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Master of Science in **Information Systems & Technology**

USIU-Africa is accredited in Kenya by the Commission for University Education (CUE) & the United States of America by WASC Senior College and University Commission respectively.

PROGRAM DESCRIPTION

Informed by the contemporary and emerging Information Technology (IT) paradigms in business organizations, this program addresses the extensive industry needs for highly qualified, competent and skilled IT graduates in specialist areas by providing a progression path to a higher degree qualification. The degree qualification gives students exposure to advanced skills in areas such as Business Information Systems, Software Development, Telecommunications & Mobile Computing and Internet Security & Cybercrime.

LEARNING OUTCOMES

Upon completion of the Master of Science in Information Systems and Technology program, students will be able to:

1. Formulate Information System Technology solutions from multidisciplinary perspectives.
2. Utilize appropriate skills in the management of Information Technology Systems.
3. Conceptualize, design and conduct an Information System research project.



DEGREE REQUIREMENTS

54 UNITS

CORE COURSES:

36 UNITS

MIS	6010	IT Infrastructure	3 Units
MIS	6020	Application Domains of Information Technology	3 Units
MIS	6030	Applications Development	3 Units
MIS	6040	Networking and Wireless Communications	3 Units
MIS	6050	Database Development Technology	3 Units
MIS	6060	Distributed Computing & Internet Technology	3 Units
MIS	6070	Web-Based Information Systems	3 Units
MIS	6120	Mobile Computing	3 Units
MIS	6130	Information Systems Security, Control and Audit	3 Units
MIS	6140	Information Systems Strategy and Management	3 Units
MIS	6160	IT Project Management	3 Units
MIS	6220	Research Methods	3 Units

CONCENTRATIONS:

18 UNITS

Business Information Systems

BIS	6120	Knowledge Management Systems	3 Units
BIS	6130	Management and Economics of E-Business	3 Units
BIS	6150	Enterprise Systems	3 Units
TMC	6130	Cloud Computing and Virtualization	3 Units
MIS	6851	Project I (Information Systems)	3 Units
MIS	6852	Project II (Information Systems)	3 Units

Software Engineering

SWE	6110	Principles of Software Engineering	3 Units
SWE	6120	Human Computer Interface	3 Units
SWE	6130	Mobile Applications Development	3 Units
SWE	6140	Group Work in Large Scale Software Development	3 Units
MIS	6851	Project I (Information Systems)	3 Units
MIS	6852	Project II (Information Systems)	3 Units

Internet Security and Cybercrime

ISC	6110	Network Security and Management	3 Units
ISC	6120	Advanced Information Systems Security	3 Units
ISC	6130	Computer Forensics and Cybercrime	3 Units
ISC	6140	IT Security Techniques and Incident Handling	3 Units
MIS	6851	Project I (Information Systems)	3 Units
MIS	6852	Project II (Information Systems)	3 Units

Other requirements

Students with a first degree in sciences, engineering or business studies with limited background in Information Technology or Computing will be required to take the survey courses listed for this program.

MIS	5010	Data Structures and Algorithms	1.5 Units
MIS	5020	Fundamentals of Programming	1.5 Units
MIS	5030	Concepts of Operating Systems	1.5 Units
BUS	5080	Survey of Information Systems	1.5 Units
BUS	5090	Survey of Business Statistics	1.5 Units
BUS	5110	Computer Applications Skills	1.5 Units

NOTE:

All courses are computer-based and are thus charged a computer-lab fee.

Repeating courses

A maximum of 2 courses may be repeated. No course may be taken more than twice (the original and one subsequent registration) without approval from the Dean.

Project

Graduate students are required to be continuously enrolled during every term while their project remains incomplete.

Degree Completion Timeline

The maximum amount of time for completing a Graduate degree is 4 (four) years. An approved Leave of Absence does not change the time limits.

CAREER OPPORTUNITIES

1. ICT Director
2. Information Systems Manager
3. Mobile Applications Developer
4. ICT Consultant
5. IT Systems Researcher
6. IT Entrepreneur
7. ICT Security Specialist/Director/Consultant

CONTACTS

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