WENZHOU-KEAN UNIVERSITY

College of Science, Mathematics and Technology

MINOR IN BIOINFORMATICS
(Updated November 2026)
For Advisement Only

The minor introduces students majoring in Biology, Computer Science or Information Technology to the theory, methods, applications of bioinformatics and computational biology. The topics covered provide a strong introduction to:

- Computer analysis of big data in health, genetics, ecology and evolution
- Research database management
- Computational analysis of DNA and proteins
- Computer modeling of biological molecules and processes
- Analysis of evolutionary patterns
- Application in biomedical and biotech areas, e.g.
  - Epidemiology
  - Genetic counseling
  - Gene therapy

Minor Requirements

Minimum Grade of C or higher is required for all courses.

Required GE Courses 7

Students are required to complete the following GE courses before choosing the Minor in Bioinformatics

MATH 1054	PRE-CALCULUS (Waived for WKU students)	3
BIO 1300	GENERAL BIOLOGY I: CELL BIOLOGY AND GENETICS	4

Required Core Courses 10

BIO 2910	ESSENTIALS OF BIOINFORMATICS	3
BIO 3835	BIOSTATISTICS	3
BIO 1400	GENERAL BIOLOGY II: EVOLUTION, BIODIVERSITY AND ECOLOGY	4

Additional Required Courses 6-7

ID 1400	COMPUTING IN MODERN SOCIETY	3
	OR	
CPS 1231	FUNDAMENTALS OF COMPUTER SCIENCE	4
Select one course from the following selection		
BIO 3910	PRACTICAL COMPUTING FOR LIFE SCIENCES	3
BIO 4963	INDEPENDENT RESEARCH IN BIOLOGY	3
CSP 3320	PYTHON PROGRAMMING	3
TECH 3740	IT DATABASE MANAGEMENT SYSTEMS	3
CPS 3740	DATABASE MANAGEMENT SYSTEMS	3
STME 5120	INTRODUCTION TO BIOINFORMATICS	3

Optional Courses

Theses courses do not count towards the minor, but are of interest for students minoring in Bioinformatics:

BIO 4961	INDEPENDENT RESEARCH IN BIOLOGY	1
BIO 4962	INDEPENDENT RESEARCH IN BIOLOGY	2
BIO 4911	SPECIAL TOPICS IN BIOLOGY	1
BIO 4912	SPECIAL TOPICS IN BIOLOGY	2
BIO 4913	SPECIAL TOPICS IN BIOLOGY	3
CPS 4881	INDEPENDENT STUDY	3
CPS 4882	INDEPENDENT STUDY	3
CPS 4883	INDEPENDENT STUDY	3
BIO 3709	GENETICS	4

TOTAL CREDIT HOURS: 16-17