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# ELECTRONIC BUSINESS TECHNOLOGIES ELECTRONIC BUSINESS PROGRAMS

M.Sc., Master and PhD in Electronic Business (e-Business and e-Technologies, e-Society Streams)

**GUIDE FOR STUDENTS AND SUPERVISORS** 

#### Dear Students,

Welcome to the E-Business Technologies Masters' and E-Business PhD programs. We are committed to providing you with an academic environment that stimulates scientific inquiry, supports your learning, and fosters transdisciplinarity.

This guide introduces you to the policies of the program. We hope it will ease your adjustment to a new environment and provide a useful reference as you proceed through the program. You are welcome to meet with me or other members of the faculty at any time to discuss questions or concerns about the program. We hope you have an exciting and productive academic experience.

#### **Dear Colleagues,**

Your involvement and commitment to the E-Business Technologies Masters' and E-Business PhD programs as instructors and thesis advisors are greatly appreciated. The breadth and depth of knowledge and expertise you offer to our students is unsurpassed.

Liam Peyton Director, E-Business Programs

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#### A. GENERAL INFORMATION

#### Overview

#### Master & M.Sc. Programs

Electronic Business Technologies focuses on the integration of information technologies with business processes and strategies within a dynamic legal and business environment. At the base of Electronic Business Technologies is the fact that the application of Internet and information technology to business processes leads to remarkable new ways of conceiving and organizing businesses. This in turn leads to a myriad of innovative modes of management, new organizational structures and information architectures as well as new laws and legal and corporate strategies. Electronic Business Technologies is composed of two major areas of specialization or streams: Electronic Business and Electronic Technologies.

Electronic Business focuses on organizational transformations based on information technologies. Research includes the identification of best practices and trends, the comparative analysis of new business models, the evaluation of performance based on the introduction of new technologies, the efficacy of the new services and methods in attracting and satisfying customers, and the simulation of integrated supply chains.

Electronic Technologies focuses on information technologies and system architectures, which are used to create and manage on-line commercial transactions. Research includes work on Electronic Commerce Technologies and protocols (in particular wireless and multi-media), the analysis and development of algorithms and theories (in particular security, data mining, web data warehouses, and distributed applications), the definition of standards, architectures and software engineering methodologies for developing electronic commerce systems, the experimental development of innovative applications (virtual environments, e-learning, personalization, electronic negotiations, business reporting, legislative compliance, and health care).

The first cohort of students in the M.Sc. and Master in E-Business was welcomed in January 2006.

#### **PhD Program:**

The PhD program in Electronic Business is offered under the auspices of the Faculty of Graduate and Postdoctoral Studies (FGPS), the Telfer School of Management, the School of Electrical and Computer Engineering and the Faculty of Arts. It is offered on a full-time basis in the following three fields:

• Electronic Business (e-Business)

- Electronic Technologies (e-Technologies)
- Electronic Society (e-Society)

Electronic Business focuses on organizational transformations and digitization initiatives enabled through a variety of information and communication technologies and computer information systems. At the core of these initiatives, electronic business technologies are playing an important role in allowing internal as well as external business integration – including B2B (business-to-business), B2C (business-to-consumer), B2E (business-to-employee), G2B (government-to-business), and G2C (government-to-citizen). Furthermore, these technologies are providing critical functionality to businesses by supporting value-based corporate application portfolios including ERP (enterprise resource planning), CRM (customer relationship management), and SCM (supply chain management).

E-Technologies is complementary to the area of E-Business. Electronic technologies focus on the information technologies and system architectures which are used to create and manage on-line business transactions, services, organizations and communities. This includes enabling infrastructures (Internet protocols and file formats, wireless protocols and mobile devices, wireless sensor networks, multimedia, service-oriented architectures, grid architectures, peer-to-peer networks), theory (cryptography, machine intelligence, databases, communication protocols), and applications (web sites, information security and privacy, data mining, text mining, online payment, web services, middleware, mobile applications, business process automation, performance management, social networks, data warehouses).

As the third field of study, e-Society acts as a trans-disciplinary link between the fields of e-Business and e-Technologies in the Ph.D. program. Sometimes identified through other titles such as information society, knowledge society, or networked society, many international organizations have recently adopted the e-Society naming convention to collectively refer to micro- and macro-level research orientations on e-Commerce, e-Business, and e-Government related topics. Within this Ph.D. program, the e-Society field aims to expound the issues, challenges, and implications of adopting digital technologies in day-to-day life and work practices at the individual, organizational, and public levels. Through an investigation of user attitudes and behaviours, social behaviour norms, and organizational and public policy frameworks related to the use of ICTs, research programs developed within this field are expected to be valuable to policy makers and industry practitioners in helping them respond better to the needs and demands of digitally adept citizens.

#### **B. TEACHING STAFF**

Please consult the program website for faculty members who may currently supervise students in the M.Sc. and Master in E-Business Technologies and PhD in E-Business programs.

Website address for M.Sc. and Master in E-Business Technologies:

# http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Programmes&ProgI d=594

Website address for PhD in E-Business:

http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Programmes&ProgI d=1896

# C. THE PROGRAMS

# M.Sc. and Master Programs:

Admission is offered either on a full or part-time basis. Students admitted full-time to the Master's are required to register full-time for three sessions.

The programs are offered mainly in English. They can be taken part-time or full-time. The Master in Electronic Business Technologies can be completed in 12 months of fulltime study and the Master of Science in Electronic Business Technologies in 16 months of full-time study.

# **PhD Program:**

PhD candidates who were admitted with a master's degree or who transfer to the PhD after completing the three sessions of residency at the master level must spend at least six sessions of full-time registration.

Students who have been awarded a fellowship, scholarship or bursary for the purpose of studying on a full-time basis are required to maintain full-time registration for the period for which they hold the award.

Students whose master's degree was in an area other than Electronic Business Technologies may be required to take up to 12 credits of additional courses beyond the 9 credits normally required for the PhD. The additional coursework would consist of the following:

- EBC 7100 Research Methods in e-Business Technologies, or an equivalent course.
- At least one course (3 credits) in a field other than the candidate's chosen field of research, to be chosen from the list of field designated courses in the program.
- The additional coursework is defined by the Admissions Committee, in consultation with the potential supervisor and the Graduate Studies Committee, and is specified in the student's letter of admission.

#### Program Website

The program also has its own website, which contains additional information on the program. The site is accessible through the Faculty of Graduate and Postdoctoral Studies website:

#### M.Sc. and Master in E-Business Technologies:

http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Programmes&ProgI d=594

#### PhD in E-Business:

http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Programmes&ProgI d=1896

#### **Student Services**

Student Academic Success Services (SASS) Classroom success, career success, personal success www.sass.uottawa.ca

#### **Infoservice**

Student cards, payment of fees, obtaining documents, etc. http://www.registrar.uottawa.ca/Default.aspx?tabid=2616

#### Infoweb uoZone

Your financial account, marks posted, address change, etc. <u>www.infoweb.uottawa.ca</u> <u>http://uozone.uottawa.ca/en/frontpage</u>

#### Language Requirements

The core courses are offered in English. In accordance with University of Ottawa regulations, all students have the option of writing exams, course assignments, and theses in either English or French.

#### Program Requirements for MSc. in E-Business Technologies

(21 cr., Thesis Proposal and Thesis)

# Compulsory Courses (18 cr.)

Electives (3 cr.)

http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Exigences&ProgId= 594

#### **EBC7990** Thesis Proposal

- Must register to the Proposal for one session, maximum of two sessions.
- Must submit to the program office, a thesis proposal by the end of the first or second session registered in proposal with a letter of approval from the Thesis Supervisor.

**EBC7999 Thesis** (12 cr.)

- Students must register to Thesis for at least one session.
- Upon submission, the completed thesis will be examined by a committee of two professors who are members of the Faculty of Graduate and Postdoctoral Studies.

#### **Thesis Committee Members**

The Thesis Supervisor must name two members of FGPS who are available and willing to serve as Examiners of the Thesis. Examiners have one month to read the thesis and provide a written report to the Program Office.

#### Thesis Defence

The Thesis Defence is organized by the Program Office once the Examiners have submitted their written reports to the Program Office. A copy of the examiners' written comments is given to the students by the Program Office. Students prepare a 20-30 minute presentation.

#### Thesis Supervisor

Each student has to find their thesis supervisor when admitted to the program. Your supervisor must be a member of the Faculty of Graduate and Postdoctoral Studies. The role of the supervisor includes ensuring that the student is aware of potentially useful resources; providing advice on course selection, thesis topic, and representing the student's interests to the Director, E-Business.

#### **Co-supervisor**

The co-supervisor has the same responsibilities as a supervisor.

#### Transfers from MSc to PhD Program

For exceptional students enrolled in the University of Ottawa's M.Sc. program in E-Business Technologies, it will be possible to request the Admission Committee for a transfer into the PhD program. Such students must have completed the core MSc courses (21 cr.) with a CGPA of at least 8.5, and have submitted a Master's Thesis Proposal of high quality demonstrating a strong potential for research. The transfer must take place no later than the fourth session of study.

Following the transfer, all the requirements of the doctoral program must be met: nine credits of coursework, the comprehensive exam, the thesis proposal and the thesis.

#### Program Requirements for Master's in E-Business Technologies -

(27 cr. and a Research Project)

**Compulsory courses** (24 cr.) **Electives** (3 cr.)

http://www.grad.uottawa.ca/Default.aspx?tabid=1727&monControl=Exigences&ProgId=594

#### EBC6997 Research Project (6cr.)

• Students taking the master's with a research project must have their supervisor selection as well as their research paper approved prior to their third academic session. The research paper is roughly 50 pages long and is approved by the Director of the program once the student's supervising professor has given his or her approval.

• Once approved by your Supervisor, please provide the department with 2 copies of your Research Project (1 copy binded, one copy loose leaf). Please print your copies 1 side only. Please print your student number on the cover page.

# Co-op option

Co-op students must register full-time and complete two work terms: EBC6001 Co-op Work Term I and EBC6002 Co-op work term II. Each work term is graded P/F (pass/fail), based on the employer's report and on the written report completed by the student (the student report should be 30 pages long, including annexes). The report is evaluated by the professor in charge of the graduate co-op option in Electronic Business Technologies. The credits awarded for co-op terms may not be used to obtain equivalences for other courses. In other words, the co-op credits are additional to the minimum requirements of the degree.

#### To remain enrolled in the co-op option, students must:

- Maintain full-time status
- Maintain a 7.0 grade point average
- Obtain a satisfactory grade (P) for each co-op work term.

**<u>NOTE</u>**: The passing grade in all courses is C+. Students who fail 4.5 credits, or the same course twice, must withdraw from the program.

**Program Requirements for PhD in E-Business** - (9 cr. of coursework, Comprehensive Examination, a Thesis Proposal and a Thesis)

#### **Compulsory Courses (6 cr.)**

EBC8101 Interdisciplinary Doctoral Seminar in E-Business I (3cr.) EBC8102 Interdisciplinary Doctoral Seminar in E-Business II (3cr.)

#### Elective (3 cr.)

The elective course must be selected from the list of courses in the student's chosen field and must be preapproved by the Thesis Advisory Committee.

#### **Comprehensive examination (EBC9998)**

The Comprehensive Examination is a two-part examination (written and oral) that is overseen by the Advisory Committee. Once the written exam has been passed, the student proceeds to the oral. A student who fails either component of the exam is allowed to repeat it the following session. A second failure in either component leads to withdrawal from the program. The Comprehensive Examination must normally be completed within 4 sessions of commencing the program and, at the latest, by the end of the fifth session. Failure to sit and pass the examination by the deadline counts as a failure.

Further details about the comprehensive exam are posted on the program's Website.

#### **Thesis Proposal (EBC9997)**

The thesis proposal, prepared under the direction of the thesis supervisor, must be defended to the satisfaction of the Thesis Advisory Committee (TAC). The proposal must normally be successfully completed by the end of the fifth session. In the event of failure, the proposal can be resubmitted and defended the following session at the latest. A second failure leads to withdrawal from the program. The proposal must be successfully defended before submitting it to the Research Ethics Board (if required) and before undertaking any independent data collection.

Further details about the thesis proposal are posted on the program Website.

#### Thesis (EBC9999)

NOTE: The passing grade in all courses is C+. Students who fail 6 credits, or the same course twice, must withdraw from the program.

#### **Thesis**

The thesis is governed by the FGPS <u>http://www.grad.uottawa.ca/Default.aspx?tabid=1374</u>

Once the Thesis Topic has been selected, the student must complete the form "**Registration to Thesis Topic**"

http://www.grad.uottawa.ca/LinkClick.aspx?fileticket=O%2baildeW2B0%3d&tabid=133 8

For submission of thesis, students must submit 4 copies of their thesis and the **Statement** of **Supervisor form**;

http://www.grad.uottawa.ca/LinkClick.aspx?fileticket=m42lypc8n5Y%3d&tabid=2275 to the Program Office for the Thesis Defence.

Once the student has passed his Thesis Defence and the revisions are done, he must submit his Thesis electronically through **uOResearch** <u>http://www.biblio.uottawa.ca/html/Page?node=special-ruor&lang=en</u> within one month.

Please complete the **Request for Diploma** form: <u>http://www.registraire.uottawa.ca/Portals/43/Registrar/Regi3163.pdf</u> and the Final Version of Thesis Form signed by his Supervisor and submit it to the Faculty of Graduate and Postdoctoral Studies (Hagen Hall, Room 107).

#### <u>Plagiarism</u>

Plagiarism is taking another person's words, ideas or statistics and passing them off as your own. The complete or partial translation of a text written by someone else also constitutes plagiarism if you do not acknowledge your source. Beware of plagiarism <u>http://www.uottawa.ca/plagiarism.pdf</u>

#### Leave of Absence

Students are allowed to take up to 3 sessions in a Leave of Absence during their program. They must complete the Leave of Absence form and return it to the Program Office. <u>http://www.grad.uottawa.ca/LinkClick.aspx?fileticket=ZVLE4z0vLzE%3d&tabid=2276</u>

# Sessional Dates

The following is the link for the Sessional Dates (registration, add a course, delete a course, submit a thesis, payment of fees, etc.): http://www.registrar.uottawa.ca/Default.aspx?tabid=4172#fallwinter

# Course Timetable

https://web30.uottawa.ca/v3/SITS/timetable/Search.aspx

# Blackboard Learn (BBL)

Log in information for students: <u>http://maestro2.uottawa.ca/maestrobb/index.php/en/login-informations-for-students</u> Blackboard Help for students: <u>https://help.blackboard.com/en-us/Learn/9.1\_SP\_10\_and\_SP\_11/Student</u>

# **Tuition Fees**

http://www.registrar.uottawa.ca/Default.aspx?tabid=3619

# **Time Limits**

# Master's Degrees

A candidate for the master's degree must complete all degree requirements within **four years** of the date of initial registration in the master's program.

#### **Doctoral Degrees**

A candidate for the doctoral degree must complete all degree requirements within **six years** of the date of initial registration in the doctoral program.

# **Copyright and the Library**

It is important that faculty, students, and staff inform themselves of what they may or may not copy, and what one should do to determine the rights to copy a particular work for a particular purpose Violations of copyright law can lead to prosecution by the copyright owner. For more information on copyright http://www.biblio.uottawa.ca/html/index.jsp?lang=en

#### DEPARTMENTAL ORGANIZATION

#### Program Committee

The E-Business Program Committee is composed of at least two representatives from each of the participating faculties (Engineering, Arts, Telfer School of Business) as well as at least three student representatives (one each from Masters EBT, MSc. EBT, and PhD EBusiness) and the Coordinator for High-Tech Satellite Programs. There is an associate director from each faculty, one of whom is designated Director of the program.

The current members of the E-Business Program Committee are:

Liam Peyton, Director (Engineering) Bijan Raahemi, Associate Director (Telfer) Andre Vellino, Associate Director (Arts) Umar Ruhi (Telfer) Rocci Luppicini (Arts) Nancy Samaan (Engineering) Thomas Tran (Engineering) Pillar Mata, Student (M.Sc. EBT) Runsewe, Olubisi, Student (PhD EBusiness) Monique Walker (Coordinator, High-Tech Satellite Programs)

#### **Program Personnel**

For administrative matters, such as course registration, awards and financial support, etc. please contact the Coordinator, High-Tech Satellite Programs, Monique Walker at (613) 562-5800 x 4763 or in person at 800 King Edward Street, (SITE 4049), or by email at <u>mwalker@uottawa.ca</u> The office fax number is (613) 562-5325. For academic matters, such as choice of courses and required resources contact your Thesis Supervisor, Program Director or the Coordinator of High-Tech Satellite Programs.

#### **Computing Resources**

All faculty and graduate students are provided with an account on the university mainframe computer. This account gives them access to electronic mail facilities, internet, statistical software packages, scientific graphics, computer language compilers (e.g., C, Fortran), and a rich mathematical software library.

The University of Ottawa has many services available on the web, most of which are available through Info Web

https://web3.uottawa.ca/infoweb/logon/en.html

To obtain your e-mail account and password please contact the Computing Help Centre at (613) 562-5800 ext. 6555. After you will have created your account please communicate your new uOttawa e-mail address to the program. <u>During your studies the</u> <u>program will use only your uOttawa e-mail account</u>. We encourage all students to check their e-mail regularly as this is the usual method used to communicate with students regarding administrative matters. As an E-Business Technologies Master student, you are entitled to an account that provides access to SITE's graduate lab computing infrastructure, which consists of Unix workstations (Sun & Linux), and PCs connected to Novell server. Your account will remain active for the duration of your stay within our program.

# **<u>SITE Computer Account</u>**

As an E-Business graduate student, you are entitled to an account that provides access to SITE's graduate lab computing infrastructure, which consists of Unix workstations (Sun & Linux), and PCs connected to a Novell server. Your account will remain active for the duration of your stay within our program.

To activate your SITE account, you can follow the following procedure. To use your account, you will need to provide your student number and your infoweb password.

- Access our web-based account management interface at URL <u>http://www.site.uottawa.ca/autopass</u>.
- Access a PC in SITE's general access lab in room SITE 0110 and login with the "autopass" account (further instructions are available on the PC screen). An account management program will run and will allow you to activate your account.

Note that you can use the same procedures at any time to change your SITE passwords. Using these procedures will ensure that your password matches on all systems.

# **<u>SITE Computing Facilities</u>**

E-Business Technologies graduate students have access to the graduate labs in room 2-051 of the SITE building and in room B302A of Colonel By Hall. They also have access to SITE's general access lab in STE 0-110. The main computing equipment in SITE's lab consists of Suns and PCs.

To access the graduate labs, you will need a magnetic card, which can be obtained from the SITE's receptionist in room 5105 of the SITE building. A \$20.00 deposit will be required.

A complete description of the SITE computing facilities and documentation is available at the URL <u>http://www.site.uottawa.ca/local/labinfo/</u>. Please take some time to review this information.

Certain research groups also use the SITE computing infrastructure. If you belong to such groups, your SITE account will also provide you access to those laboratories. Other research labs use an independent computing infrastructure for which you will need a separate account.

We highly recommend that you buy your own computer with a connection to the Internet.

#### **E-Business Student Association**

The E-Business Student Association has a website and a facebook group that you can join. Many important documents and networking events are posted at the website. http://quickforms2.eecs.uottawa.ca/ebt-association/

Students are encouraged to participate. The Association receives funding to organize student events. There are elections each year for president and members of the executive.

#### Graduate Students' Association

To learn more on events, student representation, Café Nostalgica, interdisciplinary conference, dental and insurance plan please visit the internet site <a href="http://www.uottawa.ca/gsaed/eng/events.htm">http://www.uottawa.ca/gsaed/eng/events.htm</a>.

All graduate students registered full-time are automatically enrolled under the Health and Dental Plan. To obtain information or details about the coverage, please visit <u>www.health.ca</u> or <u>www.uottawa.ca/gsaed</u>.

Opting out: If you have comparable coverage under an <u>alternate</u> plan, you may opt-out. You must be able to provide <u>proof of alternate coverage</u> by detailing the insurance provider and policy number. Please visit <u>www.health.ca</u> to withdraw on-line. <u>Additional</u> <u>coverage</u>: If you wish to add dependents to your coverage, you may by paying additional cost.

# **E. FINANCIAL SUPPORT**

The Program is able to offer only very limited financial support. Information sessions on funding for graduate students are provided by FGPS. Please refer to <u>http://www.grad.uottawa.ca/fgps.html</u> for the schedule. We encourage students to apply for external funding ( e.g. Ontario Graduate Scholarships, NSERC). Students who have received a University Admission Scholarship are required to do so.

#### **Provincial Scholarship**

Ontario Graduate Scholarship (**OGS**) All students who are pursuing graduate studies in an Ontario University are eligible to apply, including international students. Complete details: <u>http://osap.gov.on.ca</u>

#### National Granting Agency

Natural Sciences and Engineering Research Council (**NSERC**) Complete details: <u>www.nserc.ca</u>

#### **Research Travel Grant**

Canadian Citizens, Permanent Residents and International Students

The FGPS recognizes that travel by graduate students in the pursuit of research for their thesis is important.

- Maximum of \$550
- Must be registered full-time at the University of Ottawa when travel takes place
- Must apply for grant **prior** to travel

Travel that allows the direct collection of data for a thesis in progress (i.e. conduct interviews, perform archival research, visiting a foreign lab)

http://www.grad.uottawa.ca/default.aspx?tabid=1469

# **TA Positions**

Telfer School of Management

http://www.telfer.uottawa.ca/en/careers/positions-for-students

School of Electrical Engineering and Computer Science

Faculty of Arts

#### CUPE2626

Canadian Union of Public Employees – Local 2626 represents over 3000 Teaching and Research Assistants, Proctors and SFRB students at the University of Ottawa <u>http://www.cupe2626.ca</u>

According to the collective agreement between the University of Ottawa and the Canadian Union of Public Employees and its Local 2626, article 18.6.4:

# Members in Interdisciplinary Programs

For the purposes of the allocation of positions and hiring under articles 18.5, 18.6, and 18.7 respectively, members registered in a self-standing interdisciplinary program (e.g. E-Business Technologies Masters` programs) shall be associated with only one unit of their choice for the duration of the member's program. Upon submitting the initial application for a position and prior to the initial hiring of the member under this agreement, the member shall select one unit from among the units which officially contribute to the member's self-standing, interdisciplinary program, or from the unit of their Thesis Director or Co-Director. When completing a job application form (Appendix C), members registered in self-standing interdisciplinary programs will indicate under Present Course of Study, in addition to their interdisciplinary program, their selected unit for the purpose of being considered under 18.6.3.1 in the hiring priority. All other applications by such members will be considered under 18.6.3.2. If you should encounter a problem with your job application, please contact your Program Office.

Please refer to the following website for the hourly rates for Teaching Assistant/Demonstrator/Lab Monitor; Tutor; Research Assistants; Marker and Proctor: CUPE2626 article 32.4 <u>http://www.cupe2626.ca</u>

# F. PAID EMPLOYMENT

Some faculty members are able to support students with graduate research assistantships from research project grants. The University of Ottawa regulations allow you to be employed for a maximum of 10 hours per week while registered as a full-time student.