PROPOSAL TO INTRODUCE A NEW SUBJECT

C. SUBJECT DETAILS

(a) Subject ID: COMP3120

(b) Subject name – Long: Introduction to Algorithms

(c) Subject name – Abbreviated: Algorithms

(d) Is this subject replacing an existing subject?:
No

(e) Organisational Unit responsible for the subject

- (i) AOU (School/Department) Code: E250
- (ii) Name: School of Computer Science & Engineering
- (iii) Subject authority and contact phone number: A/Prof Hossam Elgindy, x4034; Dr Jingling Xue, x4889

(f) Undergraduate or graduate level: undergraduate

(g) Core or elective: elective

(h) Subject stage: U

(i) Courses in which subject will be available CE (3645)

(j) Sessions offered: S2

(k) (i) Units of credit: 3
(ii) Postgraduate Assessable Hours: N/A

(l) Assessment mode: examinable (formal), assignments, reports
Assessment grades to be used: full range of grades HD, DN, CR, PS, FL

(m) Rules:

- (i) Pre-requisites: COMP2011
- (ii) Co-requisites: N/A
- (iii) Exclusions: COMP3121/COMP9101

(n) Mode of delivery

- (i) Taught in an academic session at the UNSW campus

(o) Textbooks: Still under evaluation, but a good candidate is:
T. H. Cormen, C. E. Leiserson and R. L. Rivest, Introduction to Algorithms, the MIP Press, 1998.
This book is already used for COMP3121/COMP9101

(p) Indicate whether there is an industrial component to the subject: No

(q) Indicate the session and year when subject will be first offered: S2 2000

D. HANDBOOK ENTRY

Design of algorithms using divide-and-conquer, greedy, inductive, parallel and systolic strategies. Models of computations. Correctness and complexity analysis. Time and space analysis: worst- and average- and amortised-case analysis. Algorithms: sorting and searching, trees, graphs and matrices.

E. RESOURCE STATEMENT

(a) Estimates of proposed enrolment for the next three three years:

	Enrolments
2000	100
2001	100
2002	100

(b) Resources required:

Equipment costs: N/A

Field costs: N/A

Capital funds required: N/A

Other funds required: N/A

Computing resources required: Makes use of existing lab computer facilities in the School.

Library commitments: A number of copies of text and reference books. Journal and conference proceedings already in the library.

(c) Servicing implications: None

(d) Cross referral: N/A

(e) Teaching arrangements: Subject will be taught by CS&E academic staff

(f) Distance learning: N/A

(g) Details of tuition fees:
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F. AUTHORISATIONS

Librarian's Authorisation

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

Indicate any further comments Further comments:

Signature of University Librarian

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Dean's Authorisation

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

(Please delete whichever is <u>not</u> applicable)

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

(b) *a fee will/will not be charged for this subject. If a fee is to be charged the Dean should certify 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 required before the new subject can be introduced.

(c) *the proposal does/does not conform to the University's commitment to E.O. E.*

Source of additional resources and/or further comment must also be provided and verified by the Dean.

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Signature of Dean

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