

# Computer Network Systems Security

## Associate in Applied Science Degree

### Why CNSS?

According to the US Government CISA (Cybersecurity and Infrastructure Security Agency) webpage, "Cybersecurity is the art of protecting networks, devices, and data from unauthorized access or criminal use and the practice of ensuring confidentiality, integrity, and availability of information." If you are interested in working in Cybersecurity, you must master computer systems and operating systems (CompTIA A+ skills), networking skills (CompTIA Network+ skills) and network and user administration skills (CompTIA Security+ skills) in order to be capable of ensuring confidentiality, integrity, and availability of information. Those are exactly the skills you will learn in Computer Network Systems and Security (CNSS)!

### Why Bay College?

The [Computer Network Systems Security](#) program at Bay College has recently been accepted as a CompTIA Authorized Academy. Students will now receive the education and hands on training as well as receive a free CompTIA certification voucher in several classes. Graduating with both a degree and respected industry certification will give our graduates a huge advantage in seeking employment.

### Beyond Bay College

Students interested in transferring to a four-year institution to obtain a bachelor's degree or higher may find opportunities in the following areas of study:

- **PC Bench Technician**
- **Routed Network Technician**
- **Wireless Network Technician**
- **Security Specialist**
- **Computer Forensics Specialist**
- **Network Administrator**
- **Web Server/Database Administrator**
- **Management Information Specialist**
- **Information Technology**

### Career Opportunities

This intense "hands-on" program prepares graduates for employment in information technology fields ranging from:

- **PC Bench Technician**
- **Routed Network Technician**
- **Wireless Network Technician**
- **Security Specialist**
- **Computer Forensics Specialist**
- **Network Administrator**
- **Web Server/Database Administrator**
- **Management Information Specialist**
- **Information Technology Administrator Positions**

### Contact

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[baycollege.edu](http://baycollege.edu)

# Computer Network Systems & Security, AAS

Award Granted Upon Completion: Associate in Applied Science in Computer Network Systems and Security  
Credits/Contacts Required: 65/67

Major code: 03/324  
CIP Code: 151202

## General Education Requirements (Min. 15 Credits)

Course #	Course Name	Cr
ENGL 101	Rhetoric & Composition	3
BUSN 177	Mathematics of Business	3 or
MATH 105	Intermediate Algebra	4 or
MATH 107	Liberal Arts Mathematics	4
XXXX xxx	Social/Behavioral Science or Humanities Elective	3
XXXX xxx	General Education Electives	5-6 *

## Requirements (Min. 50 Credits)

Course #	Course Name	Cr
CNSS 105	Digital Logic Principles	4
CNSS 130	Introduction to Networks	4
CNSS 150	A plus Computer Maintenance	4
CNSS 220	Network Design	4
CNSS 225	Wireless Systems	4
CNSS 230	Introduction to Unix Using Linux	4
CNSS 231	Advanced Linux System Administration	4
CNSS 250	Windows Networking I	4
CNSS 251	Windows Networking II	4
CNSS 260	Network Security	4
CNSS 272	CNSS Co-op Internship	1-8
XXXX xxx	Approved Electives	7 **

## \*\* Approved Electives (Min. 7 Credits)

Course #	Course Name	Cr
CIS 101	Computer Concepts & Applications	4
CIS 103	Visual Basic	4
CIS 115	Using Microsoft Windows	3
CIS 12x	Microsoft Courses (CIS 120, CIS 121, CIS 122, CIS 123)	1
CIS 220	Java Programming	4
CIS 235	Mobile App Development	3
CNSS 110	Information Security Principles	3
CNSS 115	Cyber Ethics	3
CNSS 245	SQL Server	4
CNSS 262	Web Server Administration	4
CNSS 273	CNSS Co-op Internship	1-8 #
CNSS 274	CNSS Co-op Internship	1-8 #
CNSS 284	CNSS Special Topics	4
CSCI 121	C++ Programming I	3
CSCI 122	C++ Programming II	4
ELEC 170	Digital I Fundamentals	4

## Suggested Sequences Per Semester

### First Semester

Course #	Course Name	Cr/Ct
CNSS 105	Digital Logic Principles	4
CNSS 130	Introduction to Networks	4
CNSS 150	A plus Computer Maintenance	4
ENGL 101	Rhetoric & Composition	3
<b>First Semester Total - Credit(s): 15   Contacts: 17</b>		

### Second Semester

Course #	Course Name	Cr/Ct
CNSS 220	Network Design	4
CNSS 230	Introduction to Unix Using Linux	4
BUSN 177	Mathematics of Business	3 or
MATH 105	Intermediate Algebra	4 or
MATH 107	Liberal Arts Mathematics	4
XXXX xxx	Approved Elective	3/3 **
XXXX xxx	Social & Behavioral Sciences/Humanities Elective	3/3 **
<b>Second Semester Total - Credit(s): 17-18   Contacts: 17-18</b>		

### Third Semester

Course #	Course Name	Cr/Ct
CNSS 231	Advanced Linux System Administration	4
CNSS 250	Windows Networking I	4
CNSS 272	CNSS Co-op Internship	1-8 (3 cr minimum)
XXXX xxx	Approved Elective	4/4 **
XXXX xxx	General Education Elective	3/3 *
<b>Third Semester Total - Credit(s): 18   Contacts: 18</b>		

### Fourth Semester

Course #	Course Name	Cr/Ct
CNSS 225	Wireless Systems	4
CNSS 251	Windows Networking II	4
CNSS 260	Network Security	4
XXXX xxx	General Education Elective	3/3 *
<b>Fourth Semester Total - Credit(s): 15   Contacts: 15</b>		

## Note(s)

# Internships and Co-ops require that the student pass a criminal background check.

\* Additional courses as needed to reach 15 credits and 5 courses.