

# PROPOSAL TO INTRODUCE A NEW PROGRAM

## 1. MAIN FEATURES OF PROPOSAL

**1.1 Proposed name of program:** Bachelor of Science in Computer Science Bachelor of Digital Media

**1.2 Proposed abbreviation of the program:** BSc(Computer Science)BDM

**1.3 Program code:** 3982                      **Plan:** COMPA13982 — Computer Science  
DIGMA13982 — Digital Media

**1.4 Staff contact:** Tim Lambert                      56496 / lambert@cse.unsw.edu.au

### 1.5 Program Authority

**School:** Computer Science and Engineering                      **Faculty:** Engineering

**AOU code:** E250

### 1.6 Reason for the proposal

The School of Computer Science and Engineering has strong connections with the College of Fine Arts, and is conducting collaborative research at the postgraduate level. A combined undergraduate degree program in computer science and digital media would support and feed into this postgraduate research. Since the inception of the Bachelor of Digital Media, there has been a strong demand for a combined BSc BDM program from students currently in the Computer Science and the Digital Media program. For students with an interest in the development and use of computer graphics, the coupling of Computer Science and Digital Media is very attractive. There are currently students in the Computer Science program who have taken core courses from Digital Media, and vice versa. The extent to which this is currently possible is very limited.

The increasing use of computer graphics and special effects in the leisure and entertainment industries indicates a need for graduates with strengths in both the technical and creative components of computer graphics, and associated areas including narrative, lighting and sound. Although the University of Wollongong offers a double degree in Creative Arts and Computer Science, the focus for the creative arts portion of that program appears to be principally design and hence is narrower in its application.

The proposed program will provide a strong foundation in both the technical and creative use of computers, with specialisation available through the selection of electives from second semester in the second year of study. The proposed program will foster in the students undertaking this program Graduate Attributes as described in the Academic Board resolution AB03/67. These attributes will include, but are not limited to, an in-depth engagement with the relevant disciplinary knowledge within the interdisciplinary context, the capacity for analytical and critical thinking and creative problem solving, an appreciation of and respect for diversity, the skills required for collaborative and multidisciplinary work and a respect for ethical practice and social responsibility. This proposed program is strongly supported by the School of Media Arts, the College of Fine Arts, the School of Computer Science and Engineering and the Faculty of Engineering.

## 1.7 Authorisation

Has this proposal received endorsement from the:

yes      no

University Librarian

Registrar's Nominee

Dean

## 1.8 Consultation Process

Yes, the College of Fine Arts and the Faculty of Engineering have been involved in the development of this proposal.

## 1.9 Planning Office

The proposed combined degree program will essentially operate as an extension of the current Digital Media program. Since the proposed program fits into an existing profile, the Planning Office has not been informed of the proposal.

## 1.10 Units of Credit

This proposal conforms to the University's policy on units of credit.

## 1.11 General Education Program

Given the diverse nature of the core courses required by this program, it conforms to the University's policy on General Education, and it includes the required instruction in professional ethics and social responsibility.

## 2. PROGRAM DETAILS

### 2.1 Conditions governing the award

Program rules are provided in Section 2.4.

### 2.2 Is it proposed that this program will replace an existing program?

No      There is currently no similar program

### 2.3 Current Entry in The Faculty Handbook

N/A.

### 2.4 Proposed Entry in The Faculty Handbook

The BSc(Computer Science) BDM combined program provides both a technical and creative foundation to the development and use of computer graphics. It also allows specialisation in the final semester in either the technical or creative strand of computer graphics and associated fields.

The BSc(Computer Science) BDM requires the following:

- at least 66 units of credit from the courses offered by the School of Computer Science and Engineering including:
  - COMP1101/1711, COMP1021/1721, COMP2011/2711, COMP2041, COMP3111, COMP3421 and at least 30 units of credit of level III or above courses.

- at least 18 units of credit from the courses offered by the School of Mathematics, including:
  - MATH1131/1141, MATH1081, MATH2400, MATH2859
- at least 84 units of credit from the courses offered by the College of Fine Arts including:
  - SOMA1600, SOMA1604, SOMA1608, SOMA2602, SOMA 1603, SOMA2607, SOMA2609, SAHT3614, SOMA3610, SOMA3616, SOMA3612, SAHT3613

Students who are enrolled in a combined program are expected to maintain a credit ( $\geq 65\%$ ) average across courses taken from each of the composite programs. Students who fail to meet this condition will be counselled about their suitability to remain in the combined program.

The stages of a generic combined program are shown below.

### Stage 1

Course No	Course Name	S1		S2	
		hr/wk	uoc	hr/wk	uoc
COMP1011	Computing 1A <i>or</i>	6	6		
COMP1711	Higher Computing 1A				
MATH1131	Mathematics 1A <i>or</i>	6	6		
MATH1141	Higher Mathematics 1A				
SOMA1604	Introduction to Digital Media	3	6		
SOMA1600*	Language of Digital Media	3	6		
COMP1021	Computing 1B <i>or</i>			6	6
COMP1721	Higher Computing 1B				
MATH1081	Discrete Mathematics			6	6
SOMA1608	Digital Composite 1			3	6
SOMA2602	Sound Media 1			3	6
Total		18	24	18	24

\* + from a list of subjects to be approved by the School of Media Arts

## Stage 2

Course No	Course Name	S1		S2	
		hr/wk	uoc	hr/wk	uoc
MATH2400	Finite Mathematics	2	3		
MATH2859	Probability, Statistics & Information	3	3		
SOMA1603	Digital Video 1	3	6		
SOMA2607	Multimedia 1	3	6		
SOMA2609	3D Graphics & Modelling 1	3	6		
COMP2011	Data Organisation <i>or</i>			6	6
COMP2711	Higher Data Organisation				
COMP2041	Software Construction: Techniques and Tools			5	6
*	COFA elective			3	6
**	SMA or CSE elective			3/6	6
Total		14	24	17-20	24

\* 6 uoc to be selected from a list of subjects to be approved by the School of Media Arts

\*\* 6 uoc to be selected from a list of subjects to be approved by the School of Media Arts OR the School of Computer Science and Engineering

## Stage 3

Course No	Course Name	S1		S2	
		hr/wk	uoc	hr/wk	uoc
COMP3111	Software Engineering	5	6		
*	Computing elective	6	6		
**	COFA elective	3	6		
***	SMA or CSE elective	3/6	6		
COMP3421	Computer Graphics			5	6
SAHT3614	Screen Culture			3	6
*	Computing elective			6	6
***	SMA or CSE elective			3/6	6
Total		17-20	24	17-20	24

\* 6 uoc to be selected from level 3 or above courses

\*\* 6 uoc to be selected from a list of subjects to be approved by the School of Media Arts

\*\*\* 6 uoc to be selected from a list of subjects to be approved by the School of Media Arts OR the School of Computer Science and Engineering

## Stage 4

Course No	Course Name	S1		S2	
		hr/wk	uoc	hr/wk	uoc
SOMA3610	Digital Studio	3	6		
SOMA3616	Professional Practice	3	6		
*	Computing elective	6	6		
**	SMA or CSE elective	3/6	6		
SOMA3612	Professional Portfolio			3	6
SAHT3613	Digital Theory and Aesthetics			3	6
***	Computing electives			12	12
Total		15-18	24	18	24

\* 6 uoc to be selected from level 3 or above courses

\*\* 6 uoc to be selected from a list of subjects to be approved by the School of Media Arts OR the School of Computer Science and Engineering

\*\*\* 12 uoc to be selected from computing level 3 or above courses

**Note:** The above staging of the program represents one possible sequence of courses. The staging of the courses may be modified, subject to prerequisites and timetabling.

## 2.5 Units of Credit

Stage	uoc
1	48
2	48
3	48
4	48
<b>Total</b>	<b>192</b>

Full-time program load equivalence (EFTSU): 4.0

## 2.6 Admission Requirements

Direct entry requirements for this program will be at a level that satisfies entry to both the BSc(Computer Science) and the BDM program.

Students who have a credit average may apply to transfer from the BSc(Computer Science) or the BDM programs to the BSc(Computer Science)BDM, although it might not be possible to complete the program within the minimum time.

### 2.6.1 Articulation Rules

This program will not be part of an articulated suite of programs.

## 2.7 Program Attendance Mode

Internal	<b>Yes</b>
External	<b>No</b>
Combination	<b>No</b>

## 2.8 Program Attendance Type

Full-time  
Part-time

Both                      Yes

**2.9 Program of study (stream) (POS) available in this program**

Not applicable

**2.10 Next Program Review Date**

The combined program will be reviewed in 2008.

**2.11 For Undergraduate Programs Only**

**2.11.1 Program Pre-requisites**

There are no course requirements. For program requirements, see 2.6.

**2.11.2 UAC Code**

Entry for this program 3982 will require a separate UAC code, as it is significantly different from existing programs. The UAC code will be advised in due course.

**2.11.3 General Education Program**

**(i) 12 units of credit in General Education courses**

There is no general education course content in this program. See 2.13.4

**(ii) 56 hours of instruction in professional ethics and social responsibility of graduates**

The program contains SOMA3616 *Professional Practice*, which contains 56 hours of instruction.

**2.11.4 Honours**

(i) Honours will be awarded in this program

(i) Honours will be determined by a further year of full-time study (or its part-time equivalent) consisting of the requirements for either the BSc(Computer Science) or the BDM.

**2.11.5 University Medal**

This program can lead to the University Medal in either BSc(Computer Science) or BDM.

**2.12 For Postgraduate Programs Only**

**2.12.1 Research Degree**

**2.12.2 Inclusion of Undergraduate Courses**

**2.13 For Double, Combined or "Fast Track" Programs only**

**2.13.1 Completion requirements for the degree/degrees**

The two degrees would normally be completed concurrently.

**2.13.2 Transfer arrangements to either of the single degrees**

Transfer from the BSc BDM back to the BSc program is possible at any time. Completed College of Fine Arts courses will count towards the Bachelor of Science free electives and general education.

Transfer from the BSc BDM to the single BDM degree program is by application to the College of Fine Arts, in compliance with the College of Fine Arts rules. The decision will be made by the College of Fine Arts Admissions Committee.

### **2.13.3 Award of Honours in the degree/degrees**

This has been specified in section 2.11.4.

### **2.13.4 General Education Program**

Since the content on the BDM degree is outside the faculty of the BSc(Computer Science), exemption from all 12 units of credit of General Education is sought.

### **2.13.5 Program Authority**

The program authority for this program will be the Faculty of Engineering.

## **2.14 For Alternative Delivery Programs Only**

## **2.15 Information Technology Requirements for students (for all proposed programs)**

As for the BDM and BSc(Computer Science) programs.

## **3. CROSS REFERRAL**

### **3.1 Academic Units with Potential Interest**

This proposal has been prepared in close consultation with the College of Fine Arts.

### **3.2 Material Overlap and Service Teaching**

This is a proposal for a combined program using courses that exist in each of the component programs.

### **3.3 Academic Cross-referral**

This proposal has been approved in principle by the College of Fine Arts.

I have examined the Program Proposal and have no concerns with the matter proceeding.

Further Comments:
-------------------

Dean or Presiding Member of consulted Faculty/Faculties

/ /2004

### **3.4 Administrative Units or External Organisations with Interest**

A number of students have expressed interest in this program. Evidence is personal communication or email.

### **3.4 Administrative Cross-referral**

I have examined the Program Proposal and have no administrative concerns with the matter proceeding.

Further Comments:
-------------------

Registrar's Nominee  
/ /2004

### **4. COURSE DETAILS**

There are no new courses required for this program.

### **5. RESOURCE STATEMENT**

#### **5.1 Resource Impact Summary**

Resource Impact Summary needs to be completed, if required, for this proposal.

#### **5.2 Enrolment Planning**

Estimated or proposed enrolments for the next three years.

2005: 5

2006: 10

2007: 15

A number of Computer Science students are keen to make application to transfer to the BSc BDM program, whenever it is approved.

#### **5.3 Details of Fees**

Other than for local fee-paying students and international students, this program is covered by HECS. For local and international fee-paying students, the appropriate fees to be charged under the UNSW fee band policy will be derived from the relative cost of providing each type of course and calculated on the basis of the relevant year's current fee.

#### **5.4 Teaching/Staff Commitments**

##### **5.4.1 Teaching Format**

Teaching format is as for the two component programs.

##### **5.4.2 Staffing Requirements**

No substantial change in staffing requirements from that existing currently for the two programs.

##### **5.4.3 Support Requirements**

Support requirements are as for the two component programs.

## **5.5 Accommodation**

No additional facilities required.

## **5.6 Materials Requirements**

No extra materials requirement.

## **5.7 Equipment Requirements**

- (i) Expenditure on new or replacement equipment: None required.
- (ii) Annual maintenance on new equipment: None required.

## **5.8 Computing Requirements**

No extra computing equipment required.

## **5.9 Library Requirements**

No extra library requirements.

## **6. AUTHORISATION**

### **6.1 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 program have been made by the Program Authority with the University Librarian.

Further Comments:
-------------------

University Librarian  
/ /2004

### **6.2 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:

- 6.2.1**
- (i) the proposal involves no additional resources. (A statement from the Head of School explaining how this can be achieved must be provided below); 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 below); 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.

**6.2.2 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.

**6.2.3** 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  
/ /2004