PROPOSAL TO INTRODUCE A NEW COURSE

1. COURSE DETAILS

1.1 Course ID

COMP9322

1.2 Course name - Long

e-Commerce Systems Engineering

1.3 Course name - Abbreviated

e-Commerce Systems Engineering

1.4 Course Authority ext/email

Dr. Boualem Benatallah **boualem@cse.unsw.edu.au**
Dr. John Shepherd **jas@cse.unsw.edu.au**

1.5 Organisational Unit responsible for course

School: Computer Science and Engineering
Faculty: Engineering
Academic Group Code (Faculty): ENG
Academic Organisation Code (Owner): COMPSC

1.6 Justification of Proposal

This course is proposed in the context of an effort to develop a new coursework master in e-commerce. Briefly stated, the master program aims at providing specialised education in the main aspects of e-enterprise computing, including B2C and B2B systems engineering. More importantly, this program will respond to the demand for IT professionals to provide necessary IT support in "digital age" organizations in Australia and elsewhere. Currently, the school offers one course (COMP9316 - e-Commerce Systems Implementation) that focuses on enabling technologies for e-commerce applications. However, in order to cover a wide range of e-commerce techniques and technologies and cater for the variations in students abilities and background, we propose to offer 3 separate courses that provide the IT foundations for building e-enterprise systems: an introductory course that covers the basic infrastructure used in Web-based e-commerce applications development, an advanced course that covers techniques for designing and implementing complex e-enterprise applications (e.g., e-government, e-banking, and e-health applications) , and a project- through which, students acquire good knowledge of complex e-commerce systems development and learn through design and implementation patterns for separating different layers of large and complex e-commerce applications. This course (COMP9322) will cover principles, techniques, architectures, and enabling technologies for the development of the different components and layers of complex e-commerce systems (presentation and personalization layer, business logic, message exchange). Programming assignments and labs will allow students to learn the main concepts and enabling technologies step by step.

1.7 Consultation Process

Postgraduate program director (Dr. John Shepherd), Head of School (Prof. Paul Compton), Associate Head of School (A/Prof. Bill Wilson), and Dr. Paramesh Parameswaran, School of Information Systems, Technology, and Management.

1.8 Units of credit (UOC) Session/s offered Hours Per Week

6	S1 and S2	3

1.9 Pre-requisites: ((COMP9321 and 9024) or COMP2011) and (COMP9311 or COMP3311 or INFS3608 or INFS5926 or INFS5992)

1.10 Proposed Entry in the Faculty Handbook

This course covers principles, techniques, architectures, and enabling technologies for the development of the different components and layers of complex e-commerce systems (presentation and personalization layer, business logic, message exchange). It discusses: (1) e-commerce transaction models, system architectures and functions, (2) enterprise applications development using J2EEE, (3) Web services and business process modelling, (4) security, transaction, payment protocols for enterprise applications, (5) e-catalogues, (6) inter-enterprise message exchange, and (6) personalization. The lecture materials will be complemented by several assignments and labs.

1.11 Is this course replacing an existing course?

Yes, COMP9316

1.12 Undergraduate / Postgraduate

1.13 Core / Elective

Core for some plans, elective for others

1.14 Program stage

First offered S1, 2005

1.15 Program/s in which course is be available

MIT (MCompIT) e-Commerce, GradDipCompIT, 3978, 3645, 3647, 3648 & combined programs involving one of those, PhD, MSc, ME in CSE

1.16 Proposed teaching methods and assessment practices

Examinable (formal) and assignments

1.17 Assessment grades to be used

Full range of grades (HD, DN. CR, PS, FL)

1.18 Mode of delivery

Internal X

External

Other (specify)

1.19 Information Technology Requirements for students

Standard for computer Science and Engineering

1.20 Textbooks

Set textbooks:

E-Commerce Enabling Technologies, Benatallah B, Rabhi F and Paik H, *Pearson Education Sprint Edition ISBN 0-73397-020-6, July 2004.*

Recommended references:

1. Stephen Asbury and Scott Weiner, Developing Java Enterprise Application, J. Wiley, 1999
2. Amjad Umar, Third Generation Distributed Systems and E-business, www.amjadumar.com
3. Gustavo Alonso, Fabio Casati, Harumi Kuno, Vijay Machiraju. **Web services: Concepts, Architectures, and Applications.** Springer Verlag. 2003.
4. Christoph Bussler: B2B Integration: Concepts and Architecture Springer 2003

1.21 Industrial experience component

N/A

2. RESOURCE STATEMENT

2.1 Enrolments

2005: 150

2006: 160

2007: 170

2.2 Resource Requirements

Staffing Requirements:

Hours per week

Full-time Academic Staff: 5 hours

Part-time Teaching Staff: 6 hours per week

General Staff: Covered by standard support of the computer Support group

Field Costs:	N/A
Studio/Laboratory Requirements:	N/A
Materials Requirements:	N/A
Equipment Costs:	N/A
Computing Requirements:	Use of existing facilities in the school
Library Requirements:	Standard textbooks for reference, journal articles and conference proceedings
Capital Funds Requirements:	N/A

2.3 Servicing Implications:

N/A

2.4 Teaching Arrangements:

YES

NO N

2.5 Alternative Delivery Arrangements:

N/A

2.6 Details of Tuition Fees:

Proposed fee:

$ for non-award enrolment (local)

$ for non-award enrolment (international)

$ for course which forms part of full fee-paying program (for local students)

$ for course which forms part of full fee-paying program (for international students)

3. AUTHORISATION

3.1 University Librarian's Endorsement

I have examined the Library needs related to the above proposal and certify that existing Library holdings, staffing, services and accommodation are adequate / inadequate (delete one) to cover the demands that are inherent in it.

Appropriate arrangements for the use of digitised material to support this course have been made by the Course Authority with the University Librarian.

Further Comments:

University Librarian
/ /2003

3.2 Head of School's Approval

I have examined the resource implications of the above proposal in regard to staff, space, materials, equipment, capital funds, and computing, and certify that the School can cover the demands that are inherent in it.

Further Comments:

Head of School
/ /2003

3.3 Dean's Approval

I have examined the resource implications of the above proposal in regard to staff, space, materials, equipment, capital funds, and computing, and certify that:

3.3.1 (i) the proposal involves no additional resources. (A statement from the Head of School explaining how this can be achieved must be provided); or

(ii) the proposal involves additional resources and it is proposed to redeploy existing resources within the faculty. (A statement from the Head of School explaining how this will be achieved must be provided); or

(iii) the proposal involves additional resources to be obtained as set out below; or

(iv) the additional resources essential to bring the proposal into effect cannot be found within resources available to the faculty.

3.3.2 **Fees** (delete if not applicable):

- ☐ a fee will not be charged for this program (other than HECS)
- ☐ a fee will be charged for this program for local fee-paying students
- ☐ a fee will be charged for international students

If a fee is to be charged the Dean certifies as follows:

I have ensured that the Vice-Chancellor has been advised of the proposed fee arrangements, and note that approval of fee arrangements is needed before the new program can be implemented.

3.3.3 the proposal conforms to the University's commitment to Equal Opportunity in Education.

Statement from Head of School on Source of Additional Resources and/or Further Comments:

Dean

/ /2003