



ENTRY REQUIREMENTS

The entry requirement for the M.Sc. in Electronic Commerce programme is at least a lower second class honours bachelor's degree (or equivalent) in any discipline. Graduates with a pass degree, and significant industry experience will be considered on a case-by-case basis.

Successful applicants who are not computer proficient or have no background in Computer Science or Information Technology are required to first complete the pre-foundation non-credit modules COMP6005 - Computer Fundamentals, and COMP6125 - Introduction to Electronic Commerce. Alternative qualifying courses may be specified where there is insufficient demand for these courses.

Successful applicants with a BSc. degree in Computer Science or Information Technology will be barred from the foundation modules, if they have passed courses in their undergraduate degree equivalent to:

- COMP6125 - Introduction to Electronic Commerce
- COMP6115 - Web Technologies

PROGRAMME COST

Payable in full or per course on registration.

Tuition Fee: BDS\$25,000 (US\$12,500)

The Tuition Fee is exclusive of the applicable University Registration Fees i.e. Amenities, Guild and ID Card. Students are required to pay these fees to the respective campus.

University Registration fees are additional to the tuition fee:

ID Card (First year only) Bds \$ 25.00 (US \$ 12.50)

Annual University Registration fees (2008/2009):

Amenities Fees Bds \$ 700.00 (US \$ 350.00)

Guild Fees Bds \$ 120.00 (US \$ 60.00)

Students enrolled in this self-financed programme are billed for the courses for which they register each semester. Fees are payable immediately on registration. University fees are additional to the programme fees and are billed on registration every semester until the degree has been awarded.

University Registration Fees are subject to change in 2009/10.



CONTACT INFORMATION FOR

M.Sc. Electronic Commerce

Programme Coordinator

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TAUGHT HIGHER DEGREE PROGRAMMES

FACULTY OF HUMANITIES & EDUCATION

- MA Cultural Studies
- MA Heritage Studies
- MA History
- MA Linguistics
- MA Post-Colonial Literatures In English
- Masters of Education
- MA Spanish Language & Literature
- MA French Language and African & Caribbean Literatures in French

FACULTY OF LAW

- LLM and Graduate Diploma in Corporate and Commercial Law
- Legislative Drafting
- Public Law

FACULTY OF MEDICAL SCIENCES

- Master of Public Health
- Master of Public Health in Health Services Management
- Graduate Diploma in Health Services Management
- M.Sc. Family Medicine
- Diploma Family Medicine

FACULTY OF PURE & APPLIED SCIENCES

- MSc Electronic Commerce
- MSc Natural Resource and Environmental Management

FACULTY OF SOCIAL SCIENCES

- Master of Social Work
- MSc Applied Psychology
- MSc Banking & Finance
- MSc Counselling Psychology
- MSc Cricket Studies
- MSc E-Governance for Developing States
- MSc Financial and Business Economics
- MSc Integration Studies
- MSc International Management
- MSc International Trade Policy
- MSc Labour & Employment Relations
- MSc Project Management & Evaluation
- MSc Tourism & Hospitality Management

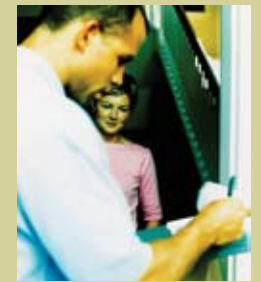
UWI also offers a range of MPhil and PhD programmes in a number of areas.

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



The University of the West Indies
Cave Hill Campus



Masters Programme
Faculty of Pure and Applied Sciences

**DEPARTMENT OF COMPUTER SCIENCE,
MATHEMATICS AND PHYSICS**

M.Sc. Electronic Commerce

2009-2010



PROGRAMME SUMMARY

The M.Sc. in Electronic Commerce, the first of its kind in the Caribbean, was launched in 2006, and aims to provide training for graduates in E-commerce, E-business, Internet law, web technologies, security and marketing.

The M.Sc. in Electronic Commerce has been developed to create the human resources required to make Barbados a destination of choice for outsourced ICT projects. This programme will put students in a unique position enabling them to develop expertise in the fields of Internet development, Networking and IT Security - the very fields involved in the technical undertaking of any Internet or Electronic Commerce activity. The M.Sc. in Electronic Commerce will bring together a skilled workforce that is required for implementing and maintaining Electronic Commerce services and to participate in the continuing development of practices in the field.

AIMS AND OBJECTIVES

The specific objectives of the programme are:

- To provide a thorough understanding of e-commerce and e-business.
- To comprehend the legal and ethical framework required for these initiatives.
- To plan and market e-commerce initiatives.
- To solve common e-commerce and e-business problems using new and existing technologies.
- To comprehend the constraints involved in the development of e-commerce initiatives in the Caribbean region and to formulate creative workarounds.
- To evaluate existing e-commerce initiatives, based on factors such as: Security, Performance, Design and Usability and provide comprehensive recommendations to improve them.
- To create or extend existing e-commerce tools
- To create new e-commerce initiatives

This programme has been designed to train bachelor degree graduates from any discipline in the multi-disciplinary field of Electronic Commerce. Both hands-on and theoretical training will be provided in areas such as law, business, marketing and information technology.

The teaching staff constitutes a multi-disciplinary team of expertise from the Faculty of Pure and Applied Sciences, Faculty of Law and the private sector. They will expose students to their international and regional experiences. The support staff and facilitators bring the industry experience through guest lectures.

PROGRAMME SCHEDULE

The M.Sc. in Electronic Commerce is an intensive programme delivered in modular format each lasting for 4-5 weeks. The Programme currently caters for part-time students only and is typically completed in 15-24 months, depending on the number of courses taken per semester and the time to complete the project. The classes are scheduled during the evening commencing at 5:00 p.m. and can extend to as late as 10:00 p.m.

PROGRAMME CONTENT

This academic degree blends course work, research and a Project/internship to give a commanding overview of the field. The course work component consists of twelve courses delivered over two semesters, with each semester comprising a mixture of compulsory and elective courses. Persons taking both Foundation courses have a choice of two out of five electives while those barred from the Foundation courses have a choice of four out of five electives.

Compulsory Course and Electives

Pre-Foundation Modules (non-credit)

COMP6005 Computer Fundamentals

COMP6015 Introduction to Computer Programming

Foundation Modules

COMP6125 Introduction to Electronic Commerce

COMP6115 Web Technology

Compulsory Modules

COMP6205 Electronic Commerce Law and Ethics

COMP6215 E-Business and Internet Marketing

COMP6225 Security and Electronic Payment Systems

PRE-FOUNDATION MODULES

COMP6005 Computer Fundamentals (0 credits)

This course introduces the student to the fundamentals of computers and the field of computer science. Topics include: The Internet and the World Wide Web, Computer architecture, Operating systems, Application Software, Database Management, Human-computer communication, Software-engineering, Communications and Networks.

COMP6015 Introduction to Computer Programming (0 credits)

This course introduces the students to the principles of computer programming and algorithmic design using the PHP programming language. In addition, the student is given an insight into software engineering and taught techniques to ensure good software design and high quality software applications. Topics include: Algorithmic design: flow charts and pseudo code, Software engineering (specification, design, implementation, integration and testing and maintenance), Software process models (Waterfall and Incremental), Object oriented programming paradigm, PHP programming language.

The pre-foundation courses are structured to introduce students to the fundamentals of

COMP6235 Electronic Commerce Laboratory

Electives

COMP6305 Electronic Commerce in the Caribbean

COMP6315 Database Technology and Knowledge Management

COMP6325 Advanced Web Technologies

COMP6335 Mobile Commerce

COMP6345 Special Topics in Electronic Commerce

Project/Internship

COMP6505 Electronic Commerce Project/ Internship

Computer Sciences and do not contribute to the 40 credits requirements. **They will only be offered where there is sufficient demand.**

FOUNDATION MODULES

COMP6125 Introduction to Electronic Commerce (4 credits)

This course introduces the student to the field of e-commerce and e-business., Topics include:The Internet and the World Wide Web, Business-to-Business, Business-to-Consumer, Consumer-to-Consumer, Business-to-Government e-commerce, E-Business, Security and Payment systems, Marketing and E-Marketing, Building a Web presence, E-Commerce and Internet Law, IT Project management and e-commerce planning and strategy.

COMP6115 Web Technology (4 credits)

This course equips students with the fundamentals of Web Technologies, both hardware and software aspects. Topics include: The Internet and the World Wide Web, Network topology, protocols (TCP/IP) and architecture (Client/Server and Peer-to-Peer), ISO OSI Reference model, Routers, switches, hubs and bridges, Fast Ethernet, DNS, POP/IMAP email protocols, Utilities: FTP, Telnet, Web Client/Server and e-commerce application software, Web site authoring using HTML, DHTML and XML, site management, Web site design; usability and usability testing, Search engines, Client-side

scripting using JavaScript, Server-side scripting using PHP, Cookies and style sheets, Multimedia, Introduction to the use of Java Applets.

COMPULSORY MODULES

COMP6205 Electronic Commerce Law and Ethics (4 credits)

Pre-requisites: COMP6125 - Introduction to Electronic Commerce. This course exposes students to the legal and ethical issues of Web sites and Web site technology. Topics include: Ethics: Acts and moral implications, Data Protection Act, Communication Decency Act, Digital Millennium Copyright Act, Federal Telephone Consumer Protection Act and Children's Online Privacy Protection Act, Intellectual property: copyright, trademarks (trademark dilution and infringement), service marks, patents (business method patents) and trade secrets, Digital rights management (DRM), Contracts, digital signatures, Defamation, data privacy, email privacy, Spam, Legal restrictions on linking frames and in lining; disclaimers, terms of use, trademarks and meta tags, cookies, Domain name disputes, name changing, name stealing and cybersquatting, Jurisdiction, E-crime: detection, prevention and legal sanctions; E-terrorism, Software development agreements and warranties.

COMP6215 E-Business and Internet Marketing (4 credits)

Pre-requisites: COMP6125 - Introduction to Electronic Commerce E-Business may be defined as the connection of critical business systems and its parts via intranets, extranets and the Internet. This module explores E-Business and presents current methods used by businesses to market their products and services on the Internet. Topics include: Transaction cost, return on investment, Revenue models, intranets, extranets and virtual private networks (VPNs), Electronic Data Interchange (EDI), Value chains and supply chain management, Business plans ,Marketing strategies; market segmentation; Branding, Permission, viral, affiliate, one-to-one marketing; mass media marketing, Business processes supporting buy/sell activities, Inventory planning.

COMP6225 Security and Electronic Payment Systems (4 credits)

Pre-requisites:COMP6125 - Introduction to Electronic Commerce and COMP6115 - Web Technologies. From a business point of view the selection and payment of goods and services is paramount. However, obstacles such as the security of the payment system or the supporting network may deter potential on-line buyers. In this module the student is exposed to a wide variety of payment systems, how they work, their security, and their advantages and disadvantages.Topics include: Cryptography, block and stream ciphers, DES,

RSA, MAC, message hashes, Public/private key, secret keys, Key distribution and recovery and Trusted Third Parties, Digital signatures and certificates, Modular Inverses and Public Key Mathematics, Operating system and web application vulnerabilities; attacks, Network security, Web application and operating system security, PGP, X.509, SSL, IPsec, secure e-mail, Viruses, virus protection, worms, Trojan horses, Adware, Spyware, firewalls, software patches, Payment systems (including Credit/Debit/ Smart cards, CyberCash, E-Wallets, CheckFree, eCASH), SETS, SwiftNet, Electronic Fund Transfer and Automated Clearinghouse, Writing secure code.

COMP6235 Electronic Commerce Laboratory (4 credits)

Pre-requisites: COMP6125 - Introduction to Electronic Commerce and COMP6115 - Web Technologies This is a hands-on course that gives students the opportunity to build a Web site from the ground up. The student will be instructed on the building and configuring of a network, the installation of Web server, browser and e-commerce software and the creation and maintenance of a Web site. The student will also learn how to use Web tools to support the creation and maintenance of Web site activities. In addition, the student will learn about the outsourcing of the Web hosting activity.

Topics include:Creating and configuring Client/Server networks, Creating VPNs and Intranets, Installing firewalls and virus protection software, Outsourcing the hosting activity; ISP identification, Installing of Web Client and Web Server software, Installing and using Web design/Multimedia tools such as Microsoft FrontPage, Dreamweaver and Macromedia Flash and open source tools such as Nvu, The use of network administration tools, Linux/Windows system administration, Apache/Microsoft IIS Server, Payment systems.

COMPULSORY PROJECT COURSE

COMP6505- Electronic Commerce Project/ Internship.

The basic objective of the Research Project is to provide an opportunity to undertake a meaningful piece of research from beginning to end, in the area of E-Commerce. This will include writing a proposal, reviewing literature, undertaking requirements gathering and specification definition, implementation, analysing the final outcome and writing a Research Paper.

NOTE: All students must complete COMP 6505 - Electronic Commerce Project/Internship. (Please request guidelines for Project/Internship from Faculty Office).