

COMPUTER STUDIES

COMPUTER SCIENCE

Associate in Science

The program outlined here will prepare students for transfer to a four-year college to obtain a bachelor of science degree in computer science. The curriculum follows the model provided by the Association of Computing Machinery 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 programming; 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 science. Computer science students have access to three computer labs utilizing contemporary operating systems, located in the Instructional Computer Science Building. The faculty recommend the following minimal criteria for prospective students in the computer science AS 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

FIRST SEMESTER

- 3 s.h. Computer Programming I (CSIT 171)¹
 - 3 s.h. Introduction to Computer Organization (CSIT 140)¹
 - 4 s.h. Calculus I (MATH 265)
 - 3 s.h. English I (ENGL 151)
 - 3 s.h. Western Civilization I (HIST 171) OR
Macroeconomic Principles (ECON 151)
- 16 s.h.

SECOND SEMESTER

- 3 s.h. Computer Programming II (CSIT 172)²
 - 3 s.h. Computer Systems (CSIT 174)³
 - 4 s.h. Calculus II (MATH 266)
 - 3 s.h. Western Civilization II (HIST 172) OR
Microeconomic Principles (ECON 152)
 - 3 s.h. English II (ENGL 152)
- 16 s.h.

THIRD SEMESTER

- 3 s.h. Data Structures and Algorithm Analysis (CSIT 271)⁴
 - 4 s.h. Calculus III (MATH 267)
 - 4 s.h. General Physics I (PHYS 271)
 - 3 s.h. Humanities Elective
 - 3 s.h. Elective⁵
- 17 s.h.

FOURTH SEMESTER

- 3 s.h. Computer Science Elective - CSIT 126 or higher
 - 3 s.h. Discrete Mathematics (MATH 270)
 - 3 s.h. Humanities Elective
 - 4 s.h. General Physics II (PHYS 272)
 - 2-3 s.h. Health Requirement
- 15-16 s.h.

Total Credits 64 - 65

¹Fall semester day and evening sections; spring semester day sections only

²Spring semester day and evening sections; fall semester day sections only

³Spring semester day and evening sections

⁴Fall semester day and evening sections

⁵Suggest elective satisfying diversity requirement