BS in Computer Science
Resolution of Recommendations arising from the 2013-2015 Assessment report

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Based on its consideration of the Biennial Assessment Report of the BS in Computer Science program for 2013-2015 cycle, the Undergraduate Committee of the School of Computing and Information Sciences made several recommendations concerning the above mentioned program. Resolution of these recommendations concludes the 2013-2015 assessment cycle for the BS in Computer Science Program, and are summarized below:

A. Recommendations originated by the Subject Area Coordinators:

- ENC 3249: Emphasize technical writing skills

    Recommendation: Emphasis on "Technical Writing" skills as described in the syllabus should be emphasized.

    Resolution: This has been communicated to the English department.

- CDA 3103: Lack of proper student preparation (algorithmic process, basic logic, and programming skills)
- COT 3541: Lack of proper student preparation (induction and propositional logic)

    Recommendation: Suggest the SCIS "Logic for Computer Science and Math Courses" Subcommittee to evaluate the current syllabus in the context of ACM recommended curriculum. If necessary, discuss with Math faculty for changes to the Discrete Math course. Recommendation with regard to "programming skills" is included with the Programming Courses.

    Resolution: Similar recommendation was made after the previous biennial assessment of 2011-2013. The Associate Director formed a committee in 2015-16 to recommend changes to Math courses. The recommendation made in this cycle will be added to the charge of that committee. Resolution of the "programming skills" portion of the recommendation is included with the Programming Courses.

- COP 2210: Lack of preparation (problem solving, and logic of programming)
- COP 3337: Lack of preparation (algorithmic process, abstraction, and some programming)

    Recommendation: (1) Provide a pre-programming course focused on problem solving and logic skills. (2) Refer students in COP 2210 to the pre-programming course after evaluating their skills in the first week of classes. (3) Redesign the syllabus of COP 2210 around carefully constructed learning outcomes. (4) Redesign the syllabus of COP 3337 around carefully constructed learning outcomes to direct the focus of students and instructors towards abstraction, problem solving, and algorithmic process. (5) Integrate

the operational syllabi of COP 2210 and COP 3337 to ensure a seamless transition from one to the other. (6) Evaluate the efficacy of the delivery mode.

Resolution: The Associate Director has formed a committee in 2015-16 to recommend changes in the Introductory Programming course sequence, including redesign of the syllabi for the first two programming courses in the CS (and IT) major. Work continues and is likely that recommendations will not be forthcoming until 2016-17. The Associate Director will investigate the feasibility of using hybrid or fully online offerings as alternate delivery modes.

- CEN 4010, CEN 4021, CEN 4072, CIS 4911: Adopting state-of-the-art software development practices

   Recommendations: The Subject Area Coordinator suggested that we should adopt state-of-the-art practices of software development including practicing agile software engineering development in the two courses. The Undergraduate Committee disagrees with this suggestion to narrow the focus of these courses to specific industry techniques. UGC suggests that instructors adopt a state-of-the-art approach with a balance between principles and practice. The SCIS "Software Engineering Course" Subcommittee may wish to evaluate the current syllabus in the context of ACM recommended curriculum.

   Resolution: The Associate Director already formed a committee in 2015-16 consisting of Professors Masoud Sadjadi, Masoud Milani, Peter Clarke, and Xudong He, with possible input from adjuncts to investigate the CEN-4010, 4021, 4072 offerings along with CIS-4911, and will communicate the UGC concerns to them for their consideration and recommendation.

B. Recommendations originated by the Assessments Coordinator:

The Course-related recommendations of the AC are already addressed above.

- AC-10: Lack of consistency among Course Embedded Assessments of different instructors

   Recommendation: The Subject Area Coordinators should coordinate with faculty who teach in their subject areas to ensure that faculty select these questions from a pool of questions created for this assessment.

   Resolution: The Associate Director will ensure consistency of assessment to the list of responsibilities for Subject Area Coordinators.