

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

Fill In Form

Cyber Security

Proposed Program Title

Fall 2017

Projected Program Start Date

Los Angeles Mission College (LAMC)
 College

Los Angeles Community College District
 District

Contact Information

Monte E. Perez, PhD

Voting Member

President of LAMC

Title

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Phone Number

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Email

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

0708.10 Recommended [Taxonomy of Program \(TOP\) Code](#)

30 units Units for Major-Degree

60 units Total Units for Degree

18 units Required Units-Certificate

Written Form

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

A.S. Degree in Cyber Security provides necessary skills required to take industry recognized certificates. Core skills include introduction to computers, networking, databases, programming logic and design and a programming language. The emphasis in cyber security provides students specific skills sets required to pass the A+, Network+ and Security+ Certificates. The program provides students with a comprehensive coverage of the information security concepts and industry best practices.

2. Provide a brief rationale for the program.

The Certificate of Achievement in Cyber Security is a program designed not only for students desiring to continue their academic studies, but also for individuals wishing to develop the skills to enhance their current employment opportunities. The certificate can be beneficial to students looking to focus specifically on enhancing their Cyber Security skills. These skills can be valuable to employers, particularly small businesses, looking to fill entry-level IT positions. The certificate can also be advantageous to Los Angeles Mission College, completing the set of required certificates to be a Network Administrator - A+, Network+ and Security+ and to increase student enrollment.

3. 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)

“The problem is that cybersecurity professionals—who combine broad technical skills with specific security expertise and an understanding of business risk—are hard to find. For instance, Cisco estimates that there are currently one million unfilled cybersecurity jobs worldwide, while industry giant Symantec predicts that by 2019 the number will be 1.5 million. Little wonder that the word “crisis” appears so often in articles on cybersecurity hiring, or that professionals in the field—finding themselves in such high demand—are able to command such high salaries.” Indeed.com 1/17/17

According to EMSI data, Information Security Analysts (SOC 15-1122) are projected to grow over 12.8% by 2026 in the Los Angeles/Orange County region. The median hourly wage is \$48.38/hour. Annual Openings are projected to be 116. Regional completions for 2015 are 4,820 for these same occupations, and while this computes to negative regional demand, there are multiple factors and industry reports (see above), that project occupations in these fields will be in high demand and that they are needed across industries. The LA Mission College Computer Science Information Technology Advisory Committee also gave its strong endorsement of the program.

4. 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 laocr@rscd.edu)

College	Program	Who You Contacted	Outcome of Contact
Cerritos	AS/CoA	Connie Boardman Jack Wilson	No Reply
East Los Angeles	AS/CoA	Gina Chelstrom - Roderick Lipscomb - Chair	No Reply
Coastline	AS/CoA	Nancy Jones - Dean	No Reply
Glendale	AS/CoA	Jan Swinton – Dean Rory Schlueter - CS/IS coordinator	Approved
Long Beach City	AS/CoA	Michelle Grimes-Hoffman	Approved
Los Angeles Pierce	AS/CoA	Tom Vessella – Dean	Suggested title change

		Natalia Grigoriants - Chair	
Los Angeles Southwest	AS/CoA	Ricky Hodge – Dean James Hicks - Chair Business	No Reply
Los Angeles Valley	AS/CoA	Laurie Nalepa, EdD - Dean	No Reply
Mt. San Antonio	AS/CoA	David Tieu	No Reply
		Barry Andrews - Co-Chair	
		Vic Zamora - Co-Chair	
Pasadena City College	AS/CoA	Lynell Wiggins – Director	No Reply
LA City College	C	Alex Davis - Dean	Approved
Santa Monica	AS/CoA	Patricia Ramos	No Reply

5. 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). (See PCAH pp. 143 and 171)

Courses in grey are core courses required for any Associate Degree. In orange are ones required for Cyber Security Certificate of Achievement (18 units).

Courses	Course Number	Course Title	Units
Core	CoSci 401	Introduction to Computers & Their Uses	3
Core	CoSci 407	Programming Logic	3
Core	CoSci 430	Data Analytics	3
Core	CoSci 434	Introduction to Oracle: SQL	3
Core (1 language other than that required for Emphases)	CoSci 408	Visual Basic	3
	CoSci 439	Programming in C	3
	CoSci 440	Programming in C++	3
	CoSci 452	Programming in Java	3
	CoSci 462	Programming in JavaScript	3
Cyber Security Associate - Required	CoSci 453	A+ Certification	3
Cyber Security Associate - Required	CoSci 487	Introduction to Local Area Network	3
Cyber Security Associate - Required	CoSci 411	Cyber Security	3
Cyber Security Associate - Required	CoSci 483	Principals of Information Security	3
Cyber Security Associate - Required	CoSci 488	Security+ Certification Preparation	3

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

The A.S. Degree is an umbrella degree that incorporates a core curriculum (grey), common to all and three different emphases: Computer Programming (blue), Cyber Security (orange) and Full Stack Development (green).

IT Professionals can add on skills, at low-cost without loss of quality, required to remain competitive.