THE UNIVERSITY OF ARIZONA
College of Information Science

INFORMATION SCIENCE

MACHINE LEARNING | HUMAN-CENTERED COMPUTING

Master of Science in Information Science

18
complete your degree is as few as 18 months

2
ways to study: on campus and online

$102K
average salary for information science master's graduates*

TRANSFORM INFORMATION INTO OPPORTUNITY.

With subplans in **Machine Learning** and **Human-Centered Computing**, the University of Arizona's, STEM-designated Master of Science in Information Science (MSIS)—offered on campus and online—equips you with the versatile, cross-disciplinary skills you need to solve society's most critical information challenges.

MACHINE LEARNING

Machine learning courses focus on the interpretation and management of large amounts of data by automating the processes by which models of data are built. The subplan includes an additional core course in machine learning and a variety of focused electives.

HUMAN-CENTERED COMPUTING

Human-centered computing courses explore topics like simulations, virtual reality, human-computer interaction, user experience and personal data collection. The subplan includes an additional core course in human-centered computing and a variety of focused electives.

CAREER POSSIBILITIES

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

- Application or systems analyst
- Database administrator
- Data scientist or engineer
- Digital repository specialist
- Information architect
- Information security manager
- Information technology manager
- Software developer or engineer
- Web programmer or producer

Ready to transform information into opportunity?

infosci.arizona.edu/msis

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Revised 7/16/26

* Average salary for information science master's degree graduates according to Payscale, December 2025.

MASTER OF SCIENCE IN INFORMATION SCIENCE

SUBPLANS AND CURRICULUM

30 units are required for graduation. Students select one of two subplans:

MACHINE LEARNING SUBPLAN

CORE COURSES	
INFO 505: Foundations of Information	**3 units**
INFO 521: Introduction to Machine Learning	**3 units**
INFO 526: Data Analysis and Visualization	**3 units**
TOTAL	**9 units**

ELECTIVE COURSES	
Choose 3 courses from the following:*	
INFO 510: Bayesian Modeling and Inference	**3 units**
INFO 523: Data Mining and Discovery	**3 units**
INFO 539: Statistical Natural Language Processing	**3 units**
INFO 550: Artificial Intelligence	**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**
TOTAL	**9 units**

GENERAL ELECTIVE COURSES	
Choose 3 elective courses with the INFO prefix. *Up to 2 elective courses may be substituted from other academic units with advisor approval.*	
TOTAL	**9 units**

EXPERIENTIAL COURSES	
Complete a total of 3 units of:	
INFO 693: Internship	**1-3 units**
INFO 698: Capstone Project	**1-3 units**
TOTAL	**3 units**
DEGREE TOTAL	**30 units**

HUMAN-CENTERED COMPUTING SUBPLAN

CORE COURSES	
INFO 505: Foundations of Information	**3 units**
INFO 516: Introduction to Human Computer Interaction	**3 units**
INFO 526: Data Analysis and Visualization	**3 units**
TOTAL	**9 units**

ELECTIVE COURSES	
*Choose 3 courses from the following**:*	
HSD 520: Makerspace	**3 units**
INFO 501: Designing an Installation	**3 units**
INFO 524: Virtual Reality	**3 units**
INFO 525: Algorithms for Games	**3 units**
INFO 551: Game Development	**3 units**
INFO 552: Advanced Game Development	**3 units**
INFO 575: User Interface and Website Design	**3 units**
TOTAL	**9 units**

GENERAL ELECTIVE COURSES	
Choose 3 elective courses with the INFO prefix. *Up to 2 elective courses may be substituted from other academic units with advisor approval.*	
TOTAL	**9 units**

EXPERIENTIAL COURSES	
Complete a total of 3 units of:	
INFO 693: Internship	**1-3 units**
INFO 698: Capstone Project	**1-3 units**
TOTAL	**3 units**
DEGREE TOTAL	**30 units**

* Additional electives may include Algorithms for Games, Designing an Installation, Game Development, Advanced Game Development, Serious STEM Games, ,User Interfaces, Virtual Reality and others.

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The MSIS 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 MSIS 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.