

COMPUTER STUDIES

COMPUTER SCIENCE

Associate in Science

Information Systems Option

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 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. Computer science students have access to five computer labs utilizing contemporary operating systems, located in the Technology Building. The faculty 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

- 3 s.h. Computer Programming I (CSIT 171)
 - 3 s.h. Introduction to Computer Organization (CSIT 140)
 - 4 s.h. Calculus I (MATH 265)
 - 3 s.h. English I (ENGL 151)
 - 3 s.h. Social Science Elective
- 16 s.h.

SECOND SEMESTER

- 3 s.h. Computer Programming II (CSIT 172)
 - 3 s.h. Computer Science Elective (CSIT 115 or higher)
 - 4 s.h. Calculus II (MATH 266)
 - 3 s.h. English II (ENGL 152)
 - 3 s.h. Social Science Elective
- 16 s.h.

THIRD SEMESTER

- 3 s.h. Data Structures and Algorithm Analysis (CSIT 271)
 - 4 s.h. Calculus III (MATH 267)
 - 4 s.h. Lab Science (BIOL 161, CHEM 181 or PHYS 271)
 - 3 s.h. Humanities Elective
 - 3 s.h. Elective
- 17 s.h.

FOURTH SEMESTER

- 3 s.h. Database Management (CSIT 213)
 - 3 s.h. Discrete Mathematics (MATH 270)
 - 4 s.h. Lab Science (BIOL 162, CHEM 182 or PHYS 272)
 - 3 s.h. Humanities Elective
 - 2-3 s.h. Contemporary Health (HEHP 225) or Applied Modern Health I (HEHP 110)
- 15-16 s.h.

Total Credits 64-65