# Los Angeles Pierce College 2020-2021 General Catalog Addendum A

## KEY

* Underlined green text = Addition
* ~~Strikethrough text~~ = Deletion

## I. Corrections

* Program title, program information, program learning outcomes, and courses updated for Cloud, Networking, and Cybersecurity A.S. (formerly Cloud and Network Technology A.S.)

# Cloud, Networking, and Cybersecurity A.S.

**PROGRAM INFORMATION**

This two-year program provides in-depth knowledge and hands-on experience for students who wish to start or enhance their careers in Cloud, Networking, and Cybersecurity. Graduates will be prepared to design and deploy secured network domains to support applications and operations in the Cloud and on premises. Students gain skills and knowledge in configuration and troubleshooting of network routers, switches and firewalls; Windows and Linux server installation and configuration; and implementation of effective cybersecurity measures such as prevention of hacking activities.

Additionally, the comprehensive scope of the classes provides students with a combination of job skills readiness and preparation for highly respected industry certificates such as AWS Cloud Practitioner, AWS Solutions Architect Associate, AWS Security Specialty, Cisco Certified Network Associate (CCNA), Cisco Certified CyberOps Associate, Azure Fundamentals, Azure Administrator, EC-Council Certified Ethical Hacking (CEH), and RedHat Certified System Administrator.

Pierce is a member of the Cisco Networking Academy (Netacad), AWS Educate, Microsoft Academy, RedHat Academy. As a result, students gain access to industry standard curriculum, simulation tools, and certification preparation materials.

**PROGRAM LEARNING OUTCOMES**
Upon completion of this program, students will:

• Implement, configure, and maintain network infrastructure successfully, with consideration to network security.
• Design, architect, and deploy secured applications and networks in the Cloud.

**MAJOR - REQUIRED COURSES**

Subject COURSE UNITS

CIS 101 Introduction to Computers and Their Uses 3

CIS 113 Intermediate Linux 3

CIS 150 Advanced Website Development Using JavaScript and AJAX 3

OR

CIS 173 Data Analysis for Computer Information Systems with Python 3

CIS 170 Introduction to Ethical Hacking 3

CIS 192 Introduction to Cloud Computing 3

CIS 194\* Computer Engines in Amazon Web Services 3

CIS 195\* Security in the Cloud 3

CIS 210 Introduction to Computer Networking 3

CIS 224\* & CIS 225\* Routing and Switching Essentials 3

 Enterprise Networking, Security, & Automation 3

OR

CIS 240\* Switching, Routing, WLANs, Security, & Enterprise Networking (CCNA Prep) 6

CIS 238 Managing Windows with Azure 3

CIS 239\* Managing and Administering Windows Server 3

CIS 216\* Network Security 3

OR

CIS 241\* Cybersecurity Operations 3

Major - Total Units 39

GENERAL EDUCATION - REQUIRED COURSES

Students must complete one of the following General Education Plans:

LACCD GE LACCD General Education Plan 21 units

CSU GE CSU GE Breadth Certification Plan 39 units

IGETC Intersegmental GE Transfer Curriculum 34-37 units

\*See Catalog course description for prerequisites and/or corequisites.

# ~~Cloud and Network Technology~~ A.S.

**PROGRAM INFORMATION**

~~The intent of this program is to produce graduates with the balanced knowledge of hardware and software required to install, operate, maintain and trouble-shoot personal computers and computer networks in a variety of work environments. Associate in Science graduates will be prepared to install, operate, maintain and trouble-shoot systems and networks for the service divisions of large computer manufactures and computer applications organizations.~~

**PROGRAM LEARNING OUTCOMES**
Upon completion of this program, students will:

~~• Configure, maintain, and troubleshoot personal computer hardware and operating systems.
• Implement, configure, and maintain servers and server operating systems, network switching topologies.
• Implement, configure, and maintain routers and routing protocols and integrate LAN and WAN technologies successfully, with consideration to basic network security.
• Integrate application software, database software, web technologies, and programming in support of network operations.~~

**MAJOR - REQUIRED COURSES**

Subject COURSE UNITS

~~CO SCI 501 Introduction to Computers and Their Uses 3~~

~~CO SCI 508 Introduction to Programming Using Visual Basic 3~~

 ***~~OR~~***

~~CO SCI 575 Programming Fundamentals for Computer Science 3~~

~~CO INFO 514\* Supporting Windows Desktops 3~~

 ***~~OR~~***

~~CO INFO 591\* Cloud Computing Architecture 3~~

~~CO SCI 533\* Databases Using Access and SQL 3~~

~~CO SCI 534\* Operating Systems 3~~

~~CO SCI 535\* Supporting Windows Servers 3~~

~~CO SCI 537\* LAN & VLAN Switching 3~~

~~CO INFO 538\* Implementing Wide Area Networking 3~~

~~CO INFO 572 Introduction to Personal Computer Hardware Operating Systems 3~~

 ***~~OR~~***

~~CO INFO 590 Introduction to Cloud Computing 3~~

~~CO SCI 578\* Routing and Switching Fundamentals 3~~

~~CO SCI 584\* Network Security 3~~

 ***~~OR~~***

~~CO INFO 592\* Security in the Cloud 3~~

~~CO INFO 587 Introduction to Computer Networks 3~~

**~~Technical Electives - Select one course from the following: 3~~**

~~CO INFO 531 Managing and Administering Windows Server 3~~

~~CO SCI 550 Introduction to Web Development Using Dreamweaver and CSS 3~~

~~CO SCI 553\* Web Site Development Using HTML and JavaScript 3~~

~~CO SCI 581\* Personal Computer Upgrade and Repair 3~~

~~CO INFO 584\* Network Security 3~~

~~CO INFO 590 Introduction to Cloud Computing 3~~

~~CO INFO 591\* Cloud Computing Architecture 3~~

~~CO INFO 592\* Security in the Cloud 3~~

Major - Total Units 39

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