# Program Planning Guides 2018 - 2019

## **Degree**

**Network Management -** *Day* 

Network Management - Evening

## **Diploma**

**Data Storage & Virtualization - D25590DV** 

## **Certificates**

C25590CA	Cisco Network Associate
C25590CP	Cisco Network Professional
C25590CX	Cisco Security
C25590LX	Linux Certified IT Professional
C25590LS	Linux Security Specialist
C25590WS	Global Windows Security Admin
C25590MS	Microsoft Certified IT Professional

## 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 mor	e than 5 yrs. ago may not receive transfer credit. Consult yo	our advisor f	or details.	
		Curriculum By Semester			
			Hours Per Week		
			Class	Lab	Credits
	SEMESTE				
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
CECON	D SEMES	ren			
CTS	120		2	3	3
NET	125	Hardware/Software Support Introduction to Networks	1	4	3
NET	126		1	4	3
		Routing Basics	2	2	3
NOS	130	Windows Single User			
NOS	230	Windows Admin I	2	2	3
SUMM	ER SEMES	STER			
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3
THIRD	SEMESTI	FR			
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
1103	120	Major Elective I	-	-	3
	<u> </u>		-		<u> </u>
	TH SEMES				
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
SIIMMI	ER SEMES	STER			
NET	289	Networking Project	1	4	3
1111	207	Major Elective III	-	-	2
		1 /		1	

# IT - Network Management (A25590NM) A.A.S. Degree (Day)

## PROGRAM PLANNING GUIDE

		General Education Elective	/es			
			Hours P	Hours Per Week		
			Class	Lab	Credits	
Human	ities and	Fine Arts Electives				
(choose	e 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	
-						
		ioral Sciences Electives				
		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 Electiv	res			
		(Select 1 option grouping below)				
		osoft Certified IT Professional Track				
NOS	231	Windows Admin II	2	2	3	
NOS	232	Windows Admin III	2	2	3	
<u> </u>	0 0'	a da la				
		Certified Network Professional Track	1 1		l 2	
NET	270	Building Scalable Networks	1	4	3	
NET	272	Multi-Layer Networks	1	4	3	
NET	273	Internetworking Support	1	4	3	
Ontion	3 - Red I	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	
1103	444	Linux/ UNIA Aumini III			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	
011	4 T I	v ii tuuliZatioii Mallilli II	1	T		

# IT - Network Management (A25590NM) A.A.S. Degree (Day) PROGRAM PLANNING GUIDE

Mixed Elective Options								
Minimu	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			

<sup>\*</sup> 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.

## 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 F	er Week	
			Class	Lab	Credits
<b>FIRST</b>	SEMESTE	R			
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
SECON	ID SEMES	TER			
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
		1			L
	ER SEMES		1 .	· .	
NET	225	Routing and Switching I	1	4	3
NET	226	Routing and Switching II	1	4	3
THIRD	SEMEST:	ER			
CTS	120	Hardware/Software Support	2	3	3
NOS	130	Windows Single User	2	2	3
NOS	230	Windows Admin I	2	2	3
FOUR	TH SEMES	TER			
CTS	115	Info Sys Business Concepts	3	0	3
ENG	114	Professional Research and Reporting	3	0	3
		Major Elective I	-	-	3
SUMM	ER SEMES	STER			
NOS	120	Linux/UNIX Single User	2	2	3
FIFTH	SEMESTE	î R			
		Humanities and Fine Arts Elective	T -	_	3
		Social and Behavioral Sciences Elective	-	-	3
		Major Elective II	-	-	3
CIVTH	SEMESTI	ZD	•	•	
SIXIH	SEMESTE	Major Elective III			2
CTS	288	Professional Practices in IT	2	2	3
	ER SEMES				
NET	289	Networking Project	1	4	3

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

		General Education Elective	es		
			Hours P	er Week	•
			Class	Lab	Credits
Human	ities and	l 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 a	and Beha	vioral 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	S		
		(Select 1 option grouping below)			
_		osoft Certified IT Professional Track			
NOS	231	Windows Admin II	2	2	3
NOS	232	Windows Admin III	2	2	3
		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
		lat Certified Engineer Track	-	_	
NOS		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
					_
		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 (Evening)

## PROGRAM PLANNING GUIDE

Mixed Elective Options					
Minimu	ım of 8 cr	edit hours from any of the above tracks, or any of the	below cou	rses	
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

<sup>\*</sup> 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.

## 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 P	Hours Per Week	
			Class	Lab	Credits
FIRST S	SUMMER S	SEMESTER			
CTI	110	Web, Pgm, & Db Foundation	2	2	3
ENG	111	Writing and Inquiry	3	0	3
		Operating System Elective			3
		•		=	
FALL SI	EMESTER				
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</b>	SEMESTE	ER			
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
SECONI	O SUMMEI	R SEMESTER			
CTI	241	Virtualization Admin II	1	4	3
WBL	113	Work-Based Learning I	-	30	3

### **GRADUATION REQUIREMENT:**

**Credit Hours** 42

	Operating System Electives						
(choose a	(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		

<sup>\*</sup> 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.

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 P	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

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 P	er Week	
			Class	Lab	Credits
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	(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			

<sup>\*</sup> 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.

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			
			Class	Lab	Credits	
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

## 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		
			Class	Lab	Credits
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** 

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			
			Class	Lab	Credits	
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** 

### 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			
			Class	Lab	Credits	
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** 

### 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			
			Class	Lab	Credits	
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