Computer Information Systems

With the continual development and use of computers in business and industry, growing need continues for personnel proficient in business programming, networking, equipment repair, software applications, and cybersecurity, as well as computer operations. To address these skills, the Computer Science Department offers an Associate of Applied Science (AAS) Networking Degree, an Associate of Science transfer degree (AS), an Associate of Applied Science Degree in Cybersecurity, and five workforce certificate programs.

The Associate of Science (AS) degree is designed to prepare students for transfer to a four-year university as a Computer Science or Computer Information Systems major. The program will provide students with a background in basic academic areas such as mathematics and the sciences, as well as introductory work in the computer areas of logic design, programming concepts, and programming languages.

The department offers a certificate in Computer Information Systems that provides training for careers in database support, software applications, and computer operations.

Additionally, an Associate of Applied Science Networking degree is designed to prepare students to perform tasks in network technology relating to network management, technical support, hardware/software installation, security servers, and equipment repair. Network and A+ certification training is available.

The program graduate will be able to assemble computers based on customer requirements, install network wiring and interfaces at customer sites, install and debug network software, and maintain network hardware and software.

The Cybersecurity program offers both a certificate and an Associate of Applied Science in Cybersecurity. Graduates will have the ability to conduct risk and vulnerablility assessments of existing and proposed networked systems, understand cyber defense and attack methods, demonstrate techniques to design a secure network, and troubleshoot an information security system.

Associate of Science in Computer Science (60 Semester Credit Hours)

Suggested Course of Study for University Transfer Students

First Semester - 15 SCH	Second Semester - 15 SCH
COSC 1301 EDUC/PSYC 1300 ENGL 1301 HIST 1301 MATH 1314	DRAM 1310 ENGL 1302 HIST 1302 MATH 2312 SPCH 1321

Third Semester - 17 SCH	Fourth Semester - 13 SCH
COSC 1336 MATH 2413 ECON 2302 GOVT 2305 PHYS 2425	COSC 1337 COMM 1307 GOVT 2306 PHYS 2426

CERTIFICATE IN BUSINESS COMPUTER APPLICATIONS
(42 Semester Credit Hours)
First Semester (15 SCH)
ACNT 1303 ....Introduction to Accounting I
ITSC 1305 ....Introduction to PC Operating Systems
ITSC 1309 ....Integrated Software Applications I
ITSW 1304 .... Introduction to Spreadsheets
POFT 1321.. Business Math
Second Semester (15 SCH)
ACNT 1311...................................Introduction to Computerized Accounting
IMED 1316 ....Web Design I
ITSC 1321 ....Intermediate PC Operating Systems
ITSW 1307 ....Introduction to Database
ITSW 2334 .... Advanced Spreadsheets
Third Semester (12 SCH)
ITSC 1364 .... Practicum - Computer and Information Sciences, General
ITSC 2321 ....Integrated Software Applications II
ITSW 1310 ....Introduction to Presentation Graphics Software
POFT 2312.................................Business Correspondence & Communication

Associate of Applied Science in Networking (60 Semester Credit Hours)

First Semester - 15 SCH	Second Semester - 15 SCH
PSYC 1300	COSC 1301
DRAM 1310	IMED 1316
ITNW 1325	ITNW 1351
ITSC 1305	ITSC 1321
ITSC 1325	MATH 1332

Third Semester - 15 SCH	Fourth Semester - 15 SCH
ENGL 1301	ITSW 1307
ITNW 1354	ITNW 2305
ITSC 2339	ITSW 2334
ITNW 2313	ITSC 1364
ITSW 1304	ITSY 1342

CERTIFICATE IN COMPUTER SUPPORT TECH - A+ (30 Semester Credit Hours)
First Semester (15 SCH)
ITSC 1305 ....Introduction to PC Operating Systems
ITSC 1325 ....Personal Computer Hardware
ITNW 1325...................................Fundamentals of Networking Technologies
ITNW 2313... Networking Hardware
ITSC 2339 ....Personal Computer Help Desk Support
Second Semester (15 SCH)
ITNW 1351...Fundamentals of Wireless LANs

ITNW 1354..Implementing and Supporting Servers
ITNW 2305..Network Administration
ITSC 1364 .... Practicum - Computer and Information Systems, General*
ITSY 1342..Information Technology Security
*Requires Instructor Permission

CERTIFICATE IN COMPUTER NETWORK TECH - A+ (42 Semester Credit Hours)
First Semester (12 SCH)
ITNW 1325...................................Fundamentals of Networking Technologies
ITSC 1305 ....Introduction to PC Operating Systems
ITSC 1325 ....Personal Computer Hardware
ITSW 1304 .... Introduction to Spreadsheets
Second Semester (18 SCH)
IMED 1316 ....Web Design I
ITNW 1351.. Fundamentals of Wireless LANs
ITNW 2305..Network Administration
ITSC 1321 .... Intermediate PC Operating Systems
ITSY 1342..Information Technology Security
ITSW 2334 .... Advanced Spreadsheets
Third Semester (12 SCH)
ITNW 1354..Implementing and Supporting Servers
ITNW 2313... Networking Hardware
ITSC 1364 .... Practicum - Computer and Information Systems, General*
ITSC 2339 ....Personal Computer Help Desk Support
*Requires Instructor Permission

CERTIFICATE IN CISCO/C-TECH (45 Semester Credit Hours)
First Semester (12 SCH)
COSC 1301 ....Introduction to Computing
ITCC 1314 ....CCNA 1: Introduction to Networks
ITSC 1305 ....Introduction to PC Operating Systems
ITSC 1325 ....Personal Computer Hardware
Second Semester (12 SCH)
ITCC 1344 .... CCNA 2: Switching, Routing, and Wireless Essentials
IMED 1316 ....Web Design I
ITSC 1321 .... Intermediate PC Operating Systems
ITNW 1351.. Fundamentals of Wireless LANs
Third Semester (12 SCH)
ITNW 2313... Networking Hardware
ITSC 2339 ....Personal Computer Help Desk Support
ITSW 1304 .... Introduction to Spreadsheets
ITCC 2320 ....CCNA 3: Enterprise Networking, Security, and Automation
Fourth Semester (9 SCH)
ITNW 2305..Network Administration
ITSY 1342..Information Technology Security
ITSW 2334 .... Advanced Spreadsheets

Associate of Applied Science in Cybersecurity* (60 Semester Credit Hours)

First Semester - 15 SCH	Second Semester - 15 SCH
COSC 1301 ITCC 1314 ITSC 1305 ITSY 1300 ENGL 1301	ITCC 1344 ITSY 1342 ITNW 1354 ITNW 2305 MATH 1332

Third Semester - 15 SCH	Fourth Semester - 15 SCH
ITSY 2330 ITSY 2300 ITSY 2301 ITSC 1325 DRAM 1310	ITSY 2343 ITSY 2342 ITSY 2345 GAME 1301 ECON 2302

CERTIFICATE IN CYBERSECURITY* (48 Semester Credit Hours)
First Semester (12 SCH)
COSC 1301 ....Introduction to Computing
ITCC 1314 ....CCNA 1: Introduction to Networks
ITSC 1305 ....Introduction to PC Operating Systems
ITSY 1300..Fundamentals of Information Security
Second Semester (12 SCH)
ITCC 1344 .... CCNA 2: Switching, Routing, and Wireless Essentials
ITSY 1342..Information Technology Security
ITNW 1354..Implementing and Supporting Servers
ITNW 2305..Network Administration
Third Semester (12 SCH)
ITSY 2330..Intrusion Detection
ITSY 2300...Operating System Security
ITSY 2301...Firewalls and Network Security
ITSC 1325 ....Personal Computer Hardware
Fourth Semester (12 SCH)
ITSY 2343...Computer System Forensics
ITSY 2342.. Incident Response & Handling
ITSY 2345.. Network Defense and Countermeasures
GAME 1301 .... Computer Ethics