

# COMPUTER NETWORKING

Curriculum Guide for Academic Year 2014-2015

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Students planning to **transfer** to a four-year college or university should refer to the ASSIST web site at [www.assist.org](http://www.assist.org) and **consult a counselor** before beginning a program of study. Please call (562)938-4561 (LAC) or (562) 938-3920 (PCC) to schedule a counseling appointment. Students may also wish to visit the Transfer Center on either campus.

Program of study leading to: <b>Associate in Science (A.S.) Degree</b>					
<b>COMPUTER NETWORKING REQUIRED COURSES:</b>			<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
	BCOM 15 <b>OR</b>	Business Communications <b>OR</b>	<b>3 OR</b>		
†	BCOM 20	Business Writing	3		
	COSA 50	Introduction to IT Concepts & Applications	4		
	COSN 5	Computer Technician Hardware Basics	4		
	COSN 10	Networking Fundamentals	4		
	COSN 200	Wireless Communications	2		
	COSP 36	System Analysis and Design	4		
	COSS 271	Networking Security Fundamentals	3		
		<b>Subtotal Units</b>	<b>24</b>		
<b>IN ADDITION, complete ONE of the following tracks:</b>					
<b>UNIX/LINUX TRACK</b>					
<b>REQUIRED COURSES</b>			<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
	COSN 205	Unix/Linux Fundamentals	4		
	COSN 210	LINUX Server Administration	4		
	COSN 215	LINUX Networking and Security	4		
		<b>Subtotal Units</b>	<b>12</b>		
		<b>UNIX/LINUX TRACK TOTAL UNITS</b>	<b>36</b>		
<b>MICROSOFT TRACK</b>					
<b>REQUIRED COURSES</b>			<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
	COSN 225	Windows OS Admin Fundamentals	3		
	COSN 230	Windows Server Admin Fundamentals	4		
		<b>Subtotal Units</b>	<b>7</b>		
		<b>MICROSOFT TRACK TOTAL UNITS</b>	<b>31</b>		
<b>CYBER SECURITY TRACK</b>					
<b>REQUIRED COURSES</b>			<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
	COSS 272	Computer Forensics and Investigation	4		
	COSS 273	Ethical Hacking and Countermeasures	4		
		<b>Subtotal Units</b>	<b>8</b>		
		<b>TOTAL UNITS</b>	<b>32</b>		

*Associate Degree requirements continued on next page.*



Program of study leading to:  
**Certificates of Accomplishment**

**Certificate: Microsoft Windows Networking Technician 4086**

<b>REQUIRED COURSES</b>		<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
COSN 10	Networking Fundamentals	4		
COSN 200	Wireless Communications	2		
COSN 225	Windows OS Administration Fundamentals	3		
COSN 230	Windows Server Administration Fundamentals	3		
<b>TOTAL UNITS</b>		<b>12</b>		

**Certificate: Cyber Security 4106**

<b>REQUIRED COURSES</b>		<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
COSN 10	Networking Fundamentals	4		
COSN 200	Wireless Communications	2		
COSS 271	Network Security Fundamentals	4		
COSS 272	Computer Forensics and Investigation	3		
COSS 273	Ethical Hacking and Countermeasures	4		
<b>TOTAL UNITS</b>		<b>17</b>		

**Certificate: Computer Hardware Technician 4126**

<b>REQUIRED COURSES</b>		<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
COSN 3	Operating Systems: Software and Hardware	4		
COSN 5	Computer Technician Hardware Basics	4		
<b>TOTAL UNITS</b>		<b>8</b>		

**Certificate: Business Digital Literacy 4130**

<b>REQUIRED COURSES</b>		<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
COSA 1	Computer Information Competency	1		
<b>TOTAL UNITS</b>		<b>1</b>		

**Certificate: Computer Network Technician 4125**

<b>REQUIRED COURSES</b>		<b>UNITS</b>	<b>In Progress</b>	<b>Completed Grade</b>
COSN 10	Network Fundamentals	4		
COSN 200	Wireless Communications	2		
<b>TOTAL UNITS</b>		<b>6</b>		

For graduation with a **Certificate of Accomplishment**:

1. Complete the above required courses with a minimum grade of "C", or "P" if course is graded on a P/NP basis.
2. Fifty percent (50%) or more of the required units must be completed in residence at LBCC.
3. Complete and submit the certificate application form to the Admissions and Records office during your final semester of course work. These forms are available in the Admissions and Records office, or online at <http://admissions.lbcc.edu>.

**Career Opportunities**

This **Associate Degree or Certificate of Achievement** is a two-year program leading to the Associate in Science (A.S.) degree. It is designed to prepare students for employment in a variety of computer related fields. Students wishing a bachelor's degree (transfer program) should meet with a counselor to discuss transferability of courses.

## **Program Mission and Outcomes**

The mission of the Computer Networking curriculum is to skillfully train students by providing strategically designed courses to meet their academia, transferable, and career needs.

### **Outcomes:**

- Configure and install a firewall.
- Implement a secured translation for service hosting through a firewall.

## **Legend**

† This course has a prerequisite. Prerequisite courses must be complete with at least a “C” or “P” grade. Refer to the General Catalog (<http://www.lbcc.edu/cat/index.html>), the Schedule of Classes (<http://schedule.lbcc.edu/>), or the online Credit Course Outline (<http://wdb-asir.lbcc.edu/coursecurriculum/coursedetails/>) for specific prerequisite information.