UNIVERSITY FACULTY SENATE FORMS

Academic Program Approval

This form is a routing document for the approval of new and revised academic programs. Proposing department should complete this form. For more information, call the Faculty Senate Office at 831-2921.

Submitted by: _____Keith Decker_____ phone number___831-1959___

Department: _____CISC_____ email address__decker@udel.edu__

Date: _____November 2010_____

Action: _____revise major_____
(Example: add major/minor/concentration, delete major/minor/concentration, revise
major/minor/concentration, academic unit name change, request for permanent status, policy change, etc.)

Effective term_____11F_____
(use format 04F, 05W)

Current degree_____BS_____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed change leads to the degree of: _____BS_____
(Example: BA, BACH, BACJ, HBA, EDD, MA, MBA, etc.)

Proposed name:_____Computer Science_____
Proposed new name for revised or new major / minor / concentration / academic unit
(if applicable)

Revising or Deleting:

Undergraduate major / Concentration:_____
(Example: Applied Music – Instrumental degree BMAS)

Undergraduate minor:_____
(Example: African Studies, Business Administration, English, Leadership, etc.)

Graduate Program Policy statement change:_____
(**Must attach** your Graduate Program Policy Statement)

Graduate Program of Study:_____
(Example: Animal Science: MS Animal Science: PHD Economics: MA Economics: PHD)

Graduate minor / concentration:_____

Note: all graduate studies proposals must include an electronic copy of the Graduate Program Policy Document, highlighting the changes made to the original policy document.

List new courses required for the new or revised curriculum. How do they support the overall program objectives of the major/minor/concentrations)?
(Be aware that approval of the curriculum is dependent upon these courses successfully passing through the Course Challenge list. If there are no new courses enter "None")

Explain, when appropriate, how this new/revised curriculum supports the 10 goals of undergraduate education: http://www.ugs.udel.edu/gened/

No substantive changes are being made: Breadth requirements wording is changed (not amount or distribution) and one technical elective is changed.

Identify other units affected by the proposed changes:
(Attach permission from the affected units. If no other unit is affected, enter "None")

Describe the rationale for the proposed program change(s):
(Explain your reasons for creating, revising, or deleting the curriculum or program.)

The Department of Computer and Information Sciences moved from the College of Arts & Sciences to the College of Engineering. The wording changes are to bring the catalog description into alignment with the new College.

The Department also underwent a major curriculum evaluation with respect to the ACM/IEEE curriculum recommendations, which resulted in the decision to remove the requirement for CPEG 202, replacing it with a fourth Technical Elective. Students interested in more hardware exposure will be advised to take CPEG courses (including a possible future CPEG Minor) as a part of their four-course BS-CS Concentration.

Program Requirements:
(Show the new or revised curriculum as it should appear in the Course Catalog. If this is a revision, be sure to indicate the changes being made to the current curriculum and **include a side-by-side comparison of the credit distribution before and after the proposed change.**)

NO CHANGE IN CREDIT DISTRIBUTION

DEGREE: BACHELOR OF SCIENCE
MAJOR: COMPUTER SCIENCE

CURRICULUM		CREDITS
UNIVERSITY REQUIREMENTS		
ENGL 110 (minimum grade C-)	Critical Reading and Writing	3
First Year Experience (FYE)		0-4
Discovery Learning Experience (DLE)		3

Multi-cultural Courses   3

COLLEGE REQUIREMENTS

Breadth Requirements   21
The College of Engineering requires 21 total credits, which includes 9 additional credits above and beyond the 12 University Breadth Requirement credits. Coursework may include courses from the University Breadth Requirement list and the **College of Engineering Supplemental Course list**. See **College of Engineering Breadth Requirements** for a detailed description. For timely progress toward degree completion, 3 credits must satisfy the University multi-cultural requirement. All courses must be passed with a minimum grade of C-.

MAJOR REQUIREMENTS

Course	Title	Credits
CISC 108	Introduction to Computer Science I (minimum grade C-)	3
CISC 181	Introduction to Computer Science II(minimum grade C-)	3
CISC 220	Data Structures (minimum grade C-)	3
CISC 260	Machine Organization and Assembly Language (minimum grade C-)	3
CISC 275	Introduction to Software Engineering	3
CISC 303	Automata Theory	3
CISC 320	Introduction to Algorithms	3
CISC 355	Computers, Ethics and Society	3
CISC 360	Computer Architecture	3
CISC 361	Operating Systems	3
CISC 475	Advanced Software Engineering	3

An additional twelve credits of Computer Science technical electives numbered 301 or above, approved by the student's advisor   12

Twelve credits in advanced courses in an advisor-approved

CISC concentration   12
Students are encouraged to explore how other subject areas impact and are impacted by computer science. Approval by the student's CISC advisor is required. Concentration courses must be distinct from other CISC requirements and technical electives.

Course	Title	Credits
MATH 205	Statistical Methods	3-4

or

MATH 350	Probability Theory	
MATH 210	Discrete Mathematics I(minimum grade C-)	3
MATH 241/**MATH 242**	Analytic Geometry and Calculus A/B	8

Twelve credits in science courses including one 12
of the following sequences of laboratory
science courses:

PHYS 207 - **PHYS 208** or	Fundamentals of Physics	
CHEM 103 - **CHEM 104** or	General Chemistry	
BISC 207 - **BISC 208** or	Introductory Biology	
GEOL 105/**GEOL 115**/ **GEOL 107**	Geological Hazards and Laboratory, General Geology	

Either **CISC 304**, **MATH 349**, or a substitute
from the list at **http://www.cis.udel.edu/drupalWeb/mathrecommendations** approved
beforehand by the student's advisor   3

ENGL 312	Written Communications in Business	3
or		
ENGL 410	Technical Writing	

ELECTIVES

After required courses are completed, sufficient elective credits must be taken to meet
the minimum credit requirement for the degree.

CREDITS TO TOTAL A MINIMUM OF   124

ROUTING AND AUTHORIZATION: (Please do not remove supporting documentation.)

Department Chairperson ___Daniel Chester___ Date _12/1/2010_

Dean of College_____ Date _12/8/10_

Chairperson, College Curriculum Committee _____ Date _12/6/2010_

Chairperson, Senate Com. on UG or GR Studies_____ Date_____

Chairperson, Senate Coordinating Com_____ Date_____

Secretary, Faculty Senate_____ Date_____

Date of Senate Resolution_____ Date to be Effective_____

Registrar _____Program Code_____ Date_____

Vice Provost for Academic Affairs & International Programs_____ Date_____

Provost _____ Date_____

Board of Trustee Notification_____ Date_____

Revised 02/09/2009 /khs