Computer Science/Information Technology

A.A.S. Degree Program – Catalog Year 2016-2017

This career program prepares students for entry-level positions in a multitude of computer-related jobs. Both computer scientists and information technologists need a balance of software and hardware applications with specific courses emphasizing effective problem solving. The software development process, (composing and coordinating component 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. A graduate of the program will have a firm understanding of modern programming practices and related skills in computer information technology. The department recommends the following minimal criteria for prospective students in the Computer Science/Information Technology program: 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.

Faculty Contacts/Program Chairs

Gerald Cohen, Ph.D. x2165 TECH 222

Transfer Information

Associate of Applied Science (AAS) degrees are intended to prepare students for immediate entry into the workforce. The NJ Statewide Transfer Agreement does not guarantee the transfer of credit/coursework when a student earns an AAS degree and continues on to a four-year institution to complete a bachelor's degree. Students are encouraged to work closely with Faculty and Advising Transfer Services. Students who are planning to transfer to a four-year institution in NJ can explore the "Plan Academic Program (RTP)" feature on NJ Transfer www.njtransfer.org.

Career Information

The Associate of Applied Science Degrees are designed to provide students with the knowledge and skills necessary to start employment upon graduation. Several of the A.A.S. degrees provide the opportunity for the student to gain work experience by offering internship credit. These degrees are usually 'technical' in nature and prepare the student for certification and licensing exams necessary to work in their field of choice. Students are strongly encouraged to consult with Faculty and Career Services as they begin to explore career options.

Fundamental Coursework

CSIT 165, 166, 176, 213

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		
CSIT 165	Programming I	4 cr.
ENGL 151	English I	3 cr.
MATH 151 or	A Survey of Mathematics or	3 cr.
MATH 171 or	Finite Mathematics or	
MATH 181 or higher	Introduction to Probability	
_____	Humanities Gen Ed Requirement	3 cr.
_____	Social Science Gen Ed Requirement	3 cr.
		16 cr.
Second Semester		
CSIT 166	Programming II	4 cr.
CSIT 176	Computer Organization & Architecture	3 cr.
ENGL 152	English II	3 cr.
_____	Computer Science Elective*	3 cr.
_____	Computer Science Elective*	3 cr.
		16 cr.
Third Semester		
_____	Computer Science Elective*	3 cr.
_____	Computer Science Elective*	3 cr.
_____	Lab Science Gen Ed Requirement	4 cr.
COMM 154	Fundamentals of Public Speaking	3 cr.
_____	Social Science or Humanities	3 cr.
	Gen Ed Requirement	16 cr.
Fourth Semester		
CSIT 213	Database Management	3 cr.
_____	Computer Science Elective*	3 cr.
_____	Computer Science Elective*	3 cr.
_____	Business Studies Elective (from list)	3 cr.
_____	Electives (to meet required 64 cr.)	4 cr.
_____		16 cr.
		TOTAL CREDITS 64

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

*Any CSIT course (CSIT 115 or higher) including those recommended in the areas of interest below. Students are not required to select a specific area of interest to complete this degree.

Suggested Computer Science Electives

CSIT 115	Introduction to Computer Game Development	3 cr.
CSIT 123	Integrated Office Software	3 cr.
CSIT 126	Intermediate Spreadsheets & Database*	3 cr.
CSIT 131	Multimedia for the Web	3 cr.
CSIT 133	Web Development Fundamentals*	3 cr.
CSIT 144	UNIX	3 cr.
CSIT 173	Game Programming with OpenGL*	3 cr.
CSIT 184	Networking Essentials*	3 cr.
CSIT 212	Systems Analysis*	3 cr.
CSIT 231	Dynamic Flash & Scripting Programming Elements for Web Pages*	3 cr.
CSIT 265	Data Structures & Analysis*	4 cr.

*These courses have pre-requisites. Please consult the Catalog.

Suggested Business Studies Electives

ACCT 161	Principles of Accounting I	3 cr.
BUSN 131	Introduction to Business Administration	3 cr.
BUSN 134	Principles of Marketing	3 cr.

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