

Graduate Certificate: Bioinformatics

COLLEGE OF SCIENCE AND TECHNOLOGY

Learn more about the graduate certificate in Bioinformatics.

About the Certificate

Bioinformatics is the science that happens when computers are joined with the latest discoveries in biochemistry, biophysics and genomics. It is a rapidly growing field that brings together elements of biology, chemistry, computer science, physics and statistics. Bioinformatics is an area of rapid job growth and has become an essential part of healthcare research and the biotechnology and pharmaceutical industries. Bioinformatics specialists are employed to process and analyze the high volume of genomic and proteomic data generated from large-scale sequencing and related efforts that form the foundation of personalized medicine.

With only 12 credits of core coursework required, the Bioinformatics 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 Bioinformatics and Biological Data Science 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 Bioinformatics graduate certificate program credentials students in the field through a curriculum chosen according to the student's interest or gap in knowledge.

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 PSM program coordinator 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 certificate program.

Coursework Required for Admission Consideration: Applicants should have a strong background in one or more science, technology, engineering or mathematics (STEM) fields.

Bachelor's Degree in Discipline/Related Discipline: The Bioinformatics graduate certificate has been designed for recent graduates and professionals who have a bachelor's degree or equivalent in a STEM field.

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

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

Transfer Credit: Graduate credits from an accredited institution may be transferred into the Bioinformatics graduate certificate program. The credits must be equivalent to coursework offered by the Biology Department at Temple University. A grade of "B" or better must have been earned for the credits to transfer. The PSM in Bioinformatics Steering Committee makes recommendations to the Department Chair for transferring credit on an individual basis. The maximum number of credits a student may transfer is 6.

Certificate Requirements

Number of Credits Required to Complete the Certificate: 12

Required Courses:

Code	Title	Credit Hours
Select four from the following:		12
BIOL 5312 or MATH 5033	Biostatistics Introduction to Stochastic Processes	
BIOL 5403	Genomics	
BIOL 5411	Structural Bioinformatics I	
BIOL 5509	Computational Genomics	
BIOL 5514	Biological Models in Python	
CHEM 5412	Structural Bioinformatics II ¹	
BIOL 5323	Global Change Science: Analytics with R	
CIS 5528	Predictive Modeling in Biomedicine	
Total Credit Hours		12

¹ 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/bioinformatics-certificate-graduate-st-binf-grad>

Department Information:

Dept. of Biology
255 Biology-Life Sciences Building
1900 N. 12th Street
Philadelphia, PA 19122-6078
cst.psm@temple.edu
215-204-8854

Submission Address for Application Materials:

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

Department Contacts:

Program Director:
Vincenzo Carnevale, PhD
vincenzo.carnevale@temple.edu