

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY



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he Department of Computer & Information Sciences is committed to providing the knowledge and skills required to prepare students to innovate

and develop relevant technologies. We seek to instill within our students the attitudes and values that will prepare them for a lifetime of service, learning, and leadership.

WHAT IS INFORMATION TECHNOLOGY?

Information technology (IT) is a label that has two meanings. In common usage, the term “information technology” is often used to refer to all of computing. As a name of an undergraduate degree program, it refers to the preparation of students to meet the computer technology needs of business, government, healthcare, schools, and other kinds of organizations.

IT professionals possess the right combination of knowledge and practical, hands-on expertise to take care of both an organization’s information technology infrastructure and the people who use it. They assume responsibility for selecting hardware and software products appropriate for an organization. They integrate those products with organizational needs and infrastructure, and install, customize and maintain those applications, thereby providing a secure and effective environment that supports the activities of the organization’s computer users. In IT, programming often involves writing short programs that typically connect existing components (scripting).

Planning and managing an organization’s IT infrastructure is a difficult and complex job that requires a solid foundation in applied computing as well as management and people skills. Those in the IT discipline require special skills – in understanding, for example, how networked systems are composed and structured, and what their strengths and weaknesses are. There are important software systems concerns such as reliability, security, usability, and effectiveness and efficiency for their intended purpose; all of these concerns are vital. These topics are difficult and intellectually demanding.

Specifically, the Information Technology graduates are most suited for:

- ◆ Decision Support Systems (DSS) Design and Support
- ◆ Data Warehousing and Mining
- ◆ Database Management and Administration
- ◆ Intranet/Internet Management
- ◆ End-User Computing Support
- ◆ Management of IS/IT Operations

- ◆ Hardware/Software Sales Representative
- ◆ Information Center/Office Automation
- ◆ Telecommunications Planning and Management
- ◆ Disaster Planning and Recovery

DEGREES OFFERED

- ◆ B. Sc. in Information Technology
- ◆ A. Sc. in Information Technology

ADMISSION REQUIREMENTS

Must have five (5) external passes including **Mathematics** and **English** (CXC level I, II or III / GCE grade A, B or C), or equivalent, or satisfactory grade in SAT (outside this region).

PROGRAM DURATION

Assuming that a full course load is taken each semester, the program takes, on average, 4 years to complete.

GRADUATION REQUIREMENTS

- ◆ An overall G.P.A. of 2.0, a minimum of 2.5 in core classes and 2.25 in the minor.
- ◆ At least a “C+” grade for all core, and a “C” in cognate classes.
- ◆ A passing score on the Language and Content Examination (Oral Exam).

INTERNSHIPS

Internships provide the opportunity for upper level students to garner practical work experience in their field through temporary supervised positions in public or private organizations. This will foster enhanced learning through the application of skills acquired in a professional environment. All students are encouraged to involve themselves in this programme.

PROFESSIONAL ADVANCEMENT CREDITS (PAC)

Students must accumulate a minimum of 100 PACs starting in their junior year. Each one hour activity will be assigned 5 PACs. Credits can be obtained through participation in relevant and approved seminars, workshops and conferences. Membership in approved professional organizations is awarded up to 10 PACs. Completion of at least 100 PACs is a requirement for the course CPTR401 Seminar in Computer & Information Sciences.



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PROGRAM OUTLINE

Total Credit Hours: **132**

Major Credit Hours: **61**

CORE REQUIREMENTS (61 credits)

CPTR113	Introduction to Programming
CPTR151	Principles of Programming I
CPTR204	Website Design & Implementation
CPTR213	Fundamentals of Databases
CPTR230	Systems Analysis & Design
CPTR240	Upgrade and Repair of PC
CPTR242	<i>Principles of Programming II OR</i>
CPTR262	<i>Visual Programming</i>
CPTR252	Data Structures & Algorithms
CPTR282	Computer Organization and Architecture
CPTR293	Field Group Project
CPTR300	Colloquium
CPTR303	IT Training & Support
CPTR304	Internet Authoring
CPTR313	Fundamentals of Information Security
CPTR356	IT Project Management
CPTR375	Operating Systems
CPTR380	Data Telecommunication
CPTR401	Seminar in Computer Information Science
CPTR421	Systems Administration & Engineering
CPTR422	Systems Administration & Engineering II
CPTR425	Network Design and Implementation
CPTR489	CIS Project/Research Proposal Development
CPTR490	Advanced Project

REQUIRED COGNATES (13 credits)

MGMT252	Principles of Management
MGMT297	Introduction to Entrepreneurship
MATHH165	Pre-Calculus I
MATH305	Probability and Statistics

ELECTIVES (12 credits)

Any other 300/400 level Computer Information Science course may be used to satisfy these electives subject to the approval of the academic advisor or department chair.

ASSOCIATIONS / PARTNERSHIPS



The **CompTIA Academy Partner Program** is designed to provide a pathway for students toward a rewarding, high-growth IT career. The program is open to educational institutions that grant diplomas or degrees, and to nonprofit or government training organizations. Its goal is to

help partners deliver a substantial IT curriculum and learning experience.



DreamSpark is a Microsoft Program that supports technical education by providing access to Microsoft software for learning, teaching and research purposes.

DreamSpark is simple: it's all about giving students Microsoft professional-level developer and designer tools at no cost so that students can chase their dreams and create the next big breakthrough in technology - or just get a head start on their career.

DreamSpark helps educators teach the latest technologies and experiment in research. Microsoft knows that to make learning more motivating, relevant, and engaging for today's students requires a diverse set of resources. DreamSpark gives educators the resources to ensure their classrooms always have the latest technologies to challenges, motivate, and keep students engaged in new ways.



The **Jamaica Computer Society** is an independent professional body designed to facilitate the establishment and maintenance of standards of practice for technology professionals. JCS represents companies and individuals involved in the Information and Communication Technology (ICT) industries.

TestOut TestOut is the leader in online labs for academia and IT professionals. With LabSim, students get a broad range of hands-on experience in a safe, simulated environment.

