

Certificate

## Bioinformatics

This program develops your skills to master bioinformatics by analyzing biological data, utilizing computational tools, and applying molecular biology techniques, preparing you for success in the expanding biotech and pharmaceutical industries. The Bioinformatics program consists of four required courses and two to three elective courses.

**Total Units:** 18

**Completion Time:** 12 months (full-time)

**Modality:** Online with live-online and self-paced formats.

**Special Programs:** Not currently approved for F-1 Compliance or WIOA/TAA Funding.



*Courses may have prerequisites; review the course page before enrolling. A checkmark indicates the course is typically offered during that term.\**

### Required Courses

12 Units | 4 Courses

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
Next-Gen Sequence Analysis Tools –a Hands-On Approach BINF.X405	3.0		✓		✓
Experimental Methods in Molecular Biology BINF.X401	3.0		✓		✓
Bioinformatics Tools, Databases and Methods BINF.X400	3.0	✓		✓	
Python for Data Analysis DBDA.X420	3.0	✓	✓	✓	✓

### Elective Courses

6 Units | Choose 2 to 3 Courses

COURSE NAME & NUMBER	UNITS	FALL	WINTER	SPRING	SUMMER
Gene Therapy: Hacking the Genome BINF.X409	1.5		✓		✓
Genomics and Next Generations DNA Sequencing: Methods and Applications   BINF.X408	3.0	✓	✓		
Principles of Drug Discovery and Development CTDM.X417	4.0		✓		✓
Data Analysis, Introduction DBDA.X404	3.0	✓	✓	✓	✓
Relational Database Design and SQL Programming DBDA.X415	3.0	✓	✓	✓	✓
Statistics BINF.X404	5.0	✓		✓	

### Completion Review

Once all certificate requirements have been met and your final grades are posted, please access your Student Portal to enroll in the "[Certificate Completion Fee](#)" to begin the review process. Please allow 4-6 weeks to receive your certificate.

Note: A foundational knowledge of molecular biology, statistics, programming, and basic familiarity with genomics and generation DNA sequencing is required to begin the Bioinformatics certificate.