

Master of Science (M.S.)  
**Health Informatics and Bioinformatics**  
**Bioinformatics Concentration (Winter Start)**

2025 – 2026  
Catalog Year

Name: \_\_\_\_\_

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

1st Year			
<b>Winter</b>		<b>Fall</b>	
CIS 661: Introduction to Health and Bioinformatics	3	CIS 635: Knowledge Discovery and Data Mining	3
CMB 610: Foundations of Biotechnology	3	CIS 660: Data Engineering	3
or CMB 501: Scientific Communication		STA 622: Statistical Methods for Biologists	3
PSM 650: Ethics & Professionalism in Applied Science	3		
<b>Total</b>	<b>9</b>	<b>Total</b>	<b>9</b>
2nd Year			
<b>Winter</b>		<b>Fall</b>	
CIS 671: Information Visualization	3	CIS 678: Machine Learning	3
CIS 691: Medical and Bioinformatics Capstone	3	PSM 662: Seminar in Professional Science Practice	2
Bioinformatics Elective	3	PSM 691: Internship	4
<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
<b>Grade point average of 3.0</b> from undergraduate work
<b>Resume</b> detailing work experiences and accomplishments
<b>Personal statement</b> of career goals and background experiences, including an explanation of how this program will help achieve educational and professional objectives.
<b>Recommendations:</b> 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 <a href="http://www.gvsu.edu/gradapply">www.gvsu.edu/gradapply</a> , and they will be sent a link to fill out their online recommendation.
<b>Programming language</b> knowledge
<b>Applied statistics</b> knowledge

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

Date \_\_\_\_\_

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

Date \_\_\_\_\_