

UNIX COMPUTER INFORMATION SYSTEMS CERTIFICATE

Award: Certificate in Computer Information Systems

No. of credits required: 30-32

For more information: Contact Assistant Professor David Law, 443-412-2264, dlaw@harford.edu; or Admissions, 443-412-2109.

Program Description

This certificate program is recommended for students with a baccalaureate degree wishing to explore and/or make a career change to the computer field. The courses prepare students to solve business, administrative or statistical problems by utilizing computer software, language, and systems.

Program Goals

Upon successful completion of this program of study, students will be able to:

1. Analyze the use of commercial software applications, hardware, networks, programming, and other technologies in information systems at a level of competence appropriate to joining the workforce.
2. Use, maintain and modify existing information systems.
3. Design and implement new information systems.
4. Demonstrate the skills to work in a business environment including working in teams, project management, and professional and effective communication with a wider audience.

Employment Information

The *Occupational Outlook Handbook* from the U.S. Department of Labor forecasts that careers in the computer industry are expected to increase by 11% adding over 88,500 positions by 2026. The report indicates continuing growth of the computer industry.

Certificate Requirements

Students earning a certificate from HCC must complete or demonstrate exemption from the following courses: ENG 003 Reading and Understanding College Textbooks and ENG 012 Basic Writing, or ENG 018 Integrated Reading and Writing, and MATH 020 Pre-Algebra I. See graduation requirement details in this catalog for further information.

Required Courses

Code	Title	Credits
CIS 102	Introduction to Information Sciences (GI)	3
CIS 110	Introduction to UNIX/Linux	4
CIS 111	Programming I: C/C++	4
CIS 115	Fundamentals of Programming	3
CIS 225	Introduction to Shell Programming	4
ENG 101	English Composition (GE)	3
ENG 209	Technical Writing	3

CIS Electives ¹	6-8
Total Credits	30-32

¹ Any CIS course(s) may be taken to satisfy the CIS elective.

General Education Degree Requirements

Note: The following codes identify courses which satisfy the General Education Degree Requirements:

- Behavioral/Social Science (GB)
- English Composition (GE)
- Arts/Humanities (GH)
- Interdisciplinary and Emerging Issues (GI)
- Biological/Physical Laboratory Science (GL)
- Mathematics (GM)
- Biological/Physical Science (GS)