Master of Science (M.S.)

**Data Science and Analytics**

**Winter Start**

**Prereqs: Programming and Statistics**

**2024 – 2025**

**Catalog Year**

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| **1st Year** | | | | | |
| **Winter**  CIS 500: Fundamentals of Software Practice  PSM 650: Ethics & Professionalism in Applied  Science  STA 610: Intermediate Applied Statistics  (section 01 or 02)  **Total** | 3  3  3  **9** | **Spring/Summer**  Elective  **Total** | 3  **3** | **Fall**  CIS 635: Knowledge Discovery and Data  Mining  PSM 662: Seminar in Professional Science  Practice  PSM 691-10: Internship  STA 518: Statistical Computing and  Graphics with R  **Total** | 3  2  1  3  **9** |
| **2nd Year** | | | | | |
| **Winter**  CIS 660: Data Engineering  CIS 677: High-Performance Computing  **or** CIS 678: Machine Learning  STA 631: Statistical Modeling and  Regression  **Total** | 3  3  3  **9** | **Spring/Summer**  PSM 691-03: Internship  **Total** | 3  **3** | **Fall**  CIS 671: Information Visualization  STA 526: Multivariate Data Analysis  STA 632: Statistical Modeling II  **Total** | 3  3  3  **9** |

* 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.
  + Prerequisites do not count towards the 36 credits.
* Students must maintain a 3.0 GPA to graduate.
* Elective must be approved by Data Science & Analytics Program Director.
* It is recommended that PSM 662 be completed prior to taking PSM 691-03.

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| **Admission Requirements** |
| **Grade point average of 3.0** from undergraduate work **OR** satisfactory **GRE/GMAT** score |
| **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, and they will be sent a link to fill out their online recommendation. |
| **CIS 500** (or **programming** **language** knowledge, preferably Python) |
| **STA 610** (or **applied statistics** knowledge) |