

# INFORMATION SCIENCE

## Master of Science in Information Science

### Launch your future as an information leader.

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

“*The robust and rewarding MSIS program is an excellent way for students to pivot their careers into the dynamic field of information science.*

– Cristian Román Palacios, Assistant Professor

### 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

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

- Application or systems analyst
- Cybersecurity 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 launch your future as an information leader?

[infosci.arizona.edu/msis](https://infosci.arizona.edu/msis)

[infosci-grad@arizona.edu](mailto:infosci-grad@arizona.edu)



# 18

Complete your degree  
is as few as 18 months.

# 2

SUBPLANS:  
Human-Centered Computing  
Machine Learning

# \$98K

average salary for information  
science master's graduates\*

\* Average salary for information science master's degree graduates according to Payscale, January 2024.



THE UNIVERSITY OF ARIZONA

College of  
Information Science

# MASTER OF SCIENCE IN INFORMATION SCIENCE

## SUBPLANS AND CURRICULUM

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

### 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
<b>TOTAL</b>	<b>9 units</b>

#### ELECTIVE COURSES

Choose 3 courses from the following:

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
<b>TOTAL</b>	<b>9 units</b>

#### 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
<b>TOTAL</b>	<b>3 units</b>

**DEGREE TOTAL 30 units**

### 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
<b>TOTAL</b>	<b>9 units</b>

#### 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
<b>TOTAL</b>	<b>9 units</b>

#### 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
<b>TOTAL</b>	<b>3 units</b>

**DEGREE TOTAL 30 units**

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.