PROGRAM DESCRIPTIONS

COMPUTER AND INFORMATION SYSTEMS (CIS)
Associate of Applied Science (AAS) Degree
94-100 credits

DEGREE AS AWARDED ON TRANSCRIPT
Associate of Applied Science, Computer and Information Systems with option

PROGRAM DESCRIPTION
The Computer Information Systems (CIS) degree program is designed around a core curriculum and four distinct options. The program’s core provides an introduction to computer concepts, software applications, operating systems, networking, database, computer servicing, internet, math, human relations and writing. Graduates work in information technology (IT) for a wide variety of commercial businesses, education, federal/state/local governments, e-commerce, publishing and real estate. CIS careers typically include positions such as PC technician, desktop support, network administrator, web developer, drafts-person, database administrator, system administrator and related managerial and administrative roles.

To earn an AAS in Computer Information Systems, a student must complete 67-72 core credits and a minimum of 27-28 credits of CIS and/or CS electives. Students may choose to complete a general AAS in CIS by taking any 27 credits with a CIS or CS prefix 100 or above, or a student may elect to complete an option in one or more areas: Networking, Computer Aided Drafting (CAD), Desktop Support, or Web Development. If a student selects specific electives to complete the requirements for one of the four options, the AAS degree awarded also specifies the option successfully completed. The general AAS provides the most flexibility in course selection and scheduling.

The Computer Aided Drafting option prepares students for entry-level employment in the drafting field. Students prepare for advanced CAD applications through an introductory set of CAD-based curriculum. Students will gain experience using dedicated architectural, civil and mechanical software.

The Desktop Support option prepares students to provide technical assistance to computer system users, answer questions, or resolve computer problems for clients in person, via telephone or from a remote location. Other responsibilities may include providing support for computer hardware and software, including printing, installation, word processing, spreadsheets, database, electronic mail and operating systems.

The Networking option prepares students for entry-level positions in network administration. Network specialists have the ability to design, create, manage and maintain computer networks for small businesses. Courses cover both hardware and software and closely follow major industry certification requirements.

The Web Development option prepares students for a career as a web developer or website administrator. These professionals are responsible for creating standards-based websites and web/database applications. In addition to programming skills in common markup, scripting and SQL languages, these types of professions require project management and communication skills.

COST OF PROGRAM
In addition to standard tuition, student fees and textbooks, students should anticipate the following estimated program costs:
- Materials (8-32 GB usb/flash drive, basic office supplies, notebooks) $100.
- Strongly recommended, but not required
A home or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office, $600. Contact program instructors for specifics.

PROGRAM PREPARATION AND RECOMMENDED PREREQUISITES
Recommended prior to entry in program (CIS) courses
- High school diploma or GED
- Minimum placement scores resulting in WR 121 placement or completion of WR 065/095 ("C" or better)
- Minimum placement scores resulting in MTH 085 placement or completion of MTH 020 and/or MTH 060 equivalent
- Basic computer competency (or CIS 010 and CIS 070)

All COCC students enrolled in the Computer and Information Systems program (which includes requirements for Cooperative Work Experience) may have to pass criminal history checks (CHC) as a condition of their acceptance into a work site. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director.

MINIMUM GPA OR GRADE REQUIREMENTS
All courses must be completed at a “C” grade or better and graduates must have an overall 2.0 GPA or higher.

REGISTRATION INFORMATION
Core Computer and Information Systems program courses (CIS) are all offered two to three quarters each academic year. All CIS elective courses are offered one to two quarters each academic year. Planning ahead is important. Students may take non-program support courses any term to build skills related to prerequisites. Students receiving federal financial aid are encouraged to speak with the financial aid advisor.

PROGRAM STANDARDS
Students must maintain a minimum 2.0 GPA while enrolled; students who do not meet this standard may be dismissed from the program.

NATIONAL/STATE LEGAL ELIGIBILITY OR UNIQUE REQUIREMENTS FOR LICENSURE AND/OR ENTRY INTO OCCUPATION, OR ADVANCEMENT IN THE OCCUPATION
While there are none currently required, various professional organizations offer certification that may enhance placement opportunities.

TRANSFER INFORMATION
This degree is designed for students planning to enter their chosen career upon graduation. Often only selected credits are considered transferrable to public or private baccalaureate institutions.

PROGRAM REQUIREMENTS
Foundational Skills

Communication
- BA 214 Business Communications 3-4
- or SP 111 Fundamentals of Public Speaking
- or WR 122 Argument, Research and Multimodal Composition 3-4
- or WR 227 Technical Writing
- WR 121 Academic Composition 4

Mathematics
- MTH 085 Technical Math I (or higher) 3-4
- or BA 104 Business Math

Human Relations
- Human Relations approved course 3-4
Program Descriptions

General Education Requirements
Choose two courses from the following list and/or from the larger Discipline Studies list (except CS/CIS prefix courses):

- BA 101  Introduction to Business 4
- BA 111  Applied Accounting I 3
- BA 112  Applied Accounting II 3
- BA 113  Applied Accounting III 3
- BA 177  Payroll Accounting 3
- BA 178  Customer Service 3
- BA 203  Global Business 3
- BA 206  Management Fundamentals I 4
- BA 207  Management Fundamentals II 4
- BA 211  Financial Accounting I 4
- BA 212  Financial Accounting II 4
- BA 213  Managerial Accounting 4
- BA 217  Accounting Fundamentals 3
- BA 218  Personal Finance 3
- BA 220  Business Analysis and Budgeting 4
- BA 222  Business Finance 3
- BA 223  Marketing Principles I 4
- BA 224  Human Resources Management 4
- BA 226  Business Law I 4
- BA 228  Computer Accounting Applications 3
- BA 229  QuickBooks 3
- BA 239  Marketing Principles II 4
- BA 249  Retailing 4
- BA 250  Entrepreneurship 4
- BA 286  Managing Business Processes 4

Foundation Courses
- CIS 120  Computer Concepts 4
- CIS 122  Introduction to Programming 4
- CIS 131  Software Applications 4
- CIS 135DB  Database Theory/SQL 4
- CIS 140  A+ Essentials I 4
- CIS 145  A+ Essentials II 4
- BA 178  Internet in Depth 4
- BA 179  Networking Essentials 4
- CIS 195  Web Development I 4
- CIS 244  Information System Analysis 4
- CIS 279WC  Windows Client 4
- CIS 297  CIS Professional Capstone 4

GENERAL CIS AAS DEGREE (WITH NO OPTION)
Select a minimum of 27 credits with a CIS or CS prefix numbered 100 or higher. This choice provides the greatest flexibility in completing degree requirements.

For a CIS AAS degree with a specific option, select a minimum of 27 credits from one of the following four CIS options.

COMPUTER AIDED DRAFTING OPTION (28 CREDITS)
Choose a minimum of 28 credits from:
- CIS 125A1  AutoCAD 1 4
- CIS 125A2  AutoCAD 2 4
- CIS 135A1  AutoDESK Revit 1 4
- CIS 135A2  AutoDESK Revit 2 4
- CIS 135C1  AutoCAD Civil 3D 4
- CIS 135S1  Solidworks 1 4
- CIS 135S2  Solidworks 2 4

DESKTOP SUPPORT OPTION (27 CREDITS)
Choose a minimum of 27 credits from:
- BA 101  Introduction to Business 4
- BA 178  Customer Service 3
- BA 223  Marketing Principles I 4
- CIS 125A  Access 4
- CIS 125E  Excel 4
- CIS 125G  Photoshop 4
- CIS 197  CMS Web Development WordPress 4
- CIS 235  IT for Business 4
- CIS 280  Co-op Work Experience CIS 1-3
- CIS 295  Web Development II 4

NETWORKING OPTION (27 CREDITS)
Choose a minimum of 27 credits from:
- CIS 151C  Cisco Introduction to Networks 4
- CIS 152C  Cisco Routing and Switching 4
- CIS 154C  Cisco Scaling and Connecting Networks 4
- CIS 279L  Linux+ 4
- CIS 279SC  Windows Server Configuration 4
- CIS 279SE  Security+ 4
- CIS 279SM  Windows Server Management 4
- CIS 279SS  Windows Server Services 4
- CIS 280  Co-op Work Experience CIS 1-3
- CIS 284  CCNA Security 4
- CIS 284EH  Ethical Hacking 4

WEB DEVELOPMENT/DATABASE OPTION (27 CREDITS)
Choose a minimum of 27 credits from:
- CIS 125G  Photoshop 4
- CIS 125I  Adobe Illustrator 4
- CIS 125WA  Web Animation 4
- CIS 133JS  Introduction to JavaScript 4
- CIS 133P  Introduction to PHP 4
- CIS 197  CMS Web Development WordPress 4
- CIS 233P  Web Programming 4
- CIS 280  Co-op Work Experience CIS 1-3
- CIS 295  Web Development II 4