MS Data Science Courses Offered in Spring 2026

Course descriptions can be found in the Graduate Guide for MS Data Science. Please note that every course students take in the MS Data Science program (excluding the final semester of enrollment) will be counted towards MS Data Science program requirements. It is not allowed to take a course and not count it towards the minimum required 30 credits; this includes auditing courses.

Please also note that MS Data Science students may not take any courses counting toward degree requirements as pass/fail. Per Graduate School policy, pass/fail courses do not meet any degree requirements.

If you wish to plan your remaining requirements & future term enrollment, you may find the MS Data Science Requirements Planning Worksheet, available on our website, to be helpful.

Statistics Core

- STAT 612 Statistical Inference for Data Science (3 cr)
    - Note: All second semester MS Data Science students **must** take STAT 612 in Spring 2026

Computer Sciences Core (Must take one course from each category to meet degree requirements)

Algorithms

- COMP SCI/E C E/ I SY E 524 Introduction to Optimization (3 cr)
- COMP SCI 577 Introduction to Algorithms (4 cr)
- COMP SCI/ I SY E/MATH/STAT 726 Nonlinear Optimization I (3 cr)

Systems

- COMP SCI 537 Introduction to Operating Systems (4 cr)
- COMP SCI 544 Introduction to Big Data Systems (3 cr)
- COMP SCI 564 Database Management Systems: Design and Implementation (4 cr)
- COMP SCI 640 Introduction to Computer Networks (3 cr)
- COMP SCI 642 Introduction to Information Security (3 cr)
- COMP SCI 739 Distributed Systems (3 cr)

Humans and Data

****Note: COMP SCI 765 and COMP SCI 770 are not offered in Spring 2026.

- COMP SCI 570 Introduction to Human-Computer Interaction (3 cr)
- COMP SCI 571 Building User Interfaces (3 cr)
    - If you plan to graduate in Spring or Summer 2026 and will complete the Humans and Data requirement with COMP SCI 571, please contact msdatascience@stat.wisc.edu with the following information to request enrollment permission:
        - Full name
        - Campus ID number
        - Wisc.edu email address
        - Desired LEC (001 or 002)

Machine Learning Core (Must take two courses to meet degree requirements)

- COMP SCI 540 Introduction to Artificial Intelligence (3 cr)
- COMP SCI/E C E 760 Machine Learning (3 cr)
- COMP SCI/E C E 761 Mathematical Foundations of Machine Learning (3 cr)
- STAT 451 Introduction to Machine Learning and Statistical Pattern Classification (3 cr)
- STAT 453 Introduction to Deep Learning and Generative Models (3 cr)
- STAT 615 Statistical Learning (3 cr)

Data Science Electives (Must take 6 credits to meet degree requirements)

- COMP SCI/E C E/ I SY E 524 Introduction to Optimization (3 cr)
- COMP SCI 537 Introduction to Operating Systems (4 cr)
- COMP SCI 541 Theory & Algorithms for Data Science (3 cr)
- COMP SCI 544 Introduction to Big Data Systems (3 cr)
- COMP SCI 564 Database Management Systems: Design and Implementation (4 cr)
- COMP SCI 577 Introduction to Algorithms (4 cr)
- COMP SCI 640 Introduction to Computer Networks (3 cr)
- COMP SCI 642 Introduction to Information Security (3 cr)
- COMP SCI 702 Graduate Cooperative Education (1-2 cr)
    - For more information about course eligibility and enrollment, visit the COMP SCI 702 for MS Data Science website
- COMP SCI/ I SY E/MATH/STAT 726 Nonlinear Optimization I (3 cr)
- COMP SCI 739 Distributed Systems (3 cr)
- COMP SCI/ E C E 763 Trustworthy Artificial Intelligence (3 cr)
- COMP SCI/E C E 766 Computer Vision (
- COMP SCI/B M I 767 Computational Methods for Medical Image Analysis (3 cr)
- COMP SCI 774 Data Exploration, Cleaning, and Integration for Data Science (3 cr)
- COMP SCI 784 Foundations of Data Management (3 cr)
- COMP SCI 799 Master's Research (1-3 cr)
    - As noted in the MS Data Science Handbook, students may count a maximum of 3 credits total of COMP SCI 799 and/or STAT 699 toward degree requirements. Recommended enrollment is no more than 2 credits per semester.
- L I S 461 LEC 003 Data and Algorithms: Ethics and Policy (3 cr)
    - If you plan to enroll in L I S 461 LEC 003, please contact msdatascience@stat.wisc.edu by December 1 with the following information to request enrollment permission:
        - Full name
        - Campus ID number
        - Wisc.edu email address
- STAT 303 LEC 002 or 004 R for Statistics I (1 cr)
- STAT 304 LEC 004 R for Statistics II (1 cr)
    - If you have previous coursework in R and would like permission to enroll in a later level, email the course syllabus to msdatascience@stat.wisc.edu
- STAT 305 LEC 004 R for Statistics III (1 cr)

    - If you have previous coursework in R and would like permission to enroll in a later level, email the course syllabus to msdatascience@stat.wisc.edu
- STAT/COMP SCI 403 Internship course in Comp Sci and Data Science (1 cr)
    - For more information about course eligibility and enrollment, visit the CS/STAT 403 website
- STAT 443 LEC 002 Classification and Regression Trees
- STAT 456 LEC 002 Applied Multivariate Analysis (3 cr)
- STAT/B M I 620 Statistics in Human Genetics (3 cr)
- STAT 699 Directed Study (1-3 cr)
    - As noted in the MS Data Science Handbook, students may count a maximum of 3 credits total of STAT 699 and/or COMP SCI 799 toward degree requirements. Recommended enrollment is no more than 2 credits per semester.
- STAT 771 Computational Statistics (3 cr)
- STAT/ECON/ GEN BUS 775 Bayesian Statistics (3 cr)
- I SY E 624 Stochastic Modeling Techniques (3 cr)
- I SY E 728 Integer Optimization (3 cr)
- MATH 616 Data-Driven Dynamical Systems, Stochastic Modeling and Prediction (3 cr)

Important Notes on Enrolling in Computer Sciences Courses

1. We encourage you to enroll AS SOON AS possible following your enrollment appointment time on November 10; Some courses DO fill quickly and will close!
2. Computer Sciences courses are in high demand. If a course is full, add yourself to the waitlist:
    1. **Waitlists do not guarantee course access – we very strongly encourage enrolling in a full schedule without the waitlisted course.**
    2. If you are granted enrollment permission for your waitlisted course, you will receive an email (to your @wisc.edu account only) saying “Enroll from the waitlist for …”. Please note: **You will have 24-48 hours to use the permission and MUST take action to enroll off of a waitlist**

Please feel free to contact the MS Data Science program coordinator if you have any questions: msdatascience@stat.wisc.edu.