Master of Science – Data Science and Analytics
2026-2027

REQUIREMENTS	PLAN OF STUDY SEQUENCES

REQUIREMENTS

Admission Requirements

Candidates must satisfy all of the following:

1. **Grade point average of 3.0** (B) from all undergraduate coursework.
2. **Resume** of work experiences and accomplishments.
3. **Personal statement** of career goals and background experiences, including an explanation of how this program will help achieve educational and professional objectives.
4. **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, and they will be sent a link to fill out their online recommendation.
5. Candidates must possess knowledge of **programming**.
6. Candidates must possess a knowledge of **applied statistics**.

Degree Requirements

The Data Science and Analytics (M.S.) program requires a minimum of 36 credits.

Computing Requirements (12 credits)
- CIS 635   Knowledge Discovery and Data Mining
- CIS 660   Data Engineering
- CIS 671   Information Visualization
- One of the following:
   ◦   CIS 677   High-Performance Computing
   ◦   CIS 678   Machine Learning

Statistics Requirements (12 credits)
- STA 518   Statistical Computing and Graphics with R
- STA 631   Statistical Modeling and Regression
- STA 632   Statistical Modeling II
- STA 526   Multivariate Data Analysis

Professional Science Requirements (9 credits)
- PSM 650   Ethics and Professionalism in Applied Science
- PSM 662   Seminar in Professional Science Practice
- PSM 691   Internship

Electives Requirements (3 credits)
- Elective must be approved by Data Science and Analytics Graduate Program Director.
   (CIS 661 is NOT allowed as an elective)

PLAN OF STUDY SEQUENCES

First Year – Fall Start

Fall
CIS 660	Data Engineering
CIS 678	Machine Learning or CIS 677
PSM 662	Seminar in Professional Science Practice

Winter
CIS 635	Knowledge Discovery and Data Mining
CIS 671	Information Visualization
STA 518	Statistical Computing and Graphics with R

Second Year

Fall
PSM 650	Ethics and Professionalism in Applied Science
STA 631	Statistical Modeling and Regression
Elective	(must be approved)

Winter
PSM 691	Internship
STA 526	Multivariate Data Analysis
STA 632	Statistical Modeling II

First Year – Winter Start

Winter
CIS 660	Data Engineering
CIS 678	Machine Learning or CIS 677
PSM 662	Seminar in Professional Science Practice

Fall
CIS 635	Knowledge Discovery and Data Mining
PSM 650	Ethics and Professionalism in Applied Science
STA 518	Statistical Computing and Graphics with R

Second Year

Winter
CIS 671	Information Visualization
STA 631	Statistical Modeling and Regression
Elective	(must be approved)

Fall
PSM 691	Internship
STA 526	Multivariate Data Analysis
STA 632	Statistical Modeling II