



**THE UNIVERSITY
OF THE
WEST INDIES**

**Masters Programme
Faculty of Science & Technology**



*Department of Computer Science,
Mathematics And Physics*

MSc. / Post Graduate Diploma Computing Innovation

*With concentrations in
E-BUSINESS, GAMING, and
MOBILE APPLICATIONS*

2015-2016

POST-GRADUATE DIPLOMA/ MSc. COMPUTING INNOVATION

with concentrations in E-BUSINESS, GAMING, and
MOBILE APPLICATIONS

The Post-Graduate Diploma and MSc.

Computing Innovation programmes are innovative offerings which focus on the lucrative areas of gaming, mobile applications and e-business. They provide training in gaming, mobile applications and e-business solutions development for individuals in both the public and private sectors. The Diploma and MSc. Computing Innovation programmes have three concentrations, namely gaming, mobile applications and e-business

The Post-Graduate Diploma and MSc. Computing Innovation (**e-Business**) concentration trains individuals in the development of e-business solutions for small and large organisations within the public and private sectors. The programme provides focused training in areas such as the foundations of e-business, information security and ethics, starting an e-business, web application development and e-marketing.

The Post-Graduate Diploma and MSc. Computing Innovation (**Gaming**) concentration is an innovative offering focusing on the lucrative area of gaming. In this programme, individuals are trained in the development of online and mobile games. It provides focused training in areas such as Android and iOS application development, quality assurance, massively multiplayer online games development, digital storytelling and computer modeling and animation.

The Post-Graduate Diploma and MSc. Computing Innovation (**Mobile Applications**) concentration trains individuals in the development of applications for mobile devices. These applications have become a key part of the strategies of businesses and organisations due to the sheer number of mobile devices currently in use both in developed and developing countries. The programme provides focused training in areas such as Android and iOS application development, software engineering, quality assurance, interaction design and security.

Aims and Objectives

This programme aims to:

1. Position regional businesses for growth in the global marketplace through targeted training;
2. Enable businesses and entrepreneurs to leverage ICT to increase productivity and cut costs;
3. Develop a cadre of technology entrepreneurs capable of creating high technology products for the local, regional and global marketspaces;
4. Create mobile applications for local, regional and international consumption;
5. Create a community of game developers capable of producing novel, high quality games for the local, regional and global marketspaces.

The objectives of this programme are:

1. To discuss the constraints involved in the development of high-technology products in developing states and to formulate creative workarounds;
2. To explain the legal, regulatory, ethical and social frameworks required to launch and sustain local, regional and global initiatives;
3. To find solutions to common problems using new and existing technologies;
4. To analyze and evaluate current business processes with the view of process re-engineering for improved efficiency and productivity;
5. To plan and market these products and services;
6. To create an enabling environment for the development of businesses with a global reach; and
7. To create new products and services

Entry Requirements

The entry requirement for the mobile applications and gaming concentrations of the MSc. and Diploma in Computing Innovation programmes is at least a Second Class honours Bachelor's degree or equivalent in computer science / information technology or related discipline.

The entry requirement for the e-business concentration is at least a Second Class honours Bachelor's degree or equivalent.

Candidates with a Pass degree and significant industry experience will be considered on a case-by-case basis. All applicants should ensure that they have the necessary pre-requisites for the courses they intend to read.

Programme Structure / Course of Study

To be awarded the Post-Graduate Diploma Computing Innovation the student must complete 20 credits of coursework and a 4 credit Mini Capstone project. All courses in each concentration are compulsory.

To be awarded the MSc. Computing Innovation the student must complete 36 credits of coursework and an 8 credit Capstone project.

For both the Diploma and the MSc. all students must also complete the not for credit workshop –“Starting an e-Business”.

Students completing a research-based Capstone Project are also required to complete the not for credit workshop – “Kickstarting your Research”.

Transition

Students who are pursuing the Post-Graduate Diploma Computing Innovation degree may choose to transition to the M.Sc. Computing Innovation degree at any time prior to the start of the Mini Capstone Project provided that they receive the necessary permissions to do so from the Campus Committee.

In addition, students who may have been pursuing the M.Sc. Computing Innovation programme but did not complete it may be awarded the Post-Graduate Diploma Computing Innovation once they have satisfied all of the requirements of that programme (including the Mini Capstone Project).

Duration

Candidates in the Post-Graduate Diploma Computing Innovation are expected to complete the programme requirements in 11 months.

Candidates in the MSc. Computing Innovation are expected to complete the programme requirements in 14 months (fulltime) or 28 months (part-time).

Cost

MSc. Computing Innovation BDS\$30,000 (US \$15,000)

Post-Graduate Diploma in BDS \$ 18,000
Computing Innovation (US \$ 9,000)

Note: Students in the Postgraduate Diploma and MSc. Computing Innovation (Gaming) and MSc. Computing Innovation (Mobile Applications) will need to make provision for an additional BDS \$5,000 (US \$2,500) to cover the cost of a specialized laptop and a mobile phone that are essential for these programmes.

LIST OF COURSES All courses worth 4 credits unless otherwise stated

Post-Graduate Diploma Computing Innovation Concentration in eBusiness All courses compulsory

- An introduction to e-Business
- e-Marketing (2 credits)
- Foundations of e-Business
- Web Technologies
- Mobile Web Application Development (2 credits)
- Information and Knowledge Management
- Starting an e-Business Workshop (0 credits)
- Mini Capstone Project

MSc. Computing Innovation Concentration in eBusiness All courses compulsory

- An introduction to e-Business
- e-Marketing (2 credits)
- Foundations of e-Business
- Web Technologies
- Advanced Web Technologies
- Interaction Design
- System Quality Assurance
- Information and Knowledge Management
- Information Security, Ethics and Legal Aspects
- Mobile Web Application Development (2 credits)
- Starting an e-Business Workshop (0 credits)
- Capstone Project (8 credits)

Post-Graduate Diploma Computing Innovation Concentration in Mobile Applications

- iOS Development Environment (6 credits) OR Android Development Environment (6 credits)
- Mobile Communications and Security
- Data Mining on Mobile Devices
- Mobile Web Application Development (2 credits)
- Advanced Software Engineering
- Mini Capstone Project

MSc. Computing Innovation Concentration in Mobile Applications All courses compulsory

- iOS Development Environment (6 credits)
- Android Development Environment (6 credits)
- Advanced Software Engineering
- Interaction Design
- System Quality Assurance
- Mobile Communications and Security
- Data Mining on Mobile Devices
- Capacity Planning for Networked Applications (2 credits)
- Mobile Web Application Development (2 credits)
- Capstone Project (8 credits)

Post-Graduate Diploma Computing Innovation Concentration in Gaming

- iOS Development Environment (6 credits) OR Android Development Environment (6 credits)
- Game Development Essentials
- Mobile Game Development
- Computer Graphics
- Mobile Web Application Development (2 credits)
- Mini Capstone Project

MSc. Computing Innovation Concentration in Gaming

- iOS Development Environment (6 credits)
- Android Development Environment (6 credits)
- Computer Graphics
- Game Development Essentials
- Mobile Game Development
- Game Physics and AI
- Digital Storytelling Workshop (0 credits)
- Computer Modelling and Animation Workshop (0 credits)
- Interaction Design
- System Quality Assurance
- Capstone Project (8 credits) OR Capstone Project: Massively Multiplayer Online game Development (8 credits)

CONTACT INFORMATION FOR

MSc. Computing Innovation

Programme Coordinator

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HIGHER DEGREE PROGRAMMES

FACULTY OF HUMANITIES & EDUCATION

MA Caribbean Studies :
Languages / Literatures

MA Creative Arts

Dip / MA Cultural Studies

MA History

MA Heritage Studies

MA Linguistics

MA Theology

Diploma in Education (*Secondary*)

Master in Education (MEd)

specialisations (Curriculum Studies; Educational Leadership; Inclusive Practices for Special Needs Students; Language & Literacy Education; School Counselling; Science and Technology Education; Social Context and Education Policy; Testing, Measurement and Evaluation; and The Psychology of Education)

FACULTY OF LAW

LLM / Dip Corporate
& Commercial Law

LLM / Dip Legislative
Drafting

LLM / Dip Public Law

LLM / Dip Intellectual
Property Law **New**

LLM / Dip General **New**

FACULTY OF MEDICAL SCIENCES

DM Anaesthesia and
Intensive Care

DM Emergency Medicine

Diploma, MSc., DM
Family Medicine

DM General Surgery (*Parts I and II*)

DM Internal Medicine

DM Obstetrics and Gynaecology

DM Ophthalmology

DM Orthopedics

DM Paediatrics

DM Psychiatry

Master in Public Health

FACULTY OF SCIENCE & TECHNOLOGY

Dip / MSc. Computing Innovation

MSc. Computing Research

MSc. Natural Resource and
Environmental Management

Dip / MSc. Technology
Entrepreneurship

MSc. Telecommunications **New**

MSc. Renewable Energy
Management

FACULTY OF SOCIAL SCIENCES

Master of Social Work

MSc. Applied Psychology

MSc. Banking & Finance

MSc. Building & Construction
Management

MSc. Counselling Psychology

MSc. E-Governance for
Developing States

MSc. Financial & Business
Economics

MSc. Financial Management **New**

MSc. Human Resources
Management **New**

MSc. Integration Studies

MSc. International Management

MSc. International Trade Policy

MSc. Investments & Wealth
Management

MSc. Labour & Employment
Relations

MSc. Logistics and Supply
Chain Management

MSc. Marketing **New**

MSc. Project Management
& Evaluation

MSc. Sociology

MSc. / Dip. Sport Sciences

MSc. Tourism & Events
Management

MSc. Tourism & Hospitality
Management

MSc. Tourism & Sport
Management

MSc. Tourism with Project
Management

MSc. Tourism Marketing

MSc. Transport Economics

CAVE HILL SCHOOL OF BUSINESS

Doctor of Business
Administration

Executive Master in
Business Administration (*offered
in three specialisations: – General
Management, Public Sector Management
and Human Resource Management*)

Masters in Business Administration
(Entrepreneurship)

International Master in
Business Administration

Masters in Entrepreneurship
and Innovation **New**



UWI also offers a range of MPhil and PhD programmes in a number of areas. Information on these as well as our application process, online application forms, and the documentation required can be found at:

www.cavehill.uwi.edu/gradstudies