

DATA SCIENCE

Master of Science (MS)

Delivery Face to Face

This is a guide based on the 2025-2026 Graduate Bulletin and is subject to change. The time it takes to earn a degree will vary based on factors such as dual enrollment, remediation, and summer enrollment. Students meet with an academic advisor each semester and use Degree Works to monitor their progress.

CURRICULUM CHECKLIST

30 Hours Required

Required Courses:

- ___ CS505 Data Mining (3)
- ___ CS640 Advanced Database Systems (3)
- ___ MA530 Statistical Learning (3)
- ___ MA544 Numerical Methods (3)
- ___ MA625 Applied Regression Analysis (3)
- ___ MA675 Multivariate Methods (3)
- ___ MA610 Introduction to Data Science (3)
- ___ MA685 Projects and Practice of Data Science (3)
- ___ GR699 Master's Oral Examination (0)

Electives – 6 hours

Select one CS prefix course and one MA prefix course from the following:

- ___ CS506 Distributed Cloud Computing (3)
- ___ CS603 Introduction to Data Analytics (3)
- ___ CS631 Advance Software Engineering (3)
- ___ CS634 Machine Learning (3)
- ___ MA545 Linear Algebra and Matrices (3)
- ___ MA549 Graph Theory (3)
- ___ MA550 Differential Equations II (3)
- ___ MA575 Time Series and Forecasting (3)
- ___ MA664 Computational Cryptography (3)

Admission Requirements

In addition to the criteria established for general admission to graduate studies, applicants must have the following:

1. A bachelor's degree in mathematics, statistics, computer science, software engineering, engineering, physics, or equivalent discipline or substantial work experience in information technology or applied mathematics or statistics.
2. An undergraduate GPA of 2.75 or higher on a 4.0 scale
3. Passed at least one statistics course at the introductory level or above.

For graduate studies admissions deadlines, visit <https://semo.edu/admissions/requirements/graduate.html>.

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2025-2026 *degree map*

