — 17 CREDITS

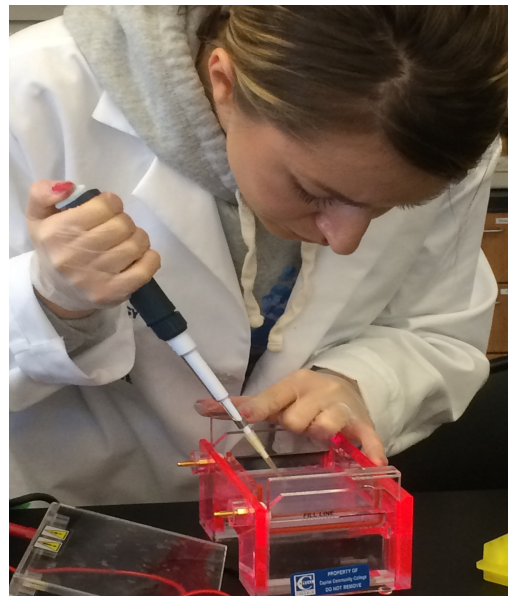
ENG*102	Literature and Composition	3 credits
BIO*230	Advanced Techniques in Biotechnology	4 credits
CHE*121	General Chemistry I	4 credits
_____	Social Sciences Elective	3 credits
_____	Humanities Elective	3 credits

#### Semester 3 — 16 CREDITS

BIO*202	Seminar in Biotechnology	2 credits
MAT*167	Principles of Statistics	3 credits
_____	Fine Arts Elective	3 credits
_____	Science Elective	4 credits
_____	Science Elective	4 credits

#### Semester 4 — 15 CREDITS

BIO*265	Synthetic Biology	4 credits
BIO*296	Biotechnology Internship	4 credits
_____	Science Elective	3 credits
_____	Social Sciences Elective	3 credits



**Science Electives:** General Biology II, Biochemistry, Microbiology, Principles of Genetics, General Chemistry II, Organic Chemistry I&II, General Physics I&II, and Biotechnology Internship II.

### Transfer Options

Students are strongly encouraged to pursue a bachelor's degree upon successful completion of the AS in Biotechnology Program. Students interested in transferring should discuss their transfer options with the Program Coordinator and/or Department Chair of Sciences & Mathematics within their first 15-30 credits.

### Employment Prospects

Biotechnology is a growing career field nationwide and locally here in Connecticut. The Department of Labor for Connecticut projects a 16.1% increase in biological technician jobs between 2010 and 2020. The AS Degree in Biotechnology prepares graduates for an entry-level position as a Laboratory Technician/Technologist or a Biological Technologist/Technician. For detailed salary information, job availability and projected growth analysis please visit the US Department of Labor, Bureau of Statistics at [www.BLS.gov](http://www.BLS.gov).



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