

APPLIED BIOINFORMATICS GRADUATE CREDIT CERTIFICATE PROGRAM

Person-in-Charge	Scott Selleck
Program Code	BIOINC
Campus(es)	World Campus

Students will gain an understanding of genomic sequencing and learn how to analyze and interpret genomic data in the context of cellular behavior and activity. Genomic sequencing has an impact on all of the sciences, and access to this new type of information has fundamentally altered biology and it now demands that life scientists become familiar with computational and statistical concepts.

Effective Semester: Spring 2015

Expiration Semester: Fall 2019

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (<http://gradschool.psu.edu/prospective-students/how-to-apply>). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions (<http://gradschool.psu.edu/graduate-education-policies>). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students>) for more information.

Applied Bioinformatics is a computationally heavy science that requires both computer and internet access to understand and practice the concepts presented in the coursework. Applicants must have a bachelor's degree and an eagerness to learn about the latest scientific developments of the genomic era.

Certificate Requirements

Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs>).

The 11-credit curriculum includes 9 credits of core BMMB courses plus 3 credits of STAT. To earn the certificate, students must have achieved a B (3.0) average in all courses, receiving no grade lower than a C in any course.

Code	Title	Credits
Required Courses		
BMMB/IBIOS 551	Genomics	3
BMMB/IBIOS 554	Foundations in Data Driven Life Sciences	3
BMMB 852	Applied Bioinformatics	2
STAT/BIOL/ MCIBS 555	Statistical Analysis of Genomics Data	3
Total Credits		11

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Contact

Campus	World Campus
Graduate Program Head	Scott Brian Selleck
Program Contact	Istvan Albert 314 Keller Building University Park PA 16802 iua1@psu.edu (814) 865-2281
Program Website	View (http://www.worldcampus.psu.edu/degrees-and-certificates/applied-bioinformatics-certificate/overview)