



# COMPUTER INFORMATION TECHNOLOGY

Associate of Applied Science Degree  
Certificate

LINCOLN CAMPUS (SOME COURSES ONLINE)

[www.southeast.edu/ComputerInformation](http://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
- Setup, monitor and support network systems
- Troubleshoot computer and network problems



## 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



## 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



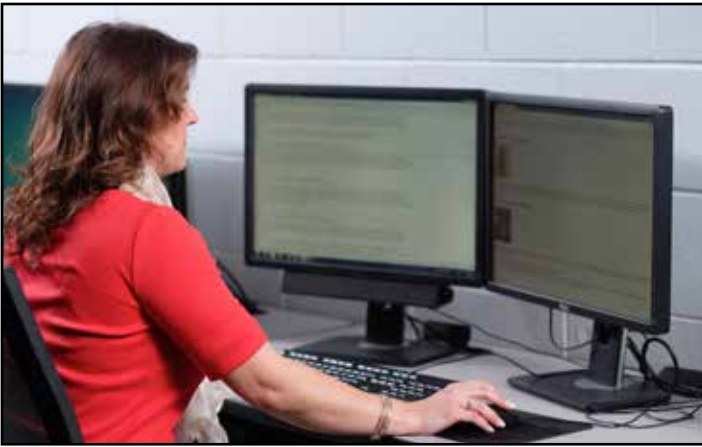
## APPLICATIONS DEVELOPMENT FOR INTEGRATED PLATFORMS >>>>

### 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



**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



## 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

## General Education Requirements

Oral Communications	4.5
(Choose ONE):	
SPCH1090	Fundamentals of Human Communication
SPCH1110	Public Speaking
SPCH2810	Business & Professional Communication
Written Communications	4.5
ENGL1010	English Composition I
Mathematics	4.5
(Choose ONE)	
MATH1040	Business Math
MATH1050	Thinking Mathematically
MATH1080	Algebra & Trigonometry
MATH1100	Intermediate Algebra
A higher level MATH class can be taken based on math placement scores.	
Social Science	4.5
(Choose ONE)	
ANTH1020	Introduction to Cultural Anthropology
ANTH1120	General Anthropology
PSYC1250	Interpersonal Relations
PSYC1810	Introduction to Psychology
SOCI1010	Introduction to Sociology
SOCI1020	Diversity in Society
SOCI2150	Issues in Unity and Diversity
Humanities	4.5
(Choose ONE from the Humanities list of General Education Requirements.)	
22.5 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





# 609

Full-time jobs were posted for CIT students and alumni on the SCC Placement website in the last year!

## Graduate Earnings

Recent graduates report an average starting wage of **\$20.85** per hour.



**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!

### 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 quarter
- Day, evening and online courses
- Full-time and part-time schedules

### For more information contact:

Linda Bettinger, Program Co-chair  
402-437-2490, 800-642-4075 ext. 2490, lbettinger@southeast.edu

Jo Schuster, Program Co-chair  
402-437-2492, 800-642-4075 ext. 2492, jschuster@southeast.edu

or the College Admissions Office  
Lincoln 402-437-2600, 800-642-4075 ext. 2600

To determine overall costs, students should plan a budget that includes the above expenses as well as room, meals, clothing, laundry, medical care, recreation and entertainment, transportation, insurance, etc. Nebraska Resident tuition rate is \$65.50 per credit hour. Out-of-state tuition rate is \$79.50 per credit hour. Student fee is \$2 per credit hour. Graduation fee is \$25.

Housing is available at Beatrice and Milford campuses only. Quarterly tuition, books and fees are dependent upon classes taken.

#### Estimated Expenses

##### A.A.S degree

##### FIRST QUARTER

Tuition And Fees	\$1,114
Books	550
Tools/Supplies	30
<b>Total</b>	<b>\$1,694</b>

##### SECOND QUARTER

Tuition And Fees	\$1,114
Books	450
Tools/Supplies	30
<b>Total</b>	<b>\$1,594</b>

##### THIRD QUARTER

Tuition And Fees	\$945
Books	550
Tools/Supplies	10
<b>Total</b>	<b>\$1,505</b>

##### FOURTH QUARTER

Tuition And Fees	\$945
Books	450
Tools/Supplies	30
<b>Total</b>	<b>\$1,425</b>

##### FIFTH QUARTER

Tuition And Fees	\$912
Books	400
Tools/Supplies	10
<b>Total</b>	<b>\$1,322</b>

##### SIXTH QUARTER

Tuition And Fees	\$912
Books	450
Tools/Supplies	10
<b>Total</b>	<b>\$1,372</b>

##### SEVENTH QUARTER

Tuition And Fees	\$912
Books	400
Tools/Supplies	10
<b>Total</b>	<b>\$1,322</b>

##### EIGHTH QUARTER

Tuition And Fees	\$912
Books	250
Tools/Supplies	10
<b>Total</b>	<b>\$1,172</b>

##### Total For AAS Degree \$11,406

NOTE: Book and supply costs are estimates due to different career options.

##### Certificate (36.5 credits)

Tuition And Fees	\$1,464
Books	1200
<b>Total</b>	<b>\$3,664</b>

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