

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, draftsman, 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 an 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	
or WR 227	Technical Writing	
WR 121	Academic Composition	4

Mathematics

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

Human Relations

Human Relations approved course	3-4
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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
CIS 178	Internet in Depth	4
CIS 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
or CIS 125V	Visio	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
or 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