



CAREER OPTIONS

- Network Administrator
- Network Engineer
- Network Designer
- Network Architect
- Software Engineer
- Software Applications Developer
- Information Systems Developer
- Mobile Applications Developer
- Systems Analyst / Programmer
- Information Systems Project manager
- Systems Architect
- Database Administrator
- Web Applications Developer
- Information systems Auditor
- IT Forensics Engineer
- Internet and Cybercrime Consultant
- Network Security Engineer

SOFTWARE ENGINEERING

- SFE 4010 Human Computer Interaction
- SFE 4020 Software Design and Architecture
- SFE 4030 Software Testing and Quality Assurance
- SFE 4040 Software Requirements & Estimation
- SFE 4050 Software Process and Project Management

NETWORKING

- IST 4080 Backend Databases and Structured Query Language
- NET 4010 Client-Server and Distributed Systems
- NET 4020 Network Management
- NET 4030 Internet Architecture and Protocols
- NET 4040 Telecommunication Applications

FORENSIC INFORMATION TECHNOLOGY & CYBERCRIME

- FIC 4010 Information System Security
- FIC 4020 Forensic Accounting and Fraud Investigation
- FIC 4030 Information Systems Audit
- FIC 4040 Information Technology & Cybercrime
- FIC 4050 Computer Forensics and Investigation

CONTACTS

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Bachelor of Science in Applied Computer Technology



Education to take you places.

PROGRAM DESCRIPTION

The Bachelor of Science in Applied Computer Technology program addresses the integration, design, deployment and management of computing and telecommunication resources and services, as well as the development of technology infrastructures in organizations.

It prepares students to solve complex hardware and software problems requiring fundamental knowledge and competencies in the processes of needs assessment, technology transfer and user support.

DEGREE REQUIREMENTS 120 UNITS

GENERAL EDUCATION REQUIREMENTS 39 UNITS

STRATEGIES FOR UNIVERSITY SUCCESS 3 UNITS

SUS 1010 Strategies for University Success

SYMBOLIC SYSTEMS AND INTELLECTUAL SKILLS 12 UNITS

Written, Analytical, Critical Thinking Skills 6 Units

ENG 1106 Composition I (WI)

ENG 2206 Composition II (WI)

Quantitative and Technological Skills 6 Units

IST1020 Introduction to Information Systems

MTH 1109 College Algebra

LANGUAGE STUDIES 6 UNITS

Students must have credit for a foreign language or must take up to a two-course foreign language sequence of one language. USIU-Africa offers courses in Arabic, French, Japanese, Spanish, Swahili and Chinese.

COMMUNITY SERVICE OR COMMUNITY PROJECT 3 UNITS

CMS 3700 Community Service

THE SENIOR EXPERIENCE 3 UNITS

The Senior Experience is required for each undergraduate degree program.

SEN 4800 Integrated Senior Seminar

GENERAL EDUCATION ELECTIVES 12 UNITS

Students are required to take at least two (2) electives from the Chandaria School of Business & two (2) from the School of Humanities & Social Sciences.

Choose one of the following Chandaria School of Business Lower Division courses.

BUS 1010 Introduction to Business Organizations

ENT 1010 Introduction to Entrepreneurship

BUS 2000 Foundations of Business Age

Choose one of the following School of Humanities and Social Sciences Lower Division courses

SOC 2201 Introduction to Sociology

PHL 1104 Introduction to Philosophy

PSY 1101 Introduction to Psychology

Students must select two courses from the list below; one from the School of Humanities & Social Services list and another from the Chandaria School of Business list. Note: One course may not be used to fulfill requirements for two different areas:-

SCHOOL OF HUMANITIES & SOCIAL SERVICES LIST OF UPPER LEVEL ELECTIVES

FAR 3000	Music of the World
FAR 3001	Visual Arts of the World
GEO 3000	Geography and the Environment
HIS 3015	20 th Century Eastern Africa
HIS 3021	History of Modern Asian Civilization
HIS 3025	History of Kenya
IRL 3015	Introduction to Peace & Conflict Studies
LIT 3330	Literature for Children & Adolescents
LIT 3340	Myths, Rituals & Archetypes
LIT 3351	Masterpieces of World Literature
LIT 3775	Post-Colonial Writing in English
LIT 4785	African Authors Seminar
LIT 4815	Oral Literature
LIT 4820	Sacred Literatures of the World
PHL 3309	Major Figures in Philosophy
PHL 3310	Ethics and Value Theory
PSY 3135	Psychology of Communication
PSY 3150	Courtship & Marriage
SOC 3301	Social Problems
SOC 3305	Deviant Behavior
SOC 3310	Family & Kinship in a Multicultural Context
SOC 3500	Social Conflict & Resolution

CHANDARIA SCHOOL OF BUSINESS LIST OF UPPER LEVEL ELECTIVES

MKT 3010	Principles of Marketing
MGT 3010	Overview of Management Practices
BUS 4070	Business Values & Ethics
BUS 4090	Strategic Management
MGT 4030	Cross Cultural Management

MAJOR

LOWER DIVISION CORE COURSES

NSC 2215	Introduction to Physical Mechanics
APT 1020	Introduction to Programming Using C/C++
APT 1030	Fundamentals of Programming Languages
APT 1040	Introduction to Web Design and Applications
APT 1050	Database Systems
APT 2010	Systems Analysis and Design
APT 2020	Computer Organization
APT 2022	Introduction to Assembly Programming
APT 2030	Digital Electronics
APT 2040	Operating Systems
APT 2050	Computer Network and Telecommunication
APT 2060	Data Structures & Algorithms
APT 2080	Introduction to Software Engineering
APT 2090	Computer Graphics
MTH 2215	Discrete Mathematics

UPPER DIVISION CORE COURSES

APT 3040	Object Oriented Design and Programming
APT 3050	Introduction to Project Management
APT 3060	Mobile Programming
APT 3080	Management Information Systems
APT 3090	Cryptography and Network Security
APT 4900	Applied Computer Technology Project
APT 4910	Applied Computer Technology Internship

CONCENTRATION COURSES

Applied Computer Technology majors must take Software Engineering, Networking, Mobile Computing & Distributed Systems or Forensic Information Technology and Cybercrime as their concentration or area of specialization

DISTRIBUTED SYSTEMS & MOBILE COMPUTING

DST 4010	Distributed Systems
DST 4020	Mobile computing
DST 4030	Parallel Computing
DST 4040	Digital Wireless Communication and Networks
DST 4050	Embedded Real-Time Systems

66 UNITS

45 UNITS

21 UNITS

15 UNITS