Computer Science:
Information Technology Option
A.S. Degree Program – Catalog Year 2017-2018

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 and the Institute of Electrical and Electronics Engineers Computer Society in order to assure maximum transferability. Upon graduation, students can expect to transfer to a four-year college with junior status. The field of information technology is interdisciplinary, with applications to all aspects of the economy. Information technologists need a balance of software and hardware applications with concentration in specific courses. Effective problem solving is central to this degree; 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 prepare the student to meet the future needs of integration, design, deployment and management of computing, resources and services.

Faculty Contacts/Program Chairs
Gerald Cohen x2165   TECH 222   gcohen@ocean.edu
Edmond Hong x2168   TECH 221   ehong@ocean.edu

Transfer Information
Students pursuing the Computer Science – Information Technology degree can transfer into majors such as Information Technology and Communications with a concentration or specialization in IT. Many colleges offer opportunities for transfer both in and out of state. Students are encouraged to work closely with Faculty and Advising Transfer Services. Students planning to transfer to a four-year institution in NJ can explore the "Transfer Programs" feature on NJ Transfer www.njtransfer.org.

Career Information
The Associate of Arts and the Associate of Science Degrees are designed to transfer to a four-year institution, where students will pursue a Bachelor's Degree. Some students pursue the Associate Degree for personal enrichment, and/or for employment purposes, helping to improve qualifications for jobs requiring a credential beyond the high school degree. Students are strongly encouraged to consult with Faculty and Career Services as they begin to explore career options. Students can also utilize Career Coach, a resource provided by OCC to help students explore degree programs and corresponding careers
ocean.emsicareercoach.com

Fundamental Coursework
  CSIT 165, 166, 176, 213, 265   MATH 265, 266

Students are encouraged to keep track of degree requirements by using the "My Progress" screen on Student Planning. Student Planning can be accessed via logging into Ocean Connect.

Curriculum

First Semester

ENGL 151	English I	3 cr.
CSIT 165	Programming I	4 cr.
_____	Humanities Gen Ed Requirement	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
_____	Elective* (to meet required 64 cr.)	3 cr.
		16 cr.

Second Semester

ENGL 152	English II	3 cr.
CSIT 166	Programming II	4 cr.
CSIT 176	Computer Organization & Architecture	3 cr.
MATH 265	Calculus I	4 cr.
_____	Humanities or Social Science Gen Ed Requirement	3 cr.
		17 cr.

Third Semester

CSIT 184	Networking Essentials	3 cr.
CSIT 265	Data Structures and Algorithm Analysis	4 cr.
BIOL 161 or, CHEM 181, or PHYS 281	Lab Science Gen Ed Requirement	4 cr.
MATH 266	Calculus II	4 cr.
		15 cr.

Fourth Semester

CSIT 213	Database Management	3 cr.
BIOL 162 or, CHEM 182, or PHYS 282	Lab Science Gen Ed Requirement (continue original science sequence)	4 cr.
_____	Electives (to meet required 64 cr.)*	9 cr.
_____		16 cr.
_____	TOTAL CREDITS 64	

Courses satisfying General Education Requirements must be selected from the list of Approved General Education Courses