

2018-2019

SOUTHEAST
COMMUNITY
COLLEGE
NEBRASKA

COMPUTER INFORMATION TECHNOLOGY

Associate of
Applied Science
Degree

Certificate

LINCOLN CAMPUS (SOME COURSES ONLINE)

www.southeast.edu/ComputerInformation



Prepare for a rewarding career in a fast-growing industry.



NETWORKING SYSTEMS MANAGEMENT

Students learn . . .

- Hardware installation
- Computer communications and network protocols
- Network operating systems
- Cisco networking
- Setup and use of virtual machines

Network managers . . .

- Research and recommend hardware and software purchases
- Set up, monitor and support network systems
- Troubleshoot computer and network problems

425

Jobs were posted for CIT students and alumni on the SCC Career Services website in the last year!

Graduate Earnings

Recent graduates report an average starting wage of **\$21.35** per hour.



NETWORK SECURITY

Students learn . . .

- Computer communications and network operating systems
- Cisco networking and security
- Attack methods and defense techniques
- Security software and devices

Security technicians . . .

- Configure and maintain secure networks and data systems
- Perform security auditing and penetration testing
- Respond to security incidents

Types of jobs available:

- Applications Developer
- Cyber Security Technician
- Help Desk Specialist
- IT Security Specialist
- IT Support Technician
- Network Manager
- Network Technician
- Programmer/Analyst
- Software Developer
- Web Developer

Highlights

- Great facilities for hands-on training
- Skilled, experienced instructors
- Great career opportunities for qualified graduates

Flexible Schedules

- New students are accepted every term
- Day, evening and online courses
- Full-time and part-time schedules



COMPUTER AND NETWORK SUPPORT

Students learn . . .

- Customer service skills
- Problem-solving techniques
- Hardware troubleshooting
- Software and operating systems
- Help desk structure and operation
- Basic networking

Support specialists . . .

- Handle customer requests and solve problems
- Install and support computer hardware and software
- Troubleshoot computer problems
- Prepare training materials



APPLICATIONS DEVELOPMENT FOR PC AND WEB PLATFORMS

Students learn . . .

- Coding in C# and Java
- Web development using HTML, CSS, JavaScript, ASP, and PHP
- Database design and SQL
- Mobile apps development
- Teaming and project development

These developers . . .

- Use logic to plan and code computer applications
- Test and implement computer programs
- Develop and maintain websites
- Design and manage databases



APPLICATIONS DEVELOPMENT FOR INTEGRATED PLATFORMS

Students learn . . .

- Coding in Java, C#, and COBOL
- Web development using HTML, JavaScript, and JSP
- Various database platforms and SQL
- Techniques to integrate PC, Web and mainframe applications
- Procedures to implement a small-scale computerized business system

These developers . . .

- Design and code applications using different computer platforms
- Document, test and implement code
- Develop Web front-end applications to interact with back-end systems
- Maintain existing computer applications

For more information contact:

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Cit	IT careers are available in every area of the economy. Health, education, business, transportation, and manufacturing all rely on computers and the people who make them work. There is a demand for people with IT skills in organizations of all sizes.
learn It	Students in the CIT program can complete an Associate of Applied Science degree leading to careers in networking, security and support or software and Web development.
do it	A two-year degree is one of the quickest routes to a rewarding, professional career in IT!

General Education Requirements:

See the General Education pages online for a complete list.

Oral Communications (Choose ONE):	4.5
SPCH1090 Fundamentals of Human Communication	
SPCH1110 Public Speaking	
SPCH2810 Business & Professional Communication	
Written Communications	4.5
ENGL1010 English Composition I	
Analytical, Quantitative, and Scientific Reasoning (Choose ONE):	4.5
MATH1040 Business Math	
MATH1050 Thinking Mathematically	
MATH1100 Intermediate Algebra	
Complete two additional courses from the three areas below with no courses from the same area:	<u>9.0</u>
Critical Thinking & Problem Solving	
Global Awareness and Citizenship	
Career and Life Skills (Excluding-BSAD1010)	
	22.5 hours

A.A.S. DEGREE REQUIREMENTS:

To earn an A.A.S. degree, students must complete a group of core CIT requirements, specific courses for one of the degree focus options (integrated platforms software development, PC & Web software development, network management, network security, or computer support), and the general education requirements. A grade of C or higher is required in all prerequisite courses.

Core CIT Requirements

Course #	Course title	Credit hrs.
INFO1121	Microsoft Word & PowerPoint	1.5
INFO1131	Microsoft Excel	1.5
INFO1151	Information Technology Fundamentals	4.5
INFO1161	Windows Operating Systems	4.5
INFO1211	Microsoft Access	3.0
INFO1214	Program Design & Problem Solving	4.5
INFO1311	Database Concepts	3.0
INFO1381	Data Communications & Networking	4.5
INFO2531	Linux Operating System	2.0
INFO2611	CIT Practicum or	
OFFT2000	Employment Techniques	3.0
		32.0 hours

Applications Development Focus:

Integrated Platforms Option Requirements

Course #	Course title	Credit hrs.
INFO1221	MVS Environment	2.0
INFO1314	Java	4.5
INFO1334	C#.NET	4.5
INFO1414	Advanced Java	4.5
INFO1337	IBM i Environment	2.0
INFO1425	JavaScript & jQuery	3.0
INFO1428	COBOL	4.5
INFO1431	Web Page Fundamentals	3.0
INFO1434	Advanced C#.NET	4.5
INFO1515	Database Administration	3.0
INFO2514	Java Server Programming	4.5
INFO2528	Advanced COBOL	4.5
INFO2558	System Analysis & Design	3.0
INFO2638	Integrated Platforms Capstone	4.5
INFO2678	DB2 & SQL	3.0

Select a minimum of 5.5 credits of technical electives from the following:

INFO1511	Advanced Database Concepts	3.0
INFO1514	Mobile Device Programming	4.5
INFO1522	Web Layout	3.0
INFO2533	Microsoft SharePoint for End Users	2.0
INFO2534	ASP.NET Using C#	4.5
INFO2574	Advanced Programming Using VB	4.5

60.5 hours

PC & Web Platforms Option Requirements

Course #	Course title	Credit hrs.
INFO1314	Java	4.5
INFO1334	C#.NET	4.5
INFO1414	Advanced Java	4.5
INFO1425	JavaScript & jQuery	3.0
INFO1431	Web Page Fundamentals	3.0
INFO1434	Advanced C#.NET	4.5
INFO1441	Advanced Windows Operating System	3.0
INFO1511	Advanced Database Concepts	3.0
INFO1514	Mobile Device Programming	4.5
INFO1515	Database Administration	3.0
INFO1522	Web Layout	3.0
INFO1525	Web Server Scripting	4.5
INFO2534	ASP.NET Using C#	4.5
INFO2544	Object-Oriented Analysis & Design	3.0
INFO2644	PC & Web Platforms Capstone	4.5

Select a minimum of 3.5 credits of technical electives from the following:

INFO1221	MVS Environment	2.0
INFO1337	IBM i Environment	2.0
INFO1428	COBOL	4.5
INFO2514	Java Server Programming	4.5
INFO2533	Microsoft SharePoint for End Users	2.0
INFO2574	Advanced Programming Using VB	4.5

60.5 hours

Networking, Security & Support Focus:

Network Management Option Requirements

INFO1391	TCP/IP	3.0
INFO1441	Advanced Windows Operating System	3.0
INFO1456	Hardware Installation & Troubleshooting	4.5
INFO1491	Network Security Fundamentals	3.0
INFO1575	Windows PowerShell Fundamentals	2.0
INFO1585	Virtualization Management	2.0
INFO2543	Workplace Communication Skills	2.0
INFO2585	Windows Server Administration	4.5
INFO2631	Linux Network Administration	4.5
INFO2695	Advanced Windows Server	3.0
INFO2697	Networking Capstone	3.0
ELEC2760	Introduction to Networks	4.5
ELEC2761	Routing and Switching Essentials	4.5
ELEC2860	Scaling Networks	4.5
ELEC2861	Connecting & Securing Networks	4.5

Select a minimum of 8.0 credits of technical electives from the following:

INFO1463	Advanced Hardware Troubleshooting	3.0
INFO1541	Social & Ethical Issues in Information Technology	2.0
INFO2523	Support Techniques	4.5
INFO2533	Microsoft SharePoint for End Users	2.0
INFO2581	Network Security Systems	4.5
INFO2670	Desktop Support	4.5

60.5 hours

Estimated Expenses

Nebraska Resident tuition/fee rate is \$69.50 per credit hour. Out-of-state tuition/fee rate is \$83.50 per credit hour. Graduation fee is \$25.

Housing is available at Beatrice and Milford campuses only. Tuition, books and fees are dependent upon classes taken each quarter.

Students should plan a budget that includes room, meals, clothing, laundry, medical care, recreation and entertainment, transportation, insurance, etc.

A.A.S. DEGREE		CERTIFICATE	
Tuition And Fees	\$7,993	Tuition And Fees	\$2,537
Books	3400	Books	1400
Total	\$11,393	Total	\$3,937

Network Security Option Requirements

Course #	Course title	Credit hrs.
INFO1391	TCP/IP	3.0
INFO1441	Advanced Windows Operating System	3.0
INFO1456	Hardware Installation & Troubleshooting	4.5
INFO1491	Network Security Fundamentals	3.0
INFO1575	Windows PowerShell Fundamentals	2.0
INFO2581	Network Security Systems	4.5
INFO2582	Advanced Network Security	4.5
INFO2585	Windows Server Administration	4.5
INFO2586	Security Operations & Ethics	3.0
INFO2596	Computer & Digital Forensics	3.0
INFO2631	Linux Network Administration	4.5
INFO2691	Enterprise Security Capstone	3.0
ELEC2760	Introduction to Networks	4.5
ELEC2761	Routing & Switching Essentials	4.5
ELEC2900	CCNA Security	4.5

Select a minimum of 4.5 credits of technical electives from the following:

INFO1463	Advanced Hardware Troubleshooting	3.0
INFO1541	Social & Ethical Issues in Information Technology	2.0
INFO1585	Virtualization Management	2.0
INFO2695	Advanced Windows Server	3.0
ELEC2860	Scaling Networks	4.5
ELEC2861	Connecting & Securing Networks	4.5

60.5 hours

Computer Support Option Requirements

Course #	Course title	Credit hrs.
INFO1391	TCP/IP	3.0
INFO1431	Web Page Fundamentals	3.0
INFO1441	Advanced Windows Operating System	3.0
INFO1433	Microsoft Outlook	2.0
INFO1443	Help Desk Concepts	2.0
INFO1456	Hardware Installation & Troubleshooting	4.5
INFO1463	Advanced Hardware Troubleshooting	3.0
INFO1491	Network Security Fundamentals	3.0
INFO1493	Advanced Microsoft Access	3.0
INFO1511	Advanced Database Concepts	3.0
INFO2523	Support Techniques	4.5
INFO2533	Microsoft SharePoint for End Users	2.0
INFO2543	Workplace Communication Skills	2.0
INFO2585	Windows Server Administration	4.5
INFO2670	Desktop Support	4.5
ENGL2560	Technical Writing or	
ENGL1110	Business Communications	4.5

Select a minimum of 9.0 credits of technical electives from the following:

INFO1515	Database Administration	3.0
INFO1522	Web Layout	3.0
INFO1541	Social & Ethical Issues in Information Technology	2.0
INFO1575	Windows PowerShell Fundamentals	2.0
INFO1585	Virtualization Management	2.0
INFO2631	Linux Network Administration	4.5
INFO2695	Advanced Windows Server	3.0
ELEC2760	Introduction to Networks	4.5
ELEC2761	Routing & Switching Essentials	4.5

60.5 hours

CERTIFICATE REQUIREMENTS:

The certificate is available for anyone wanting to add basic computer training to already existing skills, primarily for employment outside the IT field. A grade of C or higher is required in all prerequisite courses.

Course #	Course title	Credit hrs.
INFO1121	Microsoft Word & PowerPoint	1.5
INFO1131	Microsoft Excel	1.5
INFO1151	Information Technology Fundamentals	4.5
INFO1161	Windows Operating Systems	4.5
INFO1211	Microsoft Access	3.0
INFO1214	Program Design & Problem Solving	4.5
INFO1311	Database Concepts	3.0
INFO1381	Data Communications & Networking	4.5
INFO1431	Web Page Fundamentals or	
INFO1441	Advanced Windows Operating System	3.0
INFO2531	Linux Operating System	2.0
MATH1040	Business Math (or higher level MATH class)	4.5
		36.5 hours