

Network Administration and Security

College of Lake County Grayslake · Vernon Hills · Waukegan · Online

Program Overview

Business Division
Room T102, (847) 543-2041
www.clcillinois.edu/programs/cit

NETWORK ADMINISTRATION AND SECURITY

(Associate in Applied Science) Plan 22CD

To complete an A.A.S., students must meet General Requirements* detailed in the current CLC catalog. Visit www.clcillinois.edu/catalog/ (select Career Programs).

General Education Requirements 15

- AOS 122 Business Mathematics **or**
- MTH 122 College Algebra or
- MTH Elective (higher than MTH 122) 3-4
- CMM 111 Communication Skills **or**
- CMM 121 Fundamentals of Speech **or**
- CMM 128 Interviewing Practices 3
- ENG 121 English Composition I 3
- PSY 121 Introduction to Psychology **or**
- PSY 122 Psychology in Business and Industry 3
- Humanities or Fine Arts Elective*# 3

Required Business Coursework 3

- BUS 121 Introduction to Business 3

Required CIT Coursework 45

- CIT 120 Introduction to Computers 3
- CIT 131 Windows Operating System 3
- CIT 132 Linux Operating System 3
- CIT 134 Programming Concepts using Visual Basic **or**
- CIT 136 Programming Concepts using Java 3
- CIT 150 Introduction to Local Area Networking 3
- CIT 151 LAN Administration **or**
- CIT 230 Linux System Administration . . . 3
- CIT 152 Network Security Fundamentals . . 3
- CIT 155 Introduction to Computer Forensics 3
- CIT 156 Digital Evidence Recovery 3
- CIT 250 Advanced LAN Administration . . 3

- CIT 251 Implementing and Administering Security in Windows 3
- CIT 252 Hardening the Infrastructure . . . 3
- CIT 253 Network Defense and Countermeasures 3
- CIT 256 Advanced Digital Evidence Recovery 3
- ELT 151 PC Hardware Fundamentals 3

Total Hours for A.A.S. Degree 63-64

HUM 127, PHI 122 or PHI 125 recommended.

NETWORK ADMINISTRATION AND SECURITY (Certificate) Plan 22CK

The Network Administration and Security certificate prepares students for careers in designing and administering computer networks. In addition, coursework for this curriculum addresses how to keep networks secure from outside intrusion and procedures on securing evidence if network security has been breached.

- CIT 131 Windows Operating System 3
- CIT 132 Linux Operating System 3
- CIT 150 Introduction to Local Area Networking 3
- CIT 151 LAN Administration **or**
- CIT 230 Linux System Administration . . . 3
- CIT 152 Network Security Fundamentals . . 3
- CIT 155 Introduction to Computer Forensics 3
- CIT 156 Digital Evidence Recovery 3
- CIT 250 Advanced LAN Administration . . 3
- CIT 251 Implementing and Administering Security in Windows 3
- CIT 252 Hardening the Infrastructure . . . 3
- CIT 253 Network Defense and Countermeasures 3
- CIT 256 Advanced Digital Evidence Recovery 3

Total Hours for Certificate 36

Typical Jobs *

- Systems Administrator
- Network Engineer
- Information Technology (IT) Specialist
- Information Technology (IT) Director
- Local Area Network (LAN) Administrator
- Computer Specialist
- Data Security Administrator
- Information Systems Security Analyst
- Computer Security Specialist
- Personal Computer (PC) Analyst
- Computer Systems Technician

Salary Range *

\$37,300 - \$92,200

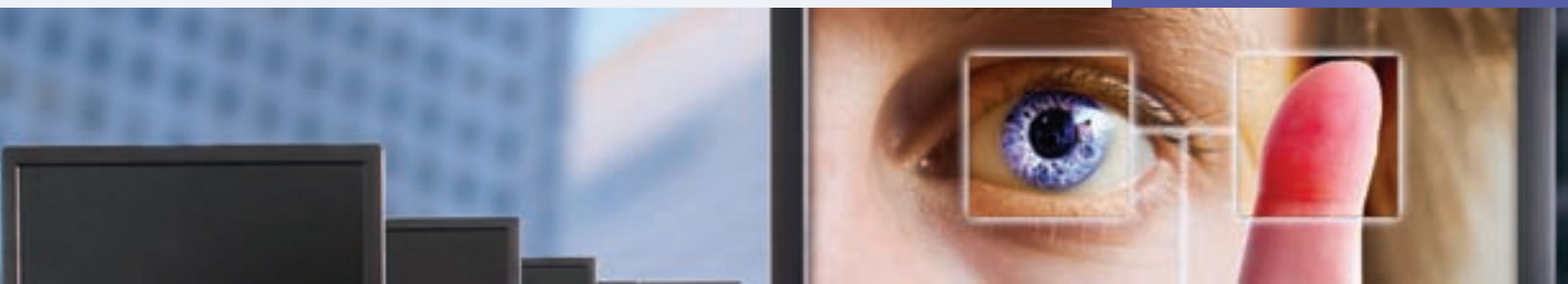
Job Outlook *

Employment of network and computer systems administrators is expected to increase much faster than average.

Computer networks have become an integral part of business, and demand for these workers will increase as firms continue to invest in new technologies.

The information security field is expected to generate many new system administrator jobs over the next decade as firms across all industries place a high priority on safeguarding their data and systems.

* Career information is based on data from the Bureau of Labor Statistics for the Chicagoland area.



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SECURITY ADMINISTRATION (Certificate) Plan 22CV

The Security Administration certificate is designed for students who currently are employed as Network Administrators or have taken courses in Network Administration. Coursework for this certificate addresses how to keep networks secure from outside intrusion and procedures on securing evidence if network security has been breached.

CIT 152	Network Security Fundamentals . . .	3
CIT 155	Introduction to Computer Forensics	3
CIT 156	Digital Evidence Recovery	3
CIT 251	Implementing and Administering Security in Windows	3
CIT 252	Hardening the Infrastructure	3
CIT 253	Network Defense and Countermeasures	3
CIT 256	Advanced Digital Evidence Recovery	3

Total Hours for Certificate 21

Nature of Work

- Install, configure and support an organization's local area network (LAN), wide area network (WAN) and internet system or a segment of a network system.
- Maintain network hardware and software.
- Monitor network to ensure network availability to all system users and perform necessary maintenance to support network availability.
- May supervise other network support and client server specialists and plan, coordinate and implement network security measures.
- Plan, coordinate and implement security measures for information systems to regulate access to computer data files and prevent unauthorized modification, destruction or disclosure of information.

Industry Certifications

These degrees and certifications map to the following industry certifications:

- A+
- Network+
- Security+
- Linux+
- Microsoft Certified Professional (MCP)
- Microsoft Certified Systems Administrator (MCSA) with security specialization
- Computer Forensics Examiner

How to Register

Visit www.clcillinois.edu/credit/register/ for steps on how to register.

Advising Notes

Courses may be taken in any order.

All prerequisites must be met.

1. The CIT A.A.S. degrees are not transferable degrees. However, students who want to transfer someday should take CMM 121, ENG 121, BUS 121, BUS 221, ACC 121, ACC 122, PSY 121, CIT 120 and either MTH 222, MTH 127 or MTH 224. These courses are most likely to transfer even though the degree will not.
2. Courses that meet the Social and Behavioral Science and Humanities electives can be found in the Programs of Instruction and Graduation Requirements section of the CLC Catalog under Career Programs Degree Requirements.

Additional Graduation Requirements

- Constitution requirement (proficiency exam, PSC 121, HST 221, or Illinois high school transcript dated 1953 or later.)
- Cumulative CLC GPA of 2.00 or higher.
- Minimum of 15 of last 30 hours at CLC (for A.A.S. and certificate of 30 hours or more, or half the hours required by the certificate while in attendance at CLC).
- Petition to graduate.

Contact Info

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