



PROGRAM TITLE : Computer Networking Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

PROPOSAL

ITEM 1: PROGRAM GOALS AND OBJECTIVES

The objectives of Computer Networking is to prepare students for entry level computer networking careers. The Goals of Computer Networking program: Prepares students to develop implement and manage computer networking systems within an organization. Ability to implement best practices solutions for network implementation. Conduct performance balancing; redundancy checks, on a local area (LAN) and wide area (WAN) network. Management system migrations and upgrades Create disaster recover documentation and manage such issues as network outage control, problem diagnosis and troubleshooting Understand budgetary constraints and work within the budget to manage the network architecture.

Program Learning Outcomes:

Upon completion of this program, prepare students to enter information technology sector as network specialists. Students will be able to develop and implement a structured network utilizing routs, switches, access points, and intrusion detection devices. Students completing this certificate will know how to administer a small, medium, or large network infrastructure including server and node management.

Prepare students to take the industry recognized CompTIA exams to work an entry level IT networking position.

Administer a small, medium, or large network infrastructure in an organizational setting.

Administer servers, clients, and other networkable equipment including operating systems.

ITEM 2: CATALOG DESCRIPTION

This program is designed to prepare students for a career in computer networks. Students receive hands-on instruction on how to operate, install, configure, troubleshoot, upgrade, and maintain computers and computer networks as well as basic network security. Students will become fully prepared to take the A+ and Network+ certification tests sponsored by CompTIA and offered at testing centers throughout the country. This certificate requires 18 units.

ITEM 3: ENROLLMENT AND COMPLETER PROJECTIONS

This program will attract new students to the CS/IS department. It would be easy for students to move between this program and other CS/IS programs.

Annual Completers : 20



PROGRAM TITLE : Computer Networking Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

ITEM 4. PLACE OF PROGRAM IN CURRICULUM/SIMILAR PROGRAMS

College offers computer Science, Computer Technician and Programmer degrees and programs.

ITEM 5: SIMILAR PROGRAMS AT OTHER COLLEGES IN SERVICE AREA

Los Angeles Mission College, Pasadena City College, and Los Angeles Pierce College offer similar programs due to the high demand by industry as per LMI data.

LAOC has endorsed the offering of this program at Glendale Community College and LMI shows strong for this program.

LAOC endorsement and LMI documents attached in section 1

Los Angeles Mission College offers similar program to Computer Networking and requires 18 units. Glendale is not requiring CIS 101 that is CSIS 101 at Glendale for Certificate

- CIS 162 CYBER SECURITY I
- CIS 222 PC MAINTENANCE & TROUBLESHOOTING
- CIS 210 INTRODUCTION TO COMPUTER NETWORKING
- CIS 211 SECURITY+ CERTIFICATION PREPARATION
- CIS 101 INTRODUCTION TO COMPUTERS & THEIR USES <-- Not Required at GCC for Certificate.
- CIS 165 PRINCIPLES OF INFORMATION SECURITY

Los Angeles Pierce College offers similar certificate in Computer Networking they call it Networking Technology and requires 12 units.

- CIS 514 Supporting Windows Desktops.
- CIS 594 Cloud Computing Architecture
- CIS 534 Operating Systems
- CIS 535 Supporting Windows Servers
- CIS 587 Introduction to Computer Networks

Pasadena City College offers similar System and Network Administration program and requires 18 units.

- CIS 040 – UNIX/LINUX Administration
- or CIS 045 – MCSA: Microsoft Windows System Administration 1
- CIS 041 – CCNA: Introduction to Networks
- CIS 042 – CCNA: Routing and Switching Essentials
- CIS 061 – Introduction to Information Systems Security
- CIS 164 – CCNA: Enterprise Networking and Security



NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

ITEM 6: TABLE OF PROGRAM REQUIREMENTS

PROGRAM TITLE: Computer Networking

REQUIRED COURSES

	Subject	Number	Title	CSU-GE	IGETC	Units
			REQUIRED COURSES			12 - 12
and	CS/IS	190	Introduction to Computer Networks			3
and	CS/IS	194	Information Technology Essentials			3
and	CS/IS	196	Advanced Networking: Security			3
and	CS/IS	197	Advanced Networking: Server Operations			3

Restricted Elective Courses

	Subject	Number	Title	CSU-GE	IGETC	Units
			Choose two from the following:			6 - 8
or	CS/IS	172	Unix/Linux Operating System			4
or	CS/IS	174	Unix/Linux System Administration			4
or	CS/IS	183	Digital Forensics Fundamentals			3
or	CS/IS	186	Workstation Security and Support			3
or	CS/IS	193	Introduction to Cybersecurity: Ethical Hacking			3
or	CS/IS	240	Cloud Computing – Fundamentals			3
or	CS/IS	242	Cloud Computing - Security			3



PROGRAM TITLE : Cybersecurity Specialist Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

PROPOSAL

ITEM 1: PROGRAM GOALS AND OBJECTIVES

The objectives of Cybersecurity program is to prepare students for entry level jobs in information technology security sector. The Goals of Cybersecurity program: General security concepts and network security. Harden networks against reconnaissance and penetration attacks. Ability to implement and develop a secure procedure for a network.

Program Learning Outcomes:

This is a new Cybersecurity Specialist Certificate for CS/IS department. This certificate will prepare students to enter information technology sector as security specialists. Students will be able to develop and implement a structured network utilizing routers, switches, access points, and intrusion detection devices. Students completing this certificate will understand the procedures and policies for securing and protecting data on the network by understanding the weaknesses associated with hardware and software.

Develop and implement a structured network utilizing routers, switches, access points, and intrusion detection services

Develop and analyze procedures and policy in an organizational setting.

Prepare students to work in a lower level security position for an IT department and transfer to a bachelor's degree program in Cybersecurity.

Evaluate and explain ethical hacking tools in cybersecurity.

ITEM 2: CATALOG DESCRIPTION

Cybersecurity Specialist Certificate is designed to prepare students for a career in cybersecurity. Students receive hands-on instruction on how to operate, install, configure, troubleshoot, upgrade, secure, and maintain computer networks as well as various ways to protect and secure the network. Students will become fully prepared to take the Network+, Security+, Cybersecurity Analyst (CySa+) certification tests sponsored by CompTIA and offered at testing centers throughout the country.

Students must complete all the required courses to total 18 units

ITEM 3: ENROLLMENT AND COMPLETER PROJECTIONS

This program will attract new students to the CS/IS department. It would be easy for students to move between this program and other CS/IS programs.

Annual Completers : 20



PROGRAM TITLE : Cybersecurity Specialist Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

ITEM 4. PLACE OF PROGRAM IN CURRICULUM/SIMILAR PROGRAMS

College offers computer Science, Computer Technician and Programmer degrees and programs.

ITEM 5: SIMILAR PROGRAMS AT OTHER COLLEGES IN SERVICE AREA

Los Angeles Mission College, Pasadena City College, and Los Angeles Pierce College offer similar programs due to the high demand by industry as per LMI data.

LAOC has endorsed the offering of this program at Glendale Community College and LMI shows strong for this program.

LAOC endorsement and LMI documents attached in section 1

Los Angeles Mission College offers identical Cybersecurity program and requires 18 units. Glendale is not requiring CIS 101 that is CSIS 101 at Glendale for Certificate

- CIS 162 CYBER SECURITY I
- CIS 222 PC MAINTENANCE & TROUBLESHOOTING
- CIS 210 INTRODUCTION TO COMPUTER NETWORKING
- CIS 211 SECURITY+ CERTIFICATION PREPARATION
- CIS 101 INTRODUCTION TO COMPUTERS & THEIR USES <-- Not Required at GCC for Certificate.
- CIS 165 PRINCIPLES OF INFORMATION SECURITY

Los Angeles Pierce College offers similar Cybersecurity program and requires 24 units. Glendale is not requiring CIS 101 that is CSIS 101 at Glendale for Certificate

- CIS 101 Introduction to Computers and Their Uses <-- Not Required at GCC for Certificate.
- CIS 195* Security in the Cloud
- CIS 209 Introduction to Computer Hardware and Operating Systems
- CIS 210 Introduction to Computer Networking
- CIS 216* Network Security
- CIS 224* Routing and Switching Essentials
- CIS 239* Managing and Administering Windows Server
- CIS 241* Cybersecurity Operations

Pasadena City College offers similar Cybersecurity program and requires 25 - 26 units. Glendale is not requiring CIS 011 that is CSIS 101 at Glendale, for Certificate. Pasadena is a Cisco academy and is offering Cisco targeted coursework.

- CIS 011 - Information and Communication Technology Essentials <-- Not Required at GCC for Certificate.
- CIS 012 - Introduction to Programming Using Python
- CIS 041 - CCNA: Introduction to Networks <-- Cisco specific coursework



NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

- CIS 042 - CCNA: Routing and Switching Essentials <-- Cisco specific coursework
- CIS 045 - MCSA: Microsoft Windows System Administration <-- Microsoft Specific Coursework
 - or CIS 040 - UNIX/LINUX Administration
- CIS 061 - Introduction to Information Systems Security
- CIS 063 - Introduction to Cybersecurity: Ethical Hacking
- CIS 065 - Computer Forensics Fundamentals

ITEM 6: TABLE OF PROGRAM REQUIREMENTS

PROGRAM TITLE: Cybersecurity Specialist Certificate

REQUIRED COURSES

	Subject	Number	Title	CSU-GE	IGETC	Units
			REQUIRED COURSES			12 - 12
and	CS/IS	183	Digital Forensics Fundamentals			3
and	CS/IS	190	Introduction to Computer Networks			3
and	CS/IS	193	Introduction to Cybersecurity: Ethical Hacking			3
and	CS/IS	196	Advanced Networking: Security			3

Restricted Elective Courses

	Subject	Number	Title	CSU-GE	IGETC	Units
			Choose two from the following:			6 - 8
or	CS/IS	135	Programming in C/C++			3
or	CS/IS	112	Introduction to Programming Using Java			3
or	CS/IS	151	Python Programming			3
or	CS/IS	172	Unix/Linux Operating System			4
or	CS/IS	174	Unix/Linux System Administration			4



PROGRAM TITLE : Cybersecurity Specialist Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

or	CS/IS	186	Workstation Security and Support			3
or	CS/IS	194	Information Technology Essentials			3
or	CS/IS	197	Advanced Networking: Server Operations			3
or	CS/IS	240	Cloud Computing – Fundamentals			3
or	CS/IS	241	Cloud Computing - Databases Essentials			3
or	CS/IS	242	Cloud Computing - Security			3



PROGRAM TITLE : Digital Content Specialist - Certificate

PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

PROPOSAL

ITEM 1: PROGRAM GOALS AND OBJECTIVES

Digital Content Specialist is a growing field that combines skill sets from multiple disciplines. Necessary skills include managing an archive of digital assets (photographs, video, graphics) and being able to prepare and deploy these assets on the web. Basic skills in these digital assets is also necessary. This job description does not exist in BLS or EDD data sets.

Program Learning Outcomes:

Upon successful completion of the required coursework, the student will be able to design, create, and manage webpages using current software and technology; produce, optimize, and distribute industry-ready image, video and photographic content for the Web and mobile devices; create and manage a client-side Web site and server; create, modify, organize, and upload Web-specific files to a server prepare students for a career as a digital content creator or digital content specialist design, create, and manage webpages using current software and technology produce, optimize, and distribute industry-ready image, video and photographic content for the Web and mobile devices

create and manage a client-side Web site and server create,

modify, organize, and upload Web-specific files to a server

prepare students for a career as a digital content creator or digital content specialist

ITEM 2: CATALOG DESCRIPTION

This program will provide the creative and technical skills to create, edit, optimize, and distribute digital content including web graphics, photographic images, and video. Completers will be able to develop, deploy, and manage web servers and optimize digital content for deployment on client side websites. The program will provide the employment skills required for Digital Content Creators, Digital Content Managers while providing skills to support Photographers, Graphic Designers and Video Editors. This program requires 23 units.

ITEM 3: ENROLLMENT AND COMPLETER PROJECTIONS

This program has had limited interest with only 1 completer since its creation primarily due to curriculum changes in Graphic Design and Media Arts. In both areas course curriculum was resequenced creating prerequisite course to the courses included in the Digital Content Specialist Certificate. The additions changed the originally 25 unit program to 34 units. This program revision correct those issues and brings the program back down to 23 units.

Annual Completers : 10

ITEM 4. PLACE OF PROGRAM IN CURRICULUM/SIMILAR PROGRAMS

Photography, Graphic Design, Media Arts



PROGRAM TITLE : Digital Content Specialist - Certificate
PROGRAM GOAL : CTE

NARRATIVE & DOCUMENTATION FOR PROGRAM REVISIONS

ITEM 5: SIMILAR PROGRAMS AT OTHER COLLEGES IN SERVICE AREA

None within the college service area.

ITEM 6: TABLE OF PROGRAM REQUIREMENTS

PROGRAM TITLE: Digital Content Specialist - Certificate

REQUIRED COURSES

	Subject	Number	Title	CSU-GE	IGETC	Units
			Required Courses			23 - 23
	PHOTO	100	Introduction to Photography			3
	PHOTO	111	Lighting I			4
	PHOTO	130	Photoshop and Lightroom for Photographers			4
	ART	250	Web Graphics			3
	ART	251	Web and Mobile Design			3
	CS/IS	260	Introduction to Web Site Development			3
	MEDIA	103	Introduction to Motion Picture Production			3



**PROGRAM TITLE : Information Technology Technician
Certificate
PROGRAM GOAL : CTE**

PROPOSAL

ITEM 1: PROGRAM GOALS AND OBJECTIVES

The objectives of Information Technology Technician program is to prepare students for entry level jobs in information technology sector. The Goals of Information Technology Technician: General computer concepts and network concepts. Common computer and networks troubleshooting. Ability to fix and support computer users in an organization.

Program Learning Outcomes:

This is a new Information Technology Technician Certificate for CS/IS department. This certificate will prepare students to enter information technology sector as Information Technology Technicians.

Students will be able to troubleshoot, repair computers hardware, and other computer peripherals. Students completing this certificate will be able to effectively communicate to computer users regarding computer issues and come up with creative solutions.

Prepare students to take the industry recognized CompTIA exams to work in an entry level IT position.

Develop troubleshooting skills related to networking, hardware, peripherals, and advanced networking.

Solve computer issues and communicate effectively with computer users.

ITEM 2: CATALOG DESCRIPTION

Information Technology Technician Certificate is designed to prepare students for a career in Information Technology. Students receive hands-on instruction on how to operate, install, configure, troubleshoot, upgrade, and maintain computer systems and computer networks. Students will become fully prepared to take the A+, Server+, and Network+ certification tests sponsored by CompTIA and offered at testing centers throughout the country. This certificate requires 18 units,

ITEM 3: ENROLLMENT AND COMPLETER PROJECTIONS

This program will attract new students to the CS/IS department. It would be easy for students to move between this program and other CS/IS programs.

Annual Completers : 20



**PROGRAM TITLE : Information Technology Technician
Certificate
PROGRAM GOAL : CTE**

ITEM 4. PLACE OF PROGRAM IN CURRICULUM/SIMILAR PROGRAMS

College offers computer Science, Computer Technician and Programmer degrees and programs.

ITEM 5: SIMILAR PROGRAMS AT OTHER COLLEGES IN SERVICE AREA

Pasadena City College, and Los Angeles Pierce College offer similar programs due to the high demand by industry as per LMI data.

LAOC has endorsed the offering of this program at Glendale Community College and LMI shows strong for this program.

LAOC endorsement and LMI documents attached in section 1

Los Angeles Pierce College offers similar Personal Computer Service Technology program and requires 12 units. Glendale is not requiring CIS 101 that is CSIS 101 at Glendale for Certificate

- CO SCI 501 Introduction to Computers and Their Uses <-- Not Required at GCC for Certificate.
- CO INFO 514 Supporting Windows Desktops.
OR
- CO INFO 591* Cloud Computing Architecture
- CO INFO 572 Introduction to Personal Computer Hardware Operating Systems
OR
- CO INFO 581* Personal Computer Upgrade and Repair
OR
- CO INFO 590 Introduction to Cloud Computing
- CO SCI 587 Introduction to Computer Networks

Pasadena City College offers similar Computer Information Systems - Help Desk/User Support program and requires 20 - 21 units. Glendale is not requiring CIS 011 that is CSIS 101 at Glendale, for Certificate. Pasadena is a Cisco academy and is offering Cisco targeted coursework.

- CIS 011 – Information and Communication Technology Essentials <-- Not Required at GCC for Certificate.
- CIS 041 – CCNA: Introduction to Networks
- CIS 042 – CCNA: Routing and Switching Essentials
- CIS 045 – MCSA: Microsoft Windows System Administration 1



**PROGRAM TITLE : Information Technology Technician
Certificate
PROGRAM GOAL : CTE**

- **CIS 061 – Introduction to Information Systems Security
Required Electives (Select 1 course)**
- **CIS 012 – Introduction to Programming Using Python**
- **CIS 031 – Introduction to Database Management Systems**
- **CIS 040 – UNIX/LINUX Administration**
- **CIS 063 – Introduction to Cybersecurity: Ethical Hacking**
- **CIS 065 – Digital Forensics Fundamentals**
- **CIS 146 – MCSA: Microsoft Windows System Administration 2**
- **CIS 151 – VCP-DCV: VMware vSphere Administration**
- **CIS 164 – CCNA: Enterprise Networking and Security**

ITEM 6: TABLE OF PROGRAM REQUIREMENTS

PROGRAM TITLE: Information Technology Technician Certificate

REQUIRED COURSES

	Subject	Number	Title	CSU-GE	IGETC	Units
			REQUIRED COURSES			12 - 12
and	CS/IS	186	Workstation Security and Support			3
and	CS/IS	190	Introduction to Computer Networks			3
and	CS/IS	194	Information Technology Essentials			3
and	CS/IS	197	Advanced Networking: Server Operations			3

Restricted Elective Courses



**PROGRAM TITLE : Information Technology Technician
Certificate
PROGRAM GOAL : CTE**

	Subject	Number	Title	CSU-GE	IGETC	Units
			ELECTIVE UNITS TOTAL			6 - 8
or	CS/IS	172	Unix/Linux Operating System			4
or	CS/IS	174	Unix/Linux System Administration			4
or	CS/IS	183	Digital Forensics Fundamentals			3
or	CS/IS	193	Introduction to Cybersecurity: Ethical Hacking			3
or	CS/IS	196	Advanced Networking: Security			3
or	CS/IS	240	Cloud Computing – Fundamentals			3
or	CS/IS	241	Cloud Computing - Databases Essentials			3
or	CS/IS	242	Cloud Computing - Security			3