PROPOSAL TO INTRODUCE A NEW COURSE

(formerly known as subject)

1. COURSE DETAILS

1.1 Course ID

COMP4???

1.2 Course name Long

Advanced Functional Programming

1.3 Course name Abbreviated

Advanced Functional Programming

1.4 Course Authority ext/email

Manuel M T Chakravarty, x4495, chak@cse.unsw.edu.au

1.5 Organisational Unit responsible for course

School: School of Computer Science & Engineering

Faculty: Faculty of Engineering

Academic Group Code (Faculty): ???

Academic Organisation Code (Owner): E250

1.6 Justification of Proposal

The proposed course complements existing basic courses in the area of programming, programming languages, and compilers with advanced material that guides students towards being able to undertake a thesis project in the area of functional programming, compilers for highlevel languages, and highlevel parallel programming languages.

1.7 Consultation Process

n/a

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

6 S1 3

1.9 Prerequisites: Permission of lecturer

Corequisites: none

Exclusions: none

1.10 Proposed Entry in the Faculty Handbook

Programming techniques: combinator libraries, concurrency, monadic programming, graphics and multimedia applications. Implementation techniques: compilation by program transformation, optimisation techniques. Parallel programming: FP approaches to highperformance computing, distributed implementation. This course will be taught in a seminar format, with students expected to give presentations based on readings of primary and secondary sources. In addition, each student needs to solve a medium sized programming assignment.

1.11 Is this course replacing an existing course?

NO

1.12 Undergraduate

1.13 Elective

1.14 Program stage

Usually taken in Stage ?

First offered in S1 2002

1.15 Program/s in which course is be available

BE (CE 3645, SE 3648, BioInf 3647), BSc (CS 3978)

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

Taught in an academic session at the UNSW campus

1.19 Information Technology Requirements for students

In accordance with Academic Board resolution 99/66 relating to *Information Technology Requirements for UNSW Students* (see Secretariat website), please indicate the IT requirements for the course:

1.20 Textbooks

The course will be based on recent research papers

1.21 Industrial experience component

n/a

2. RESOURCE STATEMENT

2.1 Enrolments

Estimated or proposed enrolments for the next three years.

2002: 10

2003: 15

2004: 15

2.2 Resource Requirements
Staffing Requirements:
Hours per week
Fulltime Academic Staff

Parttime Teaching Staff

General Staff

Field Costs:
n/a

Studio/Laboratory Requirements:
n/a

Materials Requirements:
n/a

Equipment Costs:
n/a

Computing Requirements:
Makes use of existing computer facilities in the School

Library Requirements:
Access to standard conference proceedings and journals

Capital Funds Requirements:
n/a

2.3 Servicing Implications:
n/a
2.4 Teaching Arrangements:
NO
Alternative Delivery Arrangements: n/a
2.6 Details of Tuition Fees:
Fees for courses are calculated on a prorata basis.
Proposed fee:
$ for nonaward enrolment (local)

$ for nonaward enrolment (international)

$ for course which forms part of full feepaying program (for local students)

$ for course which forms part of full feepaying program (for international students)

3. AUTHORISATION

3.1 Principal 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 Principal Librarian.

Further Comments:

Principal Librarian
/ /2001

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
/ /2001

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 a fee will / will not (delete one) be charged for this course. If a fee is to be charged the Dean certifies as follows:

I have ensured that the ViceChancellor has been advised of the proposed fee arrangements, and note that approval of fee arrangements is needed before a new course 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

/ /2001