PROPOSAL TO INTRODUCE A NEW COURSE
(formerly known as subject)

1. COURSE DETAILS

1.1 Course ID       COMP

1.2 Course name - Long

Wireless Programming for Mobile Enterprise Applications

1.3 Course name – Abbreviated

Wireless Programming for Mobile Enterprise Applications

1.4 Course Authority                          ext/email

Nandan Parameswaran       56941/paramesh@cse.unsw.edu.au

1.5 Organisational Unit responsible for course

School: Computer Science and Engineering            Faculty: Engineering

Academic Group Code [Faculty]:          ENG
eg. Arts and Social Sciences = ARTSC

Academic Organisation Code [Owner]       COMPSC
eg. Department of French=FREN

1.6 Justification of Proposal

A new class of enterprise application incorporating wireless devices as clients has recently emerged as an important area of study. These applications take advantage of the new capabilities of the increasingly sophisticated wireless devices such as mobile phones and bring the advantages of enterprise applications much closer to humans. The purpose of this course is to teach the students the art of programming small devices and cooperative problem solving techniques particularly in the context of e-commerce enterprise applications.

1.7 Consultation Process

1. Approval by the Teaching Committee, School of Computer Science and Engineering
2. Achim Hoffmann, Teaching Committee, School of Computer Science and Engineering.

1.8 Units of credit [UOC] Session/s offered     Hours Per Week
### 1.9 Pre-requisites
- COMP9021 or equivalent.

### 1.10 Proposed Entry in the Faculty Handbook

This course will teach programming and problem solving techniques with wireless devices such as mobile phones and wireless sensor networks in the context of enterprise applications.

- Technologies for wireless devices computing — wireless device configurations and profiles, user interfaces;
- Wireless devices programming — wireless application protocol, developing WML applications, middleware programming for small devices; VoiceXML applications; webservices for wireless devices; strategies for XML processing in small devices, smart client - thin client, messaging applications, personal information management and location-based services.
- Sound and Game APIs, Serial communications, event driven applications. Secure networking.
- Wireless sensor Programming – interfacing with mobile devices; disaster recovery, emergency situation management.
- M-commerce: Mobile security, Mobile commerce services; cooperative problem solving with wireless devices – ad hoc teams, dialogs/multilogs; case study – agent based management with wireless devices.

### 1.11 Is this course replacing an existing course?

- **YES**

### 1.12 Undergraduate / Postgraduate / Other (delete what is not applicable)

- Undergraduate / Postgraduate / Other

### 1.13 Core / Elective (delete one)

- Core / Elective

### 1.14 Program stage
Stage II / Session 1, 2006.

1.15 Program/s in which course is available

MEngSc 8685, ME 2765, MCompSc 8680, MinfSc 8508, GradDips - 5452, 5453, Ph D 1650.

1.16 Proposed teaching methods and assessment practices

Lectures, assignments, team projects, and final exam.

1.17 Assessment grades to be used

HD, DN, CR, PS, FL;

1.18 Mode of delivery

Internal X

External

Other (specify)

1.18.1 Multi-mode Delivery Guidelines

The following issues should be addressed in proposals for Multi-mode delivery:

- parity in admission requirements to ensure that the integrity of programs at UNSW was not compromised;
- administrative processes relating to enrolments and dealing with students overseas;
- content and standard of courses and assuring comparability with on-campus courses;
- by whom and how courses were to be delivered;
- assessment procedures; and
- availability of library resources.

Note: The business components of off-shore proposals are considered by the International Strategies Committee (ISC) chaired by Professor Wainwright, Deputy Vice-Chancellor (Research) whilst the Academic Board approves the academic aspects of proposals for offshore delivery of existing programs. The ISC considers (i) partnership arrangements; (ii) whether the impact on the faculty of staff going overseas has been considered; and (iii) whether appropriate steps have been taken to register the program in the country concerned.

The Postgraduate Coursework Committee has wished to ensure that the following issues have been addressed in proposals for offshore delivery: parity in admission requirements to ensure that the integrity of programs at UNSW is not compromised; administrative processes relating to enrolments and dealing with students overseas; content and standard of courses and assuring comparability with on-campus courses; by whom and how courses are to be delivered; assessment procedures and availability of library resources.

Proponents should contact the Office of the Deputy Vice-Chancellor (Research and International) regarding this committee.

1.19 Information Technology Requirements for students

Standard for students in the programs referred to in Section 1.15 above.

1.20 Textbooks

1.21 Industrial experience component
NIL

2. RESOURCE STATEMENT

2.1 Enrolments
Estimated or proposed enrolments for the next three years.

2003: 60
2004: 80
2005: 80

2.2 Resource Requirements

Staffing Requirements:

Hours per week
3

Full-time Academic Staff

1 hour per 20 students Part-time Teaching Staff

General Staff

Field Costs: NIL
Studio/Laboratory Requirements: NIL
Materials Requirements: NIL
Equipment Costs: NIL
Computing Requirements: NIL
Library Requirements: 1 copy of each text book prescribed above.
Capital Funds Requirements: NIL

2.3 Servicing Implications: N/A

2.4 Teaching Arrangements:
YES
NO  X

2.5 Alternative Delivery Arrangements:  N/A

2.6 Details of Tuition Fees:

Proposed fee:
Standard Faculty of Engineering rates for a 6 uoc PG course.
$  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

/ /2005

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

/ /2005

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.

<table>
<thead>
<tr>
<th>Statement from Head of School on Source of Additional Resources and/or Further Comments:</th>
</tr>
</thead>
</table>

Dean

/    /2005