

## COMPUTER INFORMATION SYSTEMS

### Computer Information Systems Associate of Applied Science

#### PROGRAM DESCRIPTION

The Computer Information Systems (CIS) program is designed to prepare students for employment in the computer area as an entry-level network administrator, computer support person, web designer, or computer programmer, while developing general problem-solving and troubleshooting skills that can be applied to networking, server, computer, web, and business programming environments.

#### PROGRAM OUTCOMES

Students who successfully complete the Associate of Applied Science in Computer Information Systems will:

1. Develop problem-solving skills for working with software, hardware, and networks through programming logic and hands-on lab simulations
2. Use common Microsoft Office applications
3. Demonstrate practical experience with a variety of operating systems
4. Work with typical hardware configurations
5. Demonstrate the skills necessary for entry- or mid-level employment in the Computer Information Systems field

#### CAREER CONSIDERATIONS

This curriculum is designed to train students in a variety of modern Internet and business-oriented computer skills. Students will initially develop software and hardware problem-solving skills using programming logic and hands-on lab situations. Students will learn to efficiently use common office applications, receive practical experience with current mainstream operating systems (OS), and work with typical hardware configurations. Advanced databases (DBMS), Internet resource design (web pages & database use) project management, Microsoft Server management, Cisco Networking and networking security are focal areas in the second year. Students will also be trained in basic business procedures, accounting and communication skills. Several of the Computer Information System (CIS) program's classes map directly to leading industry certifications such as the Microsoft Certified Systems Administrator (MCSA) and the Cisco Certified Network Administrator (CCNA) credential. The CIS program is designed to prepare students for employment in (or for a job path leading to) any one of several career opportunities as listed by the Oregon Department of Labor. The Network and Computer Systems Administrators, Computer Support Specialist, Computer Operator, Computer and Information Systems Manager, Computer Programmer, Network Administrator, Network Systems and Communications Analyst, Internet Service Technician, and Database Administrator are among those targeted job paths or

job market careers. To qualify for the AAS degree a student must satisfactorily complete all required courses. If planning on entering other than fall term or desire to transfer to a four-year CIS degree program, consult with a CS/CIS faculty advisor as soon as possible.

#### PROGRAM COURSE REQUIREMENTS

##### Year One

CIS 111	Computer Systems Configuration	4
CIS 120	Introduction to Computer Information Systems	4
CIS 122	Orientation to Programming	4
CIS 133	Introduction to Programming I	4
CIS 140M	Introduction to Microsoft Operating Systems	4
or CIS 140L	Introduction to Linux Operating System	4
CIS 151C	Networking Essentials	4
CIS 233	Introduction to Programming II	4
CIS 240M	Installing & Configuring Microsoft Windows Server	4
CIS 275	Introduction to Database Management Systems I	4
CIS 279M	Microsoft Windows Server Administration I	4
MTH 095	Intermediate Algebra (or higher)	4
PSY 101	Psychology of Human Relations	3
WR 121	Academic Composition*	4

**Year One Credits 51**

##### Year Two

CIS125D	Computer Applications – Database Software	3
CIS125S	Computer Applications – Spreadsheets	3
CIS152C	Switching and Routers	4
CIS195	Authoring for the World Wide Web I	4
CIS245	Project Management	4
CIS276	Introduction to Data Management Systems II	4
CIS280	Cooperative Work Experience: CIS	2
CIS284	Network Security Fundamentals	4
CIS285B	Advanced Network Device Security (CCNA Security)	4
CIS288M	Microsoft Windows Server Administration II	4
CIS295	Authoring for the World Wide Web II	4
SP111	Fundamentals of Public Speaking	4

**Year Two Credits 44**

\* A grade of C or better must be attained in the courses indicated.