Grand Valley State University
College of Computing

Bachelor of Science (B.S.)

Data Science & Analytics

Honors College: MTH 201 Start

2025 – 2026 Catalog Year

1st Year					
Fall		**Winter**		**Spring/Summer**	
MTH 201: Calculus 1	4	CIS 164: Computing for Data & Science 2	3		
*CIS 161: Computing for Data & Science	3	STA 215: Intro Applied Statistics	3		
HNR 151: Interdisciplinary Sequence 1	3	HNR 153: Interdisciplinary Sequence 3	3		
HNR 152: Interdisciplinary Sequence 2	3	HNR 154: Interdisciplinary Sequence 4	3		
Total	**14**	**Total**	**12**		

2nd Year					
Fall		**Winter**		**Spring/Summer**	
DSA 220: Intro to Data Science & Analytics	3	STA 311: Intro to Survey Sampling	3		
MTH 204: Linear Algebra 1	3	MTH 205: Linear Algebra 2	3		
COM 203: Argument & Analysis (SWS)	3	CIS 263: Data Structures & Algorithms	3		
STA 216: Intermediate Applied Statistics	3	HNR 201: Live Learn Lead	3		
Total	**12**	**Total**	**12**		

3rd Year					
Fall		**Winter**		**Spring/Summer**	
DSA 390: Professionalism in Data Science	3	CIS 335: Data Mining	3	DSA 490: Internship	2-5
CIS 360: Information Management	3	CIS 358: Information Assurance	3		
STA 321: Applied Regression Analysis	3	CIS 320: Information Visualization	3		
Application Domain Course	3	STA Elective	3		
HNR 350: Integrative Seminar	3	General Education	3		
Total	**15**	**Total**	**15**	**Total**	**2-5**

4th Year					
Fall		**Winter**		**Spring/Summer**	
STA 418: Computing & Graphics with R	3	DSA 495: Data Science Capstone	3		
STA 426: Multivariate Data Analysis	3	STA Elective	3		
CIS Elective	3	CIS 378: Applied Machine Learning	3		
Free Elective	3	Application Domain Course	3		
Free Elective	3	Free Elective	3		
Total	**15**	**Total**	**15**		

- This is a suggested curriculum guide that might not be applicable to every student
- This suggested course sequence is intended as a general guide and may need to be adjusted based on course availability
- Student must have a **minimum of 120 credits** to graduate, with **58 of the 120 credits** being from a senior level institution and the **final 30 of the 120 credits** completed at GVSU

College of Computing Advising Center
B-3-241 Mackinac Hall
(616)-331-2310 or online at www.gvsu.edu/computing/advising

Honors Requirements	
HNR 151	HNR 152
HNR 153	HNR 154
HNR 300	HNR 201
HNR 251 (fulfilled via CIS 331)	HNR 350
HNR 401/499 (fulfilled via CIS 495)	

Major Notes:

1.) DSA 490 can be taken as 2-5 credits. Students will work with the Computing Coordinator to determine the best amount of credits for them.
2.) It is highly encouraged for students to "double dip" their general education requirements when possible.
    a. Consider taking a course that fulfills the U.S. Diversity category and one Social and Behavioral Science course.
    b. Consider taking a course that fulfills the Global Perspectives category and one Issues course.
3.) CIS Elective Options (must choose 1): CIS 331, CIS 333, CIS 353, CIS 365, CIS 368
4.) STA Elective Options (must choose 2): STA 301, STA 310, STA 314, STA 315, STA 318, STA 421
5.) Application Domain Course Options (must choose 2): ECO 300, ECO 385, ECO 400, GPY 307, GPY 365, GPY 385, GPY 407, GPY 470, BIO 375, CMB 451, CMB 452, CMB 460, ANT 420, ANT 305, PLS 300, PLS 350
    a. ECO/GPY 385 is a course that fulfills the Application Domain course requirement as well as fulfills an Issues requirement.
6.) COM 201 fulfills one of the two Supplemental Writing Skills (SWS) requirements.
7.) CIS 358 and CIS 320 fulfill one of the two issues course requirements. The other issues course must be a non-CIS course from another discipline (such as ECO/GPY 385).
8.) Free electives refer to any courses that students choose to take in order to meet the 120 credit requirement.

Honors:

The Frederik Meijer Honors College and the College of Computing have approved the following substitutions for the honors curriculum:

1) CIS 331 fulfills the HNR 251 requirement.
2) CIS 495 fulfills the HNR 401 and HNR 499 requirements.
3) All GVSU students must earn credit for two Supplemental Writing Skills (SWS) courses. Honors students can earn credit for one SWS course by completing HNR 154 (the winter semester of a first-year sequence) with a grade of C or better. They must earn their second SWS course credit outside of the Honors requirements.