COMPUTER SCIENCE - A.S. Degree Program - Information Systems Option – Effective Catalog Year 2015-2016

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Science degree in computer information systems. The curriculum follows the model provided by the Association of Computing Machinery, Computing Machinery, the Institute of Electrical and Electronics Engineers Computer Society and the Association for Information Systems professional society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. Effective problem solving is central to good development of applications of computer and communications technology; this curriculum provides the necessary foundation. The software development process (composing and coordinating components of a program) requires that students construct algorithms for problem solving with appropriate documentation. This curriculum has been designed to address these needs in preparing the student for a future in computer applications oriented fields that combine computing, developing applications and understanding how people, organizations, and society use them. The department recommends the following minimal criteria for prospective students in the Information Systems option:

1. High school diploma or equivalent,
2. Cumulative high school grade point average of C or above,
3. Ranked in top half of high school graduating class,
4. No developmental studies requirement

FIRST SEMESTER
CSIT 165 Programming I 4 cr.
MATH 265 Calculus I 4 cr.
ENGL 151 English I 3 cr.
Social Science Gen Ed Requirement 3 cr.
Humanities Gen Ed Requirement 3 cr.
17 cr.

SECOND SEMESTER
CSIT 166 Programming II 4 cr.
CSIT 176 Computer Organization & Architecture 3 cr.
MATH 266 Calculus II 4 cr.
ENGL 152 English II 3 cr.
Social Science Gen Ed Requirement 3 cr.
17 cr.

THIRD SEMESTER
CSIT 265 Data Structures and Analysis 4 cr.
MATH 267 Calculus III 4 cr.
BIOL 161, or Lab Science Gen Ed Requirement 4 cr.
CHEM 181 or PHYS 281
Social Science Gen Ed Requirement 3 cr.
Humanities Gen Ed Requirement 3 cr.
15 cr.

FOURTH SEMESTER
CSIT 213 Database Management 3 cr.
MATH 270 Discrete Mathematics 3 cr.
BIOL 162 or Lab Science Gen Ed Requirement 4 cr.
CHEM 182 or (continue original science sequence)
PHYS 282
Electives (to meet required 64 cr.) 5 cr.
15 cr.

TOTAL CREDITS 64

Note: cr. (credit) = semester credit hour
Kean-Ocean students need COMM 154 as a general elective
Courses satisfying general education requirements must be selected from the list of Approved General Education Courses.

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Board of Trustees Approval Date: February 25, 2013
Board of Trustees Approval Date: May 28, 2013