



MASTER OF SCIENCE IN STATISTICS: DATA SCIENCE OPTION

The MSDS Program from UW-Madison combines a background in statistical theory, methods, and practice related to data science with communication skills to train a new generation of leaders who will use data effectively for planning and decision making.

Leveraging the power of statistical thinking will prepare you to put data into context and communicate its meaning to others. You will build analytical, reasoning, and communication skills in realistic strategic planning sessions. As a result, the MSDS will provide you with strong skills in working in teams of professionals and business leaders and in leading discussions grounded in data reasoning.

ONE YEAR OPTION

The MSDS one year option makes it possible for those who have completed a bachelor's degree at UW-Madison with a major in Statistics, Math, Computer Sciences, or some Engineering fields to complete the MSDS degree in one year. Students will graduate with a Master of Science in Statistics: Data Science degree after completing graduate coursework in a fall, spring, and summer semester. Students can transfer a maximum of 7 credits from undergrad to MSDS.

PROGRAM REQUIREMENTS

To be eligible for the one year MSDS option, students must have completed one statistics undergraduate elective course or one 500+ level course outside of statistics, such as MATH 632 at the University of Wisconsin-Madison.

Pre-requisite Courses:

- MATH 221, 222, 234
- Linear Algebra (i.e. MATH 340, 341, or 375)
- Upper-level analysis (i.e. MATH 421 or 521)

Recommended Courses:

- STAT 303, 304, and 305
- STAT 309, 311, or 431
- STAT 310

Fall Course Requirements:

- STAT 601 - Statistical Methods I (4 credits)
- STAT 605 - Data Science Computing Project (3 credits)
- STAT 610 - Introduction to Statistical Inference (4 credits)

Spring Course Requirements:

- STAT 602 - Statistical Methods II (4 credits)
- STAT 615 - Statistical Learning (3 credits)
- STAT 628 - Data Science Practicum (3 credits)
- Statistics graduate-level elective (3 credits)

Summer Course Requirements:

- Elective(s) if needed (3-6 credits)



If you are interested in learning more about the MSDS one year option, please visit our [website](#) or email the MSDS program coordinator at visp-msds@stat.wisc.edu.