CITY COLLEGES
OF CHICAGO

NETWORKING SYSTEMS AND TECHNOLOGY, BASIC CERTIFICATE

College(s): DA, KK, OH, TR, WR

Program Code: 0143

Networking Systems and Technology, Basic Certificate

✓ Future Ready Eligible

Program Requirements

Code	Title	Hours
Required Program Core		
CIS 101	Computer Science 101	3
CIS 111	Computer Operations	3
CIS 116	Operating System I	3
CIS 255	Operating Systems II	3
NET TEC 121	Internetworking I	3
NET TEC 122	Internetworking II	3
Total Hours		**18**

Pathway

This is an **example course sequence** for students interested in earning a degree in Networking Systems and Technology. If this pathway is followed as outlined, you will earn a Basic Certificate (BC) in Networking Systems and Technology. It does not represent a contract, nor does it guarantee course availability.

Semester-by-Semester Program Plan for Full-Time Students

All plans can be modified to fit the needs of part-time students by adding more semesters.

Semester 1		Hours
CIS 101	Computer Science 101	3
CIS 116	Operating System I	3
CIS 111	Computer Operations	3
NET TEC 121	Internetworking I	3
	Hours	12
Semester 2		
CIS 255	Operating Systems II	3
NET TEC 122	Internetworking II	3
	Hours	6
	Total Hours	18

Choose your courses with your College Advisor.

Careers

This program can prepare students for the jobs listed below. Click on each one to learn more, including average earnings, annual job openings, and how much education people in that field have. For additional guidance and resources on career options, current City Colleges students and alumni can contact the Career Services Office (https://www.ccc.edu/departments/Pages/Career-Services.aspx).

Computer User Support Specialists
Job Description

Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, via telephone, or electronically. May provide assistance concerning the use of computer

hardware and software, including printing, installation, word processing, electronic mail, and operating systems.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10th Percentile	$40,255
Median 50th Percentile	$62,296
Senior-Level 90th Percentile	$101,465

Hourly Wages

Entry-Level 10th Percentile	$19
Median 50th Percentile	$30
Senior-Level 90th Percentile	$49

Annual Job Openings

750 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	0.32%
A certificate	32.33%
Some college	1.92%
An Associate degree	13.74%
A Bachelor's degree	47.32%
A Master's or Professional degree	4.37%
A Doctoral degree or more	0.00%

51.69% continue their education beyond an associate degree

Computer Network Support Specialists
Job Description

Analyze, test, troubleshoot, and evaluate existing network systems, such as local area networks (LAN), wide area networks (WAN), cloud networks, servers, and other data communications networks. Perform network maintenance to ensure networks operate correctly with minimal interruption.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-

duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10th Percentile	$49,197
Median 50th Percentile	$77,700
Senior-Level 90th Percentile	$137,289

Hourly Wages

Entry-Level 10th Percentile	$24
Median 50th Percentile	$37
Senior-Level 90th Percentile	$66

Annual Job Openings

272 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	4.23%
A certificate	10.16%
Some college	13.63%
An Associate degree	21.68%
A Bachelor's degree	48.77%
A Master's or Professional degree	1.53%
A Doctoral degree or more	0.00%

50.30% continue their education beyond an associate degree

Network and Computer Systems Administrators
Job Description

Install, configure, and maintain an organization's local area network (LAN), wide area network (WAN), data communications network, operating systems, and physical and virtual servers. Perform system monitoring and verify the integrity and availability of hardware, network, and server resources and systems. Review system and application logs and verify completion of scheduled jobs, including system backups. Analyze network and server resource consumption and control user access. Install and upgrade software and maintain software licenses. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10th Percentile	$65,878
Median 50th Percentile	$99,986
Senior-Level 90th Percentile	$144,995

Hourly Wages

Entry-Level 10th Percentile	$32
Median 50th Percentile	$48
Senior-Level 90th Percentile	$70

Annual Job Openings

244 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	0.00%
A certificate	7.49%
Some college	9.72%
An Associate degree	20.30%
A Bachelor's degree	52.37%
A Master's or Professional degree	10.13%
A Doctoral degree or more	0.00%

62.50% continue their education beyond an associate degree

Annual Job Openings

156 annual openings in Cook County

National Education Attainment

Here, you can see the level of education that people in this career complete.

Degree Program	% of Jobs
A high school diploma or less	0.00%
A certificate	7.16%
Some college	2.01%
An Associate degree	12.87%
A Bachelor's degree	75.16%
A Master's or Professional degree	2.80%
A Doctoral degree or more	0.00%

77.96% continue their education beyond an associate degree

Information Security Analysts
Job Description

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. Assess system vulnerabilities for security risks and propose and implement risk mitigation strategies. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.

Salary Based on Experience Level

Take a look at the average hourly/annual earnings for this career in Cook County

Lightcast earnings figures are based on OES data from the BLS and include base rate, cost of living allowances, guaranteed pay, hazardous-duty pay, incentive pay (including commissions and bonuses), on-call pay, and tips.

Annual Wages

Entry-Level 10th Percentile	$70,243
Median 50th Percentile	$121,181
Senior-Level 90th Percentile	$183,449

Hourly Wages

Entry-Level 10th Percentile	$34
Median 50th Percentile	$58
Senior-Level 90th Percentile	$88