Bioinformatics combines advanced programming skills with genomics, structural biology, and cutting edge computational methods.
BIOINFORMATICS
Doctor of Philosophy

Recent unprecedented growth in data from the life and health sciences combined with rapid advances in computational technologies enable the dynamic field of Bioinformatics to address challenges that lie at the intersection of biology, chemistry, mathematics, statistics, and the computer sciences.

Program Requirements

Our Doctoral program in Bioinformatics provides a unique experience for biologically-minded students interested in computational approaches. With several foci in computational genomics, computational chemistry, and the data sciences, this interdisciplinary program offers students unique opportunities to perform basic and translational research with renowned faculty from Temple University’s College of Science & Technology and researchers from our Medical School and Fox Chase Cancer Center. There are many opportunities at Temple University and the biotechnology-rich Philadelphia region, so consider applying to our new Bioinformatics PhD program!

Curriculum Overview

The PhD in Bioinformatics program at Temple offers a flexible curriculum to accommodate diverse research backgrounds and interests. We offer a common set of core courses, primarily taken during the first two years. By focusing on coursework early on, students will be able to concentrate on an intensive research experience during their remaining 2-3 years.

Four bioinformatics tracks have been developed, reflecting the strengths of the Bioinformatics faculty and the breadth of the field of bioinformatics. Students will complete four “common core” courses, two “specialized” courses in their chosen track, and at least two elective courses. Depending on an individual’s background, a student may be exempted from certain core courses, with the remaining credits to be chosen from a large pool of electives offered at our University.

Sample Courses

BIOL 8250: Topics in Bioinformatics (taught by 6-8 CST faculty)
CIS 5015: Scripting for Science and Business
BIOL 5403: Genomics
BIOL 5312: Biostatistics
Plus, specialized courses in evolutionary genomics, genome medicine, structural bioinformatics, and biological data analysis.

For more information about this program, please visit our website at http://phdbioinform.cst.temple.edu

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