

**PROGRAM APPROVAL APPLICATION**  
**NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED**  
**(This application may not exceed 3 pages)**

**Fill In Form**

Cybersecurity Certificate of Achievement Proposed Program Title	Fall 2018 Projected Program Start Date
Los Angeles City College College	Los Angeles Community College District District

**Contact Information**

Alex A. Davis Voting Member 323.953.4000 x2596 Phone Number	Dean, Academic Affairs, Office of EWD Education, LA City College Title davisaa@lacitycollege.edu Email
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**Goal(s) of Program (Check all that apply):**

Career Technical Education (CTE)       Transfer       Other

**Type of Program (Check all that apply):**

Certificate of Achievement 12-17 (or 17-27 quarter) units       Certificate of Achievement 18+ semester (or 27+ quarter) units  
 Associate of Science Degree       Associate of Arts Degree

**Reason for Approval Request (Check One):**

New Program       Substantial Change       Locally Approved

**Program Information**

0708.00      Recommended [Taxonomy of Program \(TOP\) Code](#)  
 66 or 67      Units for Major-Degree  
 66 or 67      Total Units for Degree  
 36 or 37      Required Units-Certificate - [Depends on which prerequisite is chosen](#)

**Written Form**

**1. Insert the description of the program as it will appear in the catalog. (See PCAH pp. 142 and 170)**

The Cybersecurity Certificate of Achievement as well as the Cybersecurity Associate of Science Degree prepare students for a career in a sector of technology that is growing rapidly and will continue to grow for the foreseeable future. This curriculum teaches students to recognize threats and procedures to be proactive against cybersecurity threats and/or respond to cybersecurity incidents, how to protect and defend against intrusions through the use of advanced techniques used by cybercriminals, and how to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks. Students also learn about the ethics of security and hacking and the geo-political ramifications of cyber attacks. The Cybersecurity Certificate is comprised of a group of industry-recognized CompTIA certifications and computer

forensics and ethical hacking certification programs which will enhance a student’s ability to pursue a career in cybersecurity. To earn a certificate, students must complete the required courses as listed with a minimum grade of a “C.” At least 50% of all coursework must be completed at Los Angeles City College.

**1. Provide a brief rationale for the program.**

This is a single-level enhanced Cybersecurity Certificate and the first to be offered at Los Angeles City College. On its own, the Certificate will be achievable after three semesters. Enhanced cybersecurity programs are one of the fastest-growing CTE programs, and LACC strives to be a part of the growing network of colleges in Southern California offering a cybersecurity program. The Certificate of Achievement and Associate of Science Degree will draw students from across all socio-demographic and economic groups in a part of Los Angeles that has been underserved for years. The program gives students the chance to achieve professional-level certifications (CompTIA) while attaining the Cybersecurity Certificate.

**2. Summarize the Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)**

SOC	Occupation	2016 Jobs	2021 Jobs	2016 - 2021 Change	2016 - 2021 % Change	2016 - 2021 Openings	Annual Openings	Median Hourly Earnings
15-1122	Information Security Analysts	2,031	2,128	97	5%	233	47	\$49.72
15-1151	Computer User Support Specialists	18,500	19,378	878	5%	2,107	421	\$26.54
15-1152	Computer Network Support Specialists	5,210	5,420	210	4%	554	111	\$34.24

<http://coecc.net/supply-demand/>

For Los Angeles County

**3. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (There is space for 10 listings, if you need more, please contact [laocrc@rscdd.edu](mailto:laocrc@rscdd.edu))**

College	Program	Who you contacted	Outcome
Cerritos College	Business CIS	Nick Real	
Citrus College	Cybersecurity Cert	Jim Lancaster	No issues
Cypress College	Dean, Career Technical Education	Dr. Steve Donley	No issues
Coastline Community College	Network Security Cert	Nancy Jones	
Fullerton Community College	Business and CIS	Dr. Douglas Benoit	No issues
Los Angeles Mission College	Cybersecurity Cert	Mark Hobbs	

Long Beach City College	Cybersecurity Cert	Michelle Grimes-Hillman	
Mt San Antonio College	Cybersecurity Cert	Jemma Blake-Judd	
Orange Coast College	Network Security Cert	Lisa Knuppel	
Saddleback College	Information Security Cert	Anthony Teng	
West Los Angeles College	Network and IS Security	Mark Pracher	

4. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (There is space for 20 listings, if you need more, please contact [laocrc@rscdd.edu](mailto:laocrc@rscdd.edu)). (See PCAH pp. 143 and 171)

Course Title	Course Number	Unit Value	
Intro to Computer Hardware	CO TECH 12	4	
A+ Cert Preparation	CO TECH 14	4	
Intro to Computer Networks	CO TECH 4	4	
Network+ Cert Prep	CO TECH 15	3	
Security+ Cert Prep	CO TECH 16	4	
Linux+ Cert Prep	CO TECH 18	4	
Intro to Computer Forensics	CO TECH 29	3	
Intro to Ethical Hacking	CO TECH 31	3	
Python Programming	CO SCI 124	4	
<b>Beginning Visual Basic Programming</b>	<b>CO SCI 108</b>	<b>3</b>	<b>prerequisite 1</b>
<b>Introduction to Computer Systems for MIS</b>	<b>CO SCI 103</b>	<b>4</b>	<b>OR prerequisite 2</b>
Cybersecurity Certificate Pathway	Required courses listed above	36 or 37 units	Total units:36 or 37
Associate of Science Degree Pathway	General Education required courses + courses above	30 units	Total units: 66 or 67

5. Include any other information you would like to share.

When I first developed the Security+ class for the CTEL Department at Los Angeles City College, I discovered that students of all demographic groups were interested in the class and remained engaged throughout the class and kept in touch with me afterward. Nearly every student who has completed my class in the last few years has requested more security classes. When I told past and present students about this Certificate program and AS Degree, they were enthusiastic. Now that we are moving forward, I see students planning their semesters and asking me when new classes will be offered and when. These students range from high school graduates to senior citizens.