DATA SCIENCE
Master of Science in Data Science

Transform your future in data science.

Offered on campus and online, the top-ranked University of Arizona Master of Science in Data Science (MSDS) prepares students for robust careers in one of the world's fastest-growing professions.

> *I chose the University of Arizona Master of Science in Data Science because of the flexibility of the curriculum.*
> **– Ankit Pal, MS in Data Science '23**

WHAT YOU'LL LEARN

- Computational thinking, including decomposition, pattern recognition, abstraction and algorithms
- Data collection, manipulation, analysis and interpretation at different scales
- Interdisciplinary teamwork
- Multimedia and other information communications
- Information and data ethics
- The value of information fields to serve diverse user groups

CAREER POSSIBILITIES

MSDS graduates are ready to excel in a wide variety of in-demand positions, including:

- Data analyst
- Data architect or engineer
- Data mining analyst
- Data modeler or visualization designer
- Data scientist
- Artificial intelligence engineer

- Big data engineer
- Business intelligence analyst
- Business intelligence developer
- Machine learning engineer
- Quality specialist
- Market research analyst
- Statistician

#9
Fortune Best Master's in Data Science Program

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WAYS TO STUDY
On Campus or Online

18
Complete your degree is as few as 18 months

$110K
average salary for data science master's graduates*

* Average salary for information science master's degree graduates according to Lightcast, November 2023.

Ready to transform your future in data science?

ischool.arizona.edu/msds

si_admissions@arizona.edu

THE UNIVERSITY OF ARIZONA
School of Information

MASTER OF SCIENCE IN DATA SCIENCE

CURRICULUM

30 units are required for graduation.

CORE COURSES	
INFO 502: Data Ethics	**3 units**
INFO 511: Foundations of Data Science	**3 units**
INFO 523: Data Mining and Recovery	**3 units**
INFO 526: Data Analysis and Visualization	**3 units**
TOTAL	**12 units**

ELECTIVE COURSES	

Students have the choice of completing the MSDS alone or using sets of courses in order to attain one or more graduate certificates at the same time, such as the iSchool's Graduate Certificate in Foundations of Data Science. Any non-core courses with the INFO prefix or out-of-department courses are also considered electives.

Choose 6 elective courses from these and other options (visit ischool.arizona.edu/msds for a more complete list of elective courses).

INFO 514: Computational Social Science	**3 units**
INFO 521: Introduction to Machine Learning	**3 units**
INFO 529: Applied Cyberinfrastructure Concepts	**3 units**
INFO 531: Data Warehousing and Analytics in the Cloud	**3 units**
INFO 536: Data Science and Public Interests	**3 units**
INFO 555: Applied Natural Language Processing	**3 units**
INFO 556: Text Retrieval and Web Search	**3 units**
INFO 557: Neural Networks	**3 units**
INFO 570: Database Development and Management	**3 units**
INFO 578: Science Information and Its Presentation	**3 units**
INFO 579: Database Design in SQL	**3 units**
INFO 580: Data Standards for the Semantic Web	**3 units**
TOTAL	**15 units**

EXPERIENTIAL COURSES	

Complete a total of 3 units of either an internship or capstone project:

INFO 693: Internship	**3 units**
INFO 698: Capstone Project	**3 units**
TOTAL	**3 units**
DEGREE TOTAL	**30 units**

The MSDS curriculum is subject to change based on catalog year, transfer work, etc. The official degree requirements may be found in the University General Catalog and all University of Arizona students should refer to the Academic Advising Report for specific graduation requirements.

In addition to linear math and computer science courses, we recommend that students applying to the MSDS have programming experience in one or more of the following computer languages and/or areas: C, C++ (Object Oriented), Java, Python, Data Structures, HTML, CSS, SQL, Web Programming, R, Julia, MATLAB, TensorFlow, JavaScript, Scala, Git/GitHub, SAS. We offer undergraduate courses that can help remediate deficiencies or you may pursue other courses from UArizona or other institutions. Undergraduate courses taken for remediation purposes may not be applied for graduate credit.