

Southern Arkansas University

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MCIS

Master of Science in Computer
and Information Science



**Take advantage of SAU's online cyber security, data science, or information technology focused MS programs!
Or, simply take individual courses for skill and career enrichment.**

The Master of Science in Computer and Information Science (MCIS) program at Southern Arkansas University is one of the largest, most affordable, and highly attractive graduate programs in the U.S.A. The program offers a wide spectrum of online and onsite courses that are carefully designed to train students in both the theory and application of computer science. The curriculum is constantly reviewed and updated to reflect the ongoing changes in the field. The faculty members are highly qualified--many with extensive industry experience.

Students in the MCIS program can either study general topics in computer science or pursue one of the following focus areas:

- **Information Technology**
- **Data Science**
- **Cyber Security and Privacy**

The Information Technology option focuses on web technologies and software engineering. This option is particularly suitable for the students who want to switch to computer science from a different background. Career options include programmer, web developer, database developer, information systems project manager, and software engineer.

The Data Science option focuses on data analytics, decision theory, and big data. Candidates for this track are expected to have a background in programming and basic statistics. Career options include data analyst, data scientist, data architect, data administrator, decision analyst, and machine learning engineer.

The Cyber Security and Privacy option focuses on security analytics including penetration testing and digital forensics, cyber defense, and privacy compliance. Potential students are expected to have familiarity with computer systems and applications. Career options include security and privacy architect, security and privacy compliance analyst, and forensic specialist.

For more information about the program please contact:

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Degree Plan

Each candidate for the Master of Science in Computer and Information Science degree must complete a minimum of 30 semester hours of coursework that includes 12 hours of core courses and minimum 18 hours of electives.

12 hours of core courses:

MCIS 5103	Advanced Programming Concepts
MCIS 5133	Data Base Management Systems
MCIS 6163	Computer Networking
MCIS 6173	Information & Networking Security

18 hours of elective courses from the following:

MCIS 5003	Survey of Information Tech with Applications ¹
MCIS 5113	Web Programming: Client Side ¹
MCIS 5413	Web Programming: Server Side ¹
MCIS 6153	Software Engineering ¹
MCIS 6123	Decision Science ²
MCIS 6263	Big Data ²
MCIS 6273	Data Mining ²
MCIS 6283	Machine Learning ²
MCIS 6223	Vulnerability Analysis and Risk Assessment ³
MCIS 6233	Traceable systems and Computer Forensics ³
MCIS 6253	Privacy Compliant Systems Design ³
MCIS 6243	Wireless and Mobile Security ³
MCIS 5013	UNIX Operating System
MCIS 6213	Applied Cryptography
MCIS 6133	User Interface Implementation
MCIS 6214	Data structures and Algorithms
MCIS 6183	Special Topics (Mobile Computing)
MCIS 6201-6	Special Topics Seminar
MCIS 6983	Internship

¹Required for Information Technology option.

²Required for Data Science option.

³Required for Cyber Security and Privacy option