# **Graduate Certificate: Biotechnology**

## COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the graduate certificate in Biotechnology.

# **About the Certificate**

Biotechnology is, at its simplest, technology based on biology. It harnesses cellular and biomolecular processes to develop technologies and products that help improve our lives and the health of our planet. Modern biotechnology provides breakthrough products and technologies to combat debilitating and rare diseases; reduce our environmental footprint; feed the hungry; use less and cleaner energy; and have safer, cleaner and more efficient industrial manufacturing processes. Recent advances in biotechnology are helping us prepare for and meet society's most pressing challenges.

With only 12 credits of core coursework required, the Biotechnology graduate certificate program provides a mechanism to obtain a certificate in the field in one or two academic terms. The classes are taught by the same faculty as those for the Biotechnology PSM program. Certificate students take the same core courses as PSM students but without committing to a capstone project or the full 30 credits needed to earn a graduate degree. The Biotechnology graduate certificate program credentials future leaders in the field through a curriculum chosen according to the student's interest.

Time Limit for Certificate Completion: 2 years

#### Campus Location: Main

**Full-Time/Part-Time Status:** The certificate program can be completed on a full- or part-time basis. NOTE: International students may not be eligible to apply for a student visa based on admission to the certificate program. Please contact the assistant program director for more information.

Non-Matriculated Student Policy: Non-matriculated students may take up to 9 credits of coursework before applying to the graduate certificate program.

# **Admission Requirements and Deadlines**

#### **Application Deadline:**

#### Fall: March 1

Applications are processed on a continual basis. Ordinarily, the applicant is informed of an admissions decision within four to six weeks of receipt of all supporting application documents. Late applications may be considered for admission.

International students should note that the certificate may not fulfill the F-1 visa requirement for full-time coursework.

#### APPLY ONLINE to this graduate program.

**Coursework Required for Admission Consideration:** Applicants should have a strong background in Biology, Chemistry, Engineering or Physics. Upon review, the Biology Department's Graduate Committee may allow departures from course requirements.

Bachelor's Degree in Discipline/Related Discipline: A baccalaureate degree in a science or engineering field is required.

Statement of Goals: In approximately 500 to 1,000 words, describe your interest in the Biotechnology certificate, research goals, and academic and professional achievements.

Interview: May be required on a case-by-case basis.

# **Certificate Requirements**

Number of Credits Required to Complete the Certificate: 12

Required Courses:

Code	Title	Credit Hours
Select four or five courses, as appropriate, from the following: <sup>1</sup>		12
BIOL 5479	Biotechnology	
BIOL 5501	Analytical Biotechnology	
BIOL 5502	Microbial Biotechnology	
BIOL 5503	Biotechnology Laboratory I	
BIOL 5504	Biotechnology Laboratory II <sup>2</sup>	

BIOL 5505	Ethics Regulation and Policy in Biotechnology
BIOL 5521	Nucleic Acid Technologies

12

### **Total Credit Hours**

- <sup>1</sup> Four courses are required if all courses are taken for 3 credits. These include BIOL 5479, BIOL 5502, BIOL 5503, BIOL 5504, and BIOL 5505. Five courses are taken if BIOL 5501 Analytical Biotechnology (1.5 s.h.) and BIOL 5521 Nucleic Acid Technologies (1.5 s.h.) are selected.
- <sup>2</sup> With approval from the program director, students may request to waive this course and replace it with an alternate course that aligns with the goals of the degree program.

GPA Required to be Awarded the Certificate: 3.0 minimum

# Contacts

## **Certificate Program Web Address:**

https://www.temple.edu/academics/degree-programs/biotechnology-certificate-graduate-st-biot-grad

## **Department Information:**

Dept. of Biology 255 Biology-Life Sciences Building 1900 N. 12th Street Philadelphia, PA 19122-6078 cst.psm@temple.edu 215-204-8842

## Submission Address for Application Materials:

https://cst.temple.edu/academics/graduate-programs/apply-now

## **Department Contacts:**

Program Director: Darius Balciunas, PhD darius@temple.edu