

PROPOSAL TO INTRODUCE A NEW COURSE

1. COURSE DETAILS

1.1 Course ID

COMP1400

1.2 Course name - Long

Programming for Designers

1.3 Course name - Abbreviated

Programming for Designers

1.4 Course Authority

Dr Malcolm Ryan

ext/email

x56921/malcolmr@cse.unsw.edu.au

1.5 Organisational Unit responsible for course

School: School of Computer Science and Engineering

Faculty: Faculty of Engineering

Academic Group Code (Faculty): ENG

Academic Organisation Code (Owner): COMPSC

1.6 Justification of Proposal

Students in design programs, such as Media and Communications, Digital Media and Architectural Computing, are making increasing use of multimedia in their work. The ability to write computer programs is important in the construction of complex interactive multimedia objects such as web sites, games, interactive art, or 3D virtual environments. This course is designed to address this need.

At present there are no established courses to teach the fundamentals of programming to these students. The existing first year computer science subjects, COMP1911 and ENGG1811, are more technical in their approach and are tailored towards scientists and engineers. As such, they are of limited use to students from more artistic fields.

The proposed subject will be directly tailored to such students. The Alice programming language [1] will be used to teach all the basic concepts of procedural and object-oriented computing. This language has been specifically designed to make programming appealing to artistically-minded students, by allowing the easy construction of interactive 3D worlds within a drag-and-drop environment. This helps to eliminate much of the "black magic" of computer programming and make it accessible to people who may not otherwise think of themselves as programmers.

The language is closely related to the widely-used Java programming language, and it contains all the common programming constructs that students need to know for programming in any procedural language.

[1] <http://www.alice.org/>

1.7 Consultation Process

This subject has been planned in consultation with Jim Plume and Stephen Peter of the Faculty of Built Environment, Brigid Costello of the Faculty of Arts and Social Sciences (Multimedia & Communications) and Ross Harley of the College of Fine Arts (Digital Media), who have each approached the School expressing a need for such a course to be made available to their students. (See attached email correspondence).

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

6 UOC S2 3

1.9 Pre-requisites: None

Co-requisites: None

Exclusions: COMP1911, COMP1917

1.10 Proposed Entry in the Faculty Handbook

An introduction to the concepts and techniques of object oriented programming with a focus on the construction of interactive multimedia applications. Delivery is through lectures and computer lab classes. Assessment will be via a number of in-class exercises and staged assignments.

1.11 Is this course replacing an existing course?

YES	<input type="checkbox"/>	ARCH1252
NO	<input type="checkbox"/>	

1.12 Undergraduate

1.13 Core / Elective

This course is Core in the Architectural Computing program (3267), replacing ARCH1252, but will be also available as an elective for students in other programs.

1.14 Program stage

The course will be taken in the first year of the Architectural Computing program. Other students will be able to take it at different stages of their programs.

1.15 Program/s in which course is be available

Any programs from the Faculty of Built Environment, Faculty of Arts and Social Sciences or the College of Fine Arts, with specific emphasis on:

3267 Architectural Computing
3994 Media & Communications
3402 Media and Communications
- Media in Interactive Media (proposed 2009)
4810 Digital Media

1.16 Proposed teaching methods and assessment practices

Teaching: lectures, laboratories and projects.

Assessment: in-class exercises, programming assignments

There will be 3-hours of lectures per week (hence the full-time academic staffing

requirement below).

There will also be a 3-hour tutorial/laboratory session each week. Assuming that have around 15 students in each tutorial/lab group, this means N/15 casual academic staff (where N is the total enrolment), each of whom provides a 1-hour tutorial and a 2-hour demonstration.

1.17 Assessment grades to be used

full range of grades ie. HD, DN, CR, PS, FL

1.18 Mode of delivery

Internal	X
External	
Other (specify)	

1.18.1 Multi-mode Delivery Guidelines

N/A

1.19 Information Technology Requirements for students

Standard resources available in the school.

1.20 Textbooks

Learning to Program with Alice, Wanda Dann, Stephen Cooper, and Randy Pausch, Prentice Hall, 2005 ISBN: 0-13-187289-3

1.21 Industrial experience component

None

2. RESOURCE STATEMENT

2.1 Enrolments

Estimated or proposed enrolments for the next three years.

2008: 40
2009: 100
2010: 100

The 2008 enrolment will consist solely of students from FBE. From 2009 on, the course will also be core for the Media and Communications (Interactive Media) students and will be available as an elective to other students from FBE and FASS.

2.2 Resource Requirements

Staffing Requirements:

In 2008:

Hours per week

3	Full-time Academic Staff
12	Part-time Teaching Staff
	General Staff

2009 onwards:

Hours per week

3	Full-time Academic Staff
30	Part-time Teaching Staff
	General Staff

Field Costs:	N/A
Studio/Laboratory Requirements:	Standard labs for CSE courses, already available
Materials Requirements:	N/A
Equipment Costs:	N/A
Computing Requirements:	Standard for CSE courses, already available
Library Requirements:	3 copies of text in the open section 3 copies in the reserved section
Capital Requirements: Funds	N/A

2.3 Servicing Implications:

In the past there have existed individual subjects within FBE, FASS and COFA which have included some elements of computer programming. This course will replace the programming components of those courses. In particular, it will wholly replace ARCH1252. This is at the request of the relevant Schools, as outlined in the attached emails.

2.4 Teaching Arrangements:

(i) Will other units contribute on a regular basis to the teaching of this course?

YES	
NO	X

(ii) If so, which units are involved and what proportion of the course will they teach?

1. **Alternative Delivery Arrangements:** N/A

2.6 Details of Tuition Fees:

Standard fees for courses in the Faculty of Engineering.

3. AUTHORISATION

3.1 University Librarian's Endorsement

Note: *this section of the Proposal must be signed by a Library representative, stating:*

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
/ /2008

3.2 Head of School's Approval

Note: *this section of the Proposal must be signed by the Head of School, stating:*

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
/ /2008

3.3 Dean's Approval

Note: *this section of the Proposal must be signed by the Dean, stating:*

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

(Tick whichever is applicable)

- 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:
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Dean
/ /2008