COMPUTER SCIENCE - A.S. Degree Program - Information Systems Option – Effective Catalog Year 2013-2014

The program outlined here will prepare students for transfer to a four-year college to obtain a Bachelor of Arts 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
_________  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  PHYS 282
_________  OCC Requirement: Any course from the List of Approved General Education Courses or ACAD 155 or any HEHP
_________  Elective   2 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.

Board of Trustees Approval Date: May 4, 2004
Board of Trustees Approval Date: September 24, 2007
Board of Trustees Approval Date: December 1, 2008
Board of Trustees Approval Date: February 28, 2011