

## *Effective Fall 2017*

### Degree

**Network Management (A25590NM)**

### Diploma

**Data Storage & Virtualization (D25590DV)**

### Certificates

**Cisco Network Assoc (C25590CA)**

**Cisco Network Professional (C25590CP)**

**Cisco Security (C25590CX)**

**Linux Certified IT Professional (C25590LX)**

**Linux Security Specialist (C25590LS)**

**Global Windows Security Admin (C25590WS)**

**Microsoft Cert IT Professional (C25590MS)**

# IT - Network Management (A25590NM)

*A.A.S. Degree (Day)*

## PROGRAM PLANNING GUIDE

**Updated: Fall 2017**

**Realignment: Fall 2016 (Replaces A25340 - Networking Technology Degree)**

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

### Curriculum By Semester

			Hours Per Week		Credits
			Class	Lab	
FIRST SEMESTER					
CTI	110	Web, Programming and Database Foundations	2	2	3
CTI	120	Network and Security Foundations	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
NOS	110	Operating System Concepts	2	3	3
SECOND SEMESTER					
CTS	120	Hardware/Software Support	2	3	3
NET	125	Introduction to Networks	1	4	3
NET	126	Routing Basics	1	4	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
SUMMER SEMESTER					
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3
THIRD SEMESTER					
CTS	115	Info Sys Business Concepts	3	0	3
ENG	114	Professional Research and Reporting	3	0	3
NOS	120	Linux/UNIX Single User	2	2	3
		Major Elective I	-	-	3
FOURTH SEMESTER					
CTS	288	Professional Practices in IT	2	2	3
		Humanities and Fine Arts Elective	-	-	3
		Social and Behavioral Sciences Elective	-	-	3
		Major Elective II	-	-	3
SUMMER SEMESTER					
NET	289	Networking Project	1	4	3
		Major Elective III	-	-	2

**GRADUATION REQUIREMENT:**

**Credit Hours 65**

# IT - Network Management (A25590NM)

*A.A.S. Degree (Day)*

## PROGRAM PLANNING GUIDE

### General Education Electives

			Hours Per Week		
			Class	Lab	Credits

### Humanities and Fine Arts Electives

(choose 3 credit hours from the following courses)

ART	111	Art Appreciation	3	0	3
HUM	115	Critical Thinking	3	0	3
MUS	110	Music Appreciation	3	0	3
PHI	240	Introduction to Ethics	3	0	3

### Social and Behavioral Sciences Electives

(choose 3 credit hours from the following courses)

ECO	151	Survey of Economics	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	118	Interpersonal Psychology	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

### Required Major Electives

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**Major Electives** (Select 1 option grouping below)

#### Option 1 - Microsoft Certified IT Professional Track

NOS	231	Windows Admin II	2	2	3
NOS	232	Windows Admin III	2	2	3

#### Option 2 - Cisco Certified Network Professional Track

NET	270	Building Scalable Networks	1	4	3
NET	272	Multi-Layer Networks	1	4	3
NET	273	Internetworking Support	1	4	3

#### Option 3 - Red Hat Certified Engineer Track

NOS	220	Linux/UNIX Admin I	2	2	3
NOS	221	Linux/UNIX Admin II	2	2	3
NOS	222	Linux/UNIX Admin III	2	2	3

#### Option 4 - Data Storage & Virtualization Track

CTI	140	Virtualization Concepts	1	4	3
CTI	240	Virtualization Admin I	1	4	3
CTI	241	Virtualization Admin II	1	4	3

## IT - Network Management (A25590NM)

*A.A.S. Degree (Day)*

### PROGRAM PLANNING GUIDE

#### Mixed Elective Options

Minimum of 8 credit hours from any of the above tracks, or any of the below courses

CCT	121	Computer Crime Investigations	3	2	4
CCT	240	Data Recovery Techniques	2	3	3
CTS	118	IS Professional Comm	2	0	2
CTS	135	Integrated Software Intro	2	4	4
CTS	155	Technical Support Functions	2	2	3
CTS	220	Advanced Hardware/Software Support	2	3	3
CTS	255	Advanced Technical Support Functions	2	2	3
CTS	272	Desktop Support: Apps	2	2	3
NET	115	Telecom for IT Professionals	2	2	3
NET	135	Data Center Networking	2	2	3
NET	175	Wireless Technology	2	2	3
NET	240	Network Design	3	0	3
NOS	125	Linux/UNIX Scripting	2	2	3
OMT	154	Customer Satisfaction	2	0	2
PMT	110	Intro to Project Management	3	0	3
SEC	110	Security Concepts	2	2	3
SEC	150	Secure Communications	2	2	3
SEC	160	Security Administration I	2	2	3
WBL		Work-Based Learning* (all numbers accepted)	-	30	2

\* Work based education is an elective. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 8 for electives 1, 2 and 3.

**IT - Network Management (A25590NM)**  
**A.A.S. Degree (Evening)**  
**PROGRAM PLANNING GUIDE**

**Updated: Fall 2017**

**Realignment: Fall 2016 (Replaces A25340 - Networking Technology Degree)**

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
FIRST SEMESTER					
CTI	120	Network and Security Foundations	2	2	3
ENG	111	Writing and Inquiry	3	0	3
MAT	143	Quantitative Literacy	2	2	3
NOS	110	Operating System Concepts	2	3	3
SECOND SEMESTER					
CTI	110	Web, Programming and Database Foundations	2	2	3
NET	125	Introduction to Networks	1	4	3
NET	126	Routing Basics	1	4	3
SUMMER SEMESTER					
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3
THIRD SEMESTER					
CTS	120	Hardware/Software Support	2	3	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
FOURTH SEMESTER					
CTS	115	Info Sys Business Concepts	3	0	3
ENG	114	Professional Research and Reporting	3	0	3
		Major Elective I	-	-	3
SUMMER SEMESTER					
NOS	120	Linux/UNIX Single User	2	2	3
FIFTH SEMESTER					
		Humanities and Fine Arts Elective	-	-	3
		Social and Behavioral Sciences Elective	-	-	3
		Major Elective II	-	-	3
SIXTH SEMESTER					
		Major Elective III	-	-	2
CTS	288	Professional Practices in IT	2	2	3
SUMMER SEMESTER					
NET	289	Networking Project	1	4	3

**GRADUATION REQUIREMENT:**

**Credit Hours    65**

**IT - Network Management (A25590NM)**  
**A.A.S. Degree (Evening)**  
**PROGRAM PLANNING GUIDE**

General Education Electives					
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			Hours Per Week		
			Class	Lab	Credits

Humanities and Fine Arts Electives					
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(choose 3 credit hours from the following courses)

ART	111	Art Appreciation	3	0	3
HUM	115	Critical Thinking	3	0	3
MUS	110	Music Appreciation	3	0	3
PHI	240	Introduction to Ethics	3	0	3

Social and Behavioral Sciences Electives					
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(choose 3 credit hours from the following courses)

ECO	151	Survey of Economics	3	0	3
ECO	251	Principles of Microeconomics	3	0	3
POL	120	American Government	3	0	3
PSY	118	Interpersonal Psychology	3	0	3
PSY	150	General Psychology	3	0	3
SOC	210	Introduction to Sociology	3	0	3

Required Major Electives					
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Major Electives (Select 1 option grouping below)					
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Option 1 - Microsoft Certified IT Professional Track					
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NOS	231	Windows Admin II	2	2	3
NOS	232	Windows Admin III	2	2	3

Option 2 - Cisco Certified Network Professional Track					
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NET	270	Building Scalable Networks	1	4	3
NET	272	Multi-Layer Networks	1	4	3
NET	273	Internetworking Support	1	4	3

Option 3 - Red Hat Certified Engineer Track					
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NOS	220	Linux/UNIX Admin I	2	2	3
NOS	221	Linux/UNIX Admin II	2	2	3
NOS	222	Linux/UNIX Admin III	2	2	3

Option 4 - Data Storage & Virtualization Track					
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CTI	140	Virtualization Concepts	1	4	3
CTI	240	Virtualization Admin I	1	4	3
CTI	241	Virtualization Admin II	1	4	3

**IT - Network Management (A25590NM)**  
**A.A.S. Degree (Evening)**  
**PROGRAM PLANNING GUIDE**

**Mixed Elective Options**

Minimum of 8 credit hours from any of the above tracks, or any of the below courses

CCT	121	Computer Crime Investigations	3	2	4
CCT	240	Data Recovery Techniques	2	3	3
CTS	118	IS Professional Comm	2	0	2
CTS	135	Integrated Software Intro	2	4	4
CTS	155	Technical Support Functions	2	2	3
CTS	220	Advanced Hardware/Software Support	2	3	3
CTS	255	Advanced Technical Support Functions	2	2	3
CTS	272	Desktop Support: Apps	2	2	3
NET	115	Telecom for IT Professionals	2	2	3
NET	135	Data Center Networking	2	2	3
NET	175	Wireless Technology	2	2	3
NET	240	Network Design	3	0	3
NOS	125	Linux/UNIX Scripting	2	2	3
OMT	154	Customer Satisfaction	2	0	2
PMT	110	Intro to Project Management	3	0	3
SEC	110	Security Concepts	2	2	3
SEC	150	Secure Communications	2	2	3
SEC	160	Security Administration I	2	2	3
WBL		Work-Based Learning* (all numbers accepted)	-	30	2

\* Work based education is an elective. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 8 for electives 1, 2 and 3.

**IT - Network Management (A25590NM)**  
**Diploma**  
**Data Storage and Virtualization (D25590DV)**  
**(Evening)**  
**PROGRAM PLANNING GUIDE**

**Realignment: Fall 2016 (Replaces D25340A - Data Storage & Virtualization Diploma)**

Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
FIRST SUMMER SEMESTER					
CTI	110	Web, Pgm, & Db Foundation	2	2	3
ENG	111	Writing and Inquiry	3	0	3
		Operating System Elective			3

<b>FALL SEMESTER</b>					
CTI	140	Virtualization Concepts	1	4	3
CTS	120	Hardware/Software Support	2	3	3
NET	125	Networking Basics	1	4	3
NET	126	Routing Basics	1	4	3
NOS	130	Windows Single User	2	2	3

<b>SPRING SEMESTER</b>					
CTI	240	Virtualization Admin I	1	4	3
CTS	115	Info Sys Business Concepts	3	0	3
ENG	114	Professional Research & Reporting	3	0	3
NOS	230	Windows Admin I	2	2	3

<b>SECOND SUMMER SEMESTER</b>					
CTI	241	Virtualization Admin II	1	4	3
WBL	113	Work-Based Learning I	-	30	3

**GRADUATION REQUIREMENT:**

**Credit Hours     42**

<b>Operating System Electives</b>					
(choose a minimum of 3 credit hours from the following courses)					
NOS	110	Operating System Concepts	2	3	3
CTI	130	OS and Device Foundation	4	4	6

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**IT - Network Management (A25590NM)**  
***Certificate***  
**Cisco Network Associate (C25590CA)**  
**(Day, Evening, and On-line)**  
**PROGRAM PLANNING GUIDE**

**Realignment: Fall 2016 (Replaces C25340C - Cisco Certified Network Associate Certificate)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.

Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

Curriculum By Semester					
			Hours Per Week		
			Class	Lab	Credits
NET	125	Networking Basics	1	4	3
NET	126	Routing Basics	1	4	3
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3

**GRADUATION REQUIREMENT:**

**Credit Hours     12**

**IT - Network Management (A25590NM)**  
**Certificate**  
**Cisco Network Professional (C25590CP)**  
**(Day and Evening)**  
**PROGRAM PLANNING GUIDE**

**Realignment: Fall 2016 (Replaces C25340I - Cisco Certified Network Professional Certificate)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.

Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

Curriculum By Semester					
			Hours Per Week		Credits
			Class	Lab	
NET	270	Building Scalable Networks	1	4	3
NET	272	Multi-Layer Networks	1	4	3
NET	273	Internetworking Support	1	4	3
		Major Elective	-	-	3

**GRADUATION REQUIREMENT:**

**Credit Hours     12**

Major Electives					
(choose a minimum of 3 credit hours from the following courses)					
CTI	140	Virtualization Concepts	1	4	3
CTS	135	Integrated Software Intro	2	4	4
CTS	155	Technical Support Functions	2	2	3
CTS	240	Project Management	2	2	3
NET	115	Telecom for IT Professionals	2	2	3
NET	135	Data Center Networking	2	2	3
NET	175	Wireless Technology	2	2	3
NET	240	Network Design	3	0	3
NOS	220	Linux/UNIX Admin I	2	2	3
NOS	231	Windows Admin II	2	2	3
SEC	110	Security Concepts	2	2	3
SEC	150	Secure Communications	2	2	3
SEC	160	Security Administration I	2	2	3
WBL		Work Based Learning (all numbers acceptable)	0	30	3

\* Work based education is an elective. Students must have approval from the Program Director and pre-register with the Work-Based Learning Office. The work may be done over any number of semesters, but the total elective credits must add up to 8 for electives 1, 2 and 3.

**IT - Network Management (A25590NM)**  
*Certificate*  
**Cisco Security (C25590CX)**  
**(Day, Evening, and On-line)**  
**PROGRAM PLANNING GUIDE**

**Updated: Fall 2017**

**Realignment: Fall 2016 (Replaces D25270H - High Technology Criminal Investigations)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.

Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
SEC	110	Security Concepts	2	2	3
SEC	150	Secure Communications	2	2	3
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3

**GRADUATION REQUIREMENT:**

**Credit Hours      12**

**IT - Network Management (A25590NM)**  
***Certificate***  
**Linux Certified IT Professional (C25590LX)**  
**(Day and Evening)**  
**PROGRAM PLANNING GUIDE**

**Realignment: Fall 2016 (Replaces C25340K - Linux/Red Hat Administration Certificate)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.  
Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
NOS	120	Linux/UNIX Single User	2	2	3
NOS	125	Linux/UNIX Scripting	2	2	3
NOS	220	Linux/UNIX Admin I	2	2	3
NOS	221	Linux/UNIX Admin II	2	2	3
NOS	222	Linux/UNIX Admin III	2	2	3

**GRADUATION REQUIREMENT:**

**Credit Hours      15**

**IT - Network Management (A25590NM)**  
*Certificate*  
**Linux Security Specialist (C25590LS)**  
**(Day, Evening, and On-line)**  
**PROGRAM PLANNING GUIDE**

**Updated: Fall 2017**

**Realignment: Fall 2016 (Replaces C25270R - Red Hat Security Specialist)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.  
Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
NOS	120	Linux/UNIX Single User	2	2	3
SEC	160	Security Administration I	2	2	3
NOS	220	Linux/UNIX Admin I	2	2	3
NOS	221	Linux/UNIX Admin II	2	2	3

**GRADUATION REQUIREMENT:**

**Credit Hours     12**

**IT - Network Management (A25590NM)**  
*Certificate*  
**Global Windows Security Administrator (C25590WS)**  
**(Day, Evening, and On-line)**  
**PROGRAM PLANNING GUIDE**

**Updated: Fall 2017**

**Realignment: Fall 2016 (Replaces C25270W - Global Windows Security Administrator)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.  
Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

Curriculum By Semester					
			Hours Per Week		Credits
			Class	Lab	
SEC	160	Security Administration I	2	2	3
NOS	230	Windows Admin I	2	2	3
NOS	231	Windows Admin II	2	2	3
NOS	232	Windows Admin III	2	2	3

**GRADUATION REQUIREMENT:**

**Credit Hours     12**

**IT - Network Management (A25590NM)**  
*Certificate*  
**Microsoft Certified IT Professional (C25590MS)**  
**(Day and Evening)**  
**PROGRAM PLANNING GUIDE**

**Realignment: Fall 2016 (Replaces C25340J - Microsoft Certified IT Professional Certificate)**

\*\*\* NOTICE: Some courses in this certificate may require prerequisite knowledge or course work.  
Check WebAdvisor, or talk to your academic advisor for more details. \*\*\*

**Courses taken more than 5 yrs. ago may not receive transfer credit. Consult your advisor for details.**

**Curriculum By Semester**

			Hours Per Week		Credits
			Class	Lab	
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
NOS	231	Windows Admin II	2	2	3
NOS	232	Windows Admin III	2	2	3

**GRADUATION REQUIREMENT:**

**Credit Hours     12**