

MASTER OF SCIENCE IN INFORMATION SYSTEMS

The Department of CS & IS at Uganda Martyrs University offers a unique MSc program designed to prepare students for a professional career in Information Systems Technology (IS Technology) Development and Information Systems Management (IS Management). The program was designed with the intention of making the program competitive while maintaining the high standard of the program. With the Courses offered, the graduates will become highly competitive in the job market and at the same time prepare them in becoming independent in making choices of career and self-employment. Students are trained not only in the technical areas of specialization but also in personal development, communication skills and entrepreneurship.

Program Objectives

- To enable students to acquire advanced and up-to-date knowledge in information systems, including theories, principles, and emerging trends.
- To equip students with advanced technical skills in areas such as database management, software development, network design, geographical information systems, data analytics and system architecture.
- To develop students' ability to formulate and implement information systems strategies that align with organizational goals and objectives.
- To cultivate expertise in leveraging data analytics tools and techniques for extracting meaningful insights and supporting decision-making processes.

Program Learning Outcomes

Graduates of the Master of Science in Information Systems program at Uganda Martyrs University are prepared to assume leadership and management positions, designing, developing, and delivering innovative technological solutions to information problems in a variety of contexts. Therefore, the Department of Computer Science and Information Systems evaluates the learning outcomes for the program in a variety of ways. These include exam questions, project work, case analysis, and presentations.

Entry Requirements

- To qualify for admission, a candidate must fulfil the general Uganda Martyrs University entry requirements for master's degrees,
- And in addition, the candidate must be a holder of either; A Bachelor's degree in Information Systems or Computer Science, Software Engineering, Information Technology or Computer Engineering from an accredited institution and a recognized University/ Institution; or any other degree with evidence of having taken acceptable core courses in the field of computing, but not basics; and the minimum class of the bachelor's degree should be a second class lower.

Program Structure

Semester One				
Course Code	Course Name	Type	CH	CU
MIS 6102	IS Requirements Analysis, Design, and Implementation	Core	60	4
MIS 6103	Research Methods for Computing	Core	60	4
MIS 6106	Advanced Database Systems	Core	60	4
MIS 6107	Enterprise Architecture	Core	60	4
MIS 6108	Advanced IS Security and Auditing	Core	60	4
	Total Credit Units			20
Semester Two				

MIS 6203	Science Technology and Ethics	Core	60	4
MIS 6205	Multimedia Communication Systems	Core	60	4
MIS 6206	Advanced Enterprise Network Design and Management	Core	60	4
MIS 6207	Consultancy Skills Development for IS Professionals	Core	60	4
MIS 6208	Business Intelligence and Data mining	Core	60	4
	Total Credit Units			20
Semester Three				
MIS 6303	IS Project and Organisation Change Management	Core	60	4
MIS 6310	Financial Management for IS Professionals	Core	60	4
MIS 6311	Modeling and Simulation	Core	60	4
	3 Courses (in one area of specialization)			
	<i>Networks and Security Option</i>			
MIS 6312	Digital Forensics and Security (NS)	Elective	60	4
MIS 6313	Data Coding Techniques (NS)	Elective	60	4
MIS 6314	Telecommunication Systems (NS)	Elective	60	4
	<i>System Development Option</i>			
MIS 6315	Advanced Web Systems Development and Web Services (SD)	Elective	60	4
MIS 6316	Advanced Systems Programming (SD)	Elective	60	4
MIS 6317	Intelligent Systems (SD)	Elective	60	4
	<i>Management Option</i>			
MIS 6318	Business Process Modeling and Analysis (SM)	Elective	60	4
MIS 6319	Technology Emerging Trends and Business Innovation (SM)	Elective	60	4
MIS 6320	Management for IS Professionals (SM)	Elective	60	4
	<i>GIS Option</i>			
MIS 6321	GEO Informatics and Mapping (GIS)	Elective	60	4
MIS 6322	GIS Programming (GIS)	Elective	60	4
MIS 6323	Remote Sensing (GIS)	Elective	60	4
	<i>Data Science Option</i>			
MIS 6324	Data Science Lifecycle (DS)	Elective	60	4
MIS 6325	Big Data Analytics (DS)	Elective	60	4
MIS 6326	Data Analysis and Visualisation (DS)	Elective	60	4
	Total Credit Units	Elective		24
	Semester Four	Elective		
MIS 6401	Master's Thesis	Core	300	30
	Total Credit Units			20
	Programme Load			94