Computer Science and Information Systems, Computer Science Option

Overview

The Computer Science and Information Systems program prepares students taking the Computer Science Option with the lower-division coursework required at most universities for advancement to upper-division coursework for the Bachelor’s Degree with a major in Computer Science or Information Systems fields. All options are designed to provide students with the skills necessary for employment in the information systems and computer science industry. This certificate or degree program is designed for those interested in becoming programmers in a technical, scientific systems or game development environment, or for students desiring transfer to a four-year Computer Science Degree Program.

Degree Options at Hartnell:

- Associate of Science Degree in Computer Science and Information Systems, Computer Science Option

Certificate of Achievement:

- Computer Science and Information Systems, Computer Science Option

Related Careers

- Computer & Information System Managers
- Information Security Analysts
- Software Developers
- Software Quality Assurance Engineers & Testers
- Computer Science Teacher
- Computer Programmer
- Computer Network Support Specialist
- Computer Systems Engineer
- Web Administrator
- Web Developer
- Search Marketing Strategist
- Systems Analyst

Related Skills

- Ability to think logically, thoroughly and concentrate intensely
- Detail oriented, organized, work well under pressure
- Problem solving and decision-making
- Analytical reasoning
- Ability to master new computer languages and methodologies
- Sensitive to multiple perspectives
- Curiosity and enthusiasm
- Advanced quantitative abilities
- Classifying/Systemizing
- Research
- Statistical analysis
- Written and oral communication
Computer Science & Information Systems, Digital and Web Design Option

Overview

This program is designed for those interested in designing effective and persuasive digital and web media. This option emphasizes the following competencies: managing the development and delivery of comprehensive, integrated digital media, and schedule, customer liaison skills and client interaction, and integrating all facets of digital media into an effective product. Upon successful completion of the program, a student should be able to: anticipate, identify and solve technical and design issues by applying current media design standards, demonstrate strong interpersonal skill, communicate effectively with technical and non-technical colleagues, work effectively on a team, and apply knowledge in a variety of computer skill and proficiency areas including programming languages, software applications, and hardware setup and configuration.

Degree Options at Hartnell:

Associate of Science Degree in Computer Science & Information Systems, Digital & Web Design Option

Certificate of Achievement: Computer Science & Information Systems, Digital & Web Design Option

Related Careers

- Web Developer
- Graphic Designer
- Applications Developer
- Software Engineer
- Programmer
- Web Administrator
- Information Systems Manager
- Computer Consultant
- Software Development Specialist

Related Skills

- Ability to think logically, thoroughly and concentrate intensely
- Detail oriented, organized, work well under pressure
- Problem solving and decision-making
- Analytical reasoning
- Ability to master new computer languages and methodologies
- Sensitive to multiple perspectives
- Curiosity and enthusiasm
- Advanced quantitative abilities
- Classifying/Systemizing
- Research
- Statistical analysis
- Written and oral communication
This certificate or degree program is designed for those interested in becoming network and security specialists in a networked business or information systems environment. Upon successful completion of the program, a student should be able to: design, plan, and implement a small office network, incorporating current industry standards for performance, reliability, and security, demonstrate strong interpersonal skills, communicate effectively with technical and non-technical colleagues, and work effectively on a team, assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems, configure small business and small enterprise networking, storage and virtual equipment, (servers and network devices) to create a reliable, secure, and efficient networking infrastructure.

Related Careers
- Computer and Information Systems Managers
- Information Security Analysts
- Network and Computer Systems Administrators
- Computer Network Support Specialists
- Database Administrators
- Computer Network Architects
- Telecommunications Engineering Specialists
- Systems Administrator

Related Skills
- Ability to think logically, thoroughly and concentrate intensely
- Detail oriented, organized, work well under pressure
- Problem solving and decision-making
- Analytical reasoning
- Ability to master new computer languages and methodologies
- Sensitive to multiple perspectives
- Curiosity and enthusiasm
- Advanced quantitative abilities
- Classifying/Systemizing
- Research
- Statistical analysis
- Written and oral communication