BIOINFORMATICS AND GENOMICS (BGEN)

BGEN 541: Critical Analysis of Bioinformatics and Genomics Research Topics
1 Credits/Maximum of 2

Critical Analysis of Bioinformatics and Genomics Research Topics reviews the recent developments made in the understanding of basic genomics and bioinformatics research. This approach provides an insight into the topics that are shaping the current and future directions in a field that is rapidly evolving and literally transforming lives. Tutorials provide a comprehensive overview of the new and fundamental developments in genomics research and highlight the way in which genomic concepts are applied to basic biological processes. This course will provide insights into computational, evolutionary, and functional aspects of genomic sciences. Basic concepts that describe how life was organized and evolved and applications that promise huge advances in biomedical and biotechnological fields will be discussed. In addition to helping students develop critical oral and written presentation skills, this course is intended to kindle excitement about genomic research among graduate students and provide an intellectual framework for identifying potentially challenging and interesting questions that may be pursued.

BGEN 595: Internship
1-18 Credits/Maximum of 18

Supervised, research-oriented, off-campus, nongroup instruction, including field experiences, practicums, or internships. Written and oral critique of activity required.

BGEN 596: Individual Studies
1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, that are supervised on an individual basis and which fall outside the scope of formal courses.

BGEN 597: Special Topics
1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or semester.

BGEN 600: Thesis Research
1-15 Credits/Maximum of 999

Thesis Research

BGEN 601: Thesis Dissertation Full-Time
0 Credits/Maximum of 999

Thesis Dissertation Full-Time

BGEN 602: Supervised Experience in College Teaching
1-3 Credits/Maximum of 6

Supervised experience in teaching and orientation to other selected aspects of the profession at The Pennsylvania State University.

BGEN 611: PhD Dissertation Part-Time
0 Credits/Maximum of 999

PhD Dissertation Part-Time