

BS in Computer Science
Resolution of Recommendations arising from the 2011-2013 Assessment report

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Based on its consideration of the Biennial Assessment Report of the BS in Computer Science program for 2011-2013 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 2011-2013 assessment cycle for the BS in Computer Science Program, and are summarized below:

A. Recommendations originated by the Subject Area Coordinators:

- COP 4610: Enforcement of prerequisite COP 4338

Recommendation: Computer Engineering has changed their program with the Data System Software concentration which includes COP4338. Enforce COP4338 prerequisite requirement for COP4610 through advisors.

Resolution: This problem likely has resolved on its own, due to Computer Engineering no longer requiring COP-4610, as of fall 2013. Examination of actual student enrollment indicates that there were no examples of Computer Engineering majors taking COP-4610 without the proper prerequisite in 2014.

- COT 3420: Lack of proper student preparation

Recommendation: Consider offering our own Discrete Mathematics (MAD 2104) course, which covers some materials such as propositional logic and induction, thus complementing COT 3420.

Resolution: Note that COT-3420 has been renumbered to COT-3541. This assessment cycle includes data from 2011-13. In AY 2011-12, a committee was formed to consider alternate implementations of COT-3541, MAD-3512, and MAD-2104. Although changes to MAD-3512 were enacted, the proposal for SCIS to teach MAD-2104 was specifically rejected at that time. The Associate Director of SCIS will form a new committee in AY 2015-16, with the intention of considering recommendations for changes in these three courses for the next major curriculum revision that could occur no earlier than the fall 2017 catalog year (five years after the last major revision).

- COP 2210: Re-implement the course outcomes survey

Recommendation: (1) The COP-2210 course outcomes survey must be re-implemented expeditiously, and (2) it might be useful to attempt a correlation between the ratings of the value of COP 2210 course outcomes and the students' written suggestions on the content of the course.

Resolution: The course outcomes survey were re-implemented in 2014.

- COP 3337: Supplementing the classroom instruction for this course

Recommendation: Classroom instruction for COP 3337 could be supplemented by providing resources such as closed labs or peer tutoring, or some other mechanism to provide students with additional opportunities for mastering the course outcomes.

Resolution: Due to favorable budgets, the Associate Director has authorized the use of additional graduate TAs in 2014-15. The Associate Director will investigate in spring 2015 the feasibility of using a Learning Assistants model, currently in use for STEM courses at FIU, and/or Undergraduate TAs, currently in use at other large CS departments. However, this may take time to reach COP-3337.

- COP 4338: Update the syllabus on the SCIS website

Recommendation: The original course outcomes are still listed in the common syllabus for this course. The syllabus must be revised to reflect the revision of the course outcomes.

Resolution: Prerequisites for COP-4338 have been changed in spring 2014. The syllabus is updated on our website.

http://www.cis.fiu.edu/programs/undergrad/courses/COP_4338.pdf

- COP 4520: Adequacy of course pre-requisites

Recommendation: Consider whether the course pre-requisites (COP 3530 and CDA 4101) provide adequate preparation.

Resolution: This course was offered only once in the current Assessment cycle. UGC will revisit this issue after the next course offering.

- CEN 4010, CEN 4021, CEN 4072: Several Recommendations

Recommendations:

- i. The course delivery/contents should be discussed among the instructors of this course and provide course change recommendations. Consider the course offering frequency and required/elective aspect of CEN 4010 and CEN 4021 in the recommendations.
- ii. Also, consider including CEN 4010 as a co-requisite to CEN 4072.
- iii. Some suggestions are already outlined in the last page of the detailed course syllabus file of CIS 4911 with specific guidelines. They need to be implemented consistently.

Resolution: The school will attempt to offer Electives CEN 4072 and Software Testing at least twice a year, subject to availability of instructors. The Associate Director will ask the course instructors Professors Sadjadi, Milani, Clarke, and He, with possible input from adjunct Professors King and Fajardo, to consult on the contents of CEN 4010, CEN 4021, and CEN 4072 offerings along with CIS-4911 to ensure that the intentions of the syllabus are being followed for all courses, and to consider the prerequisites for CEN-4072.

- CIS 4911: Suggestions regarding deliverables, schedules, and coordination

Recommendation: See the narrative of the Undergraduate program Committee.

Resolution: These suggestions are already outlined in the last page of the detailed course syllabus file of CIS 4911 with specific guidelines. They need to be implemented consistently.

B. Recommendations originated by the Assessments Coordinator:

- AC-05: Consider alternative implementations of COT 3420 to include knowledge units from applied logic areas

Recommendation: The Associate Director needs to form a committee to consider the course syllabus revision. Also, consider how the revised version would conform with ABET requirements.

Resolution: This assessment cycle includes data from 2011-13. In AY 2011-12, a committee was formed to consider alternate implementations of COT-3541, MAD-3512, and MAD-2104, but there were no recommendations at that time for substantial change. The Associate Director will form a new committee in AY 2015-16, with the intention of considering recommendations for changes in these courses, for the next major curriculum revision that could occur no earlier than the fall 2017 catalog year (five years after the last major revision).

- AC-06: Projects lacking application of the Foundation Areas of Computer Science

Recommendation: It is challenging to perform meaningful assessment of Student Outcome a) Demonstrate proficiency in the foundation areas of Computer Science including mathematics, discrete structures, logic and the theory of algorithms using the rubric of the Senior Project class because there are essentially no projects attempted by students that address the relevant topics. The point is made for discussion only; no recommendations are made.

Resolution: Referred to the Associate Director and the Assessments Coordinator.

- AC-08: Consistency of Course Embedded assessments by different instructors

Recommendation: SCIS should make Subject Area Coordinators responsible to maintain the consistency of the Course Embedded Assessments. Before designing and conducting the assessment for a particular class, the instructor should consult the SAC.

Resolution: At the start of the semester in which an embedded assessment is to be performed for a course, the Assessments Coordinator will discuss the School's assessment tools with the instructor to ensure consistency.

- AC-10: Improving the sequence of Software Engineering Courses (CEN 4010, CEN 4021, and CIS 4911)

Recommendation: Refer to the recommendations made by the Subject Area Coordinators for these courses.

Resolution: The school will attempt to offer Electives SE-II and Software Testing at least twice a year, subject to availability of instructors. The Associate Director will ask the course instructors Professors Sadjadi, Milani, Clarke, and He, with possible input from adjunct Professors King and Fajardo, to consult on the contents of the CEN-4010, CEN 4021, and CEN 4072 offerings along with CIS-4911 to ensure that the intentions of the syllabus are being followed for all courses, and to consider the requisites for CEN-4072.