

# Health Informatics and Bioinformatics

## Bioinformatics Concentration (Winter Start)

**2026 – 2027  
Catalog Year**
**Name:** \_\_\_\_\_

**G Number:** \_\_\_\_\_

<b>1st Year</b>			
<b>Winter</b>		<b>Fall</b>	
CIS 661: Introduction to Health and Bioinformatics	3	CIS 660: Data Engineering	3
CIS 635: Knowledge Discovery and Data Mining	3	CMB 610: Foundations of Biotechnology	3
PSM 662: Seminar in Professional Science Practice	3	<b>or</b> CMB 501: Scientific Communication	
		STA 622: Statistical Methods for Biologists	3
<b>Total</b>	<b>9</b>		<b>Total</b>
			<b>9</b>
<b>2nd Year</b>			
<b>Winter</b>		<b>Fall</b>	
CIS 671: Information Visualization	3	CIS 678: Machine Learning	3
CIS 691: Medical and Bioinformatics Capstone	3	PSM 691: Internship	3
PSM 650: Ethics & Professionalism in Applied Science	3	Bioinformatics Elective	3
<b>Total</b>	<b>9</b>		<b>Total</b>
			<b>9</b>

**List of Bioinformatics Electives:**

CIS 677: High-Performance Computing  
CMB 552: Computer Modeling and Drug Design  
CMB 560: Genomics and Molecular Diagnostics

- This is a suggested curriculum guide that might not be applicable to every student.
- Students must have 36 credits to graduate, with a minimum of 24 credits taken at GVSU.
- Students must maintain a 3.0 GPA to graduate.

**Admission Requirements**
**Grade point average of 3.0** from undergraduate work

**Resume** detailing work experiences and accomplishments

**Personal statement** of career goals and background experiences, including an explanation of how this program will help achieve educational and professional objectives.

**Recommendations:** Two professional or academic recommendations received online, addressing the candidate's potential for graduate study completion. You will provide the emails of two references in your account at [www.gvsu.edu/gradapply](http://www.gvsu.edu/gradapply), and they will be sent a link to fill out their online recommendation.

**Programming language** knowledge

**Applied statistics** knowledge

**Student Signature** \_\_\_\_\_

**Date** \_\_\_\_\_

**GPD Signature** \_\_\_\_\_

**Date** \_\_\_\_\_