

# COMPUTER SCIENCE AND INFORMATION SYSTEMS—COMPUTER SCIENCE OPTION (AS.CISCS)

---

## ASSOCIATE OF SCIENCE

**Program Outcomes:** Upon successful completion of this program a student will be able to:

- accurately communicate their work in a technical and non-technical context.
- design and construct significant computer application(s) using current programming languages, computer architectures, and operating systems.
- describe the organization and operation of a computer architecture with respect to numerical representation and computations, digital logic, and computer components.
- demonstrate the ability to evaluate algorithms, select from a range of possible options, provide justification for that selection, and implement the algorithm in a programming context.

### Required Major Courses (20 units)

- |  |     |
|--|-----|
| <input type="checkbox"/> CSS-1 – Introduction to Computer Science and Programming Fundamentals | 4.0 |
| <input type="checkbox"/> CSS-2A – Object Oriented Programming                                  | 4.0 |
| <input type="checkbox"/> CSS-2B – Data Structures and Algorithms                               | 4.0 |
| <input type="checkbox"/> CSS-3 – Computer Architecture and Assembly Language Programming       | 4.0 |
| <input type="checkbox"/> CSS-7 – Discrete Structures   | 4.0 |

**SUBTOTAL: 20 UNITS**

---

### General Education – Required Courses

*Students must complete one of the following General Education Plans:*

**HCCD GE** (see page 66) *MAT-3A or higher*

- |  |   |                                     |
|--|---|-------------------------------------|
| <input type="checkbox"/> Natural Sciences        | <input type="checkbox"/> Social & Behavioral Sciences | <input type="checkbox"/> Humanities |
| <input type="checkbox"/> Ethnic Groups in the US | <input type="checkbox"/> Language and Rationality     |                                     |

**SUBTOTAL: 21 UNITS**

*Students can double-count required courses and courses for General Education*

■ *Electives (Courses Numbered 1-199) required when degree units plus GE units total fewer than 60.*

---

**TOTAL: 60 UNITS**