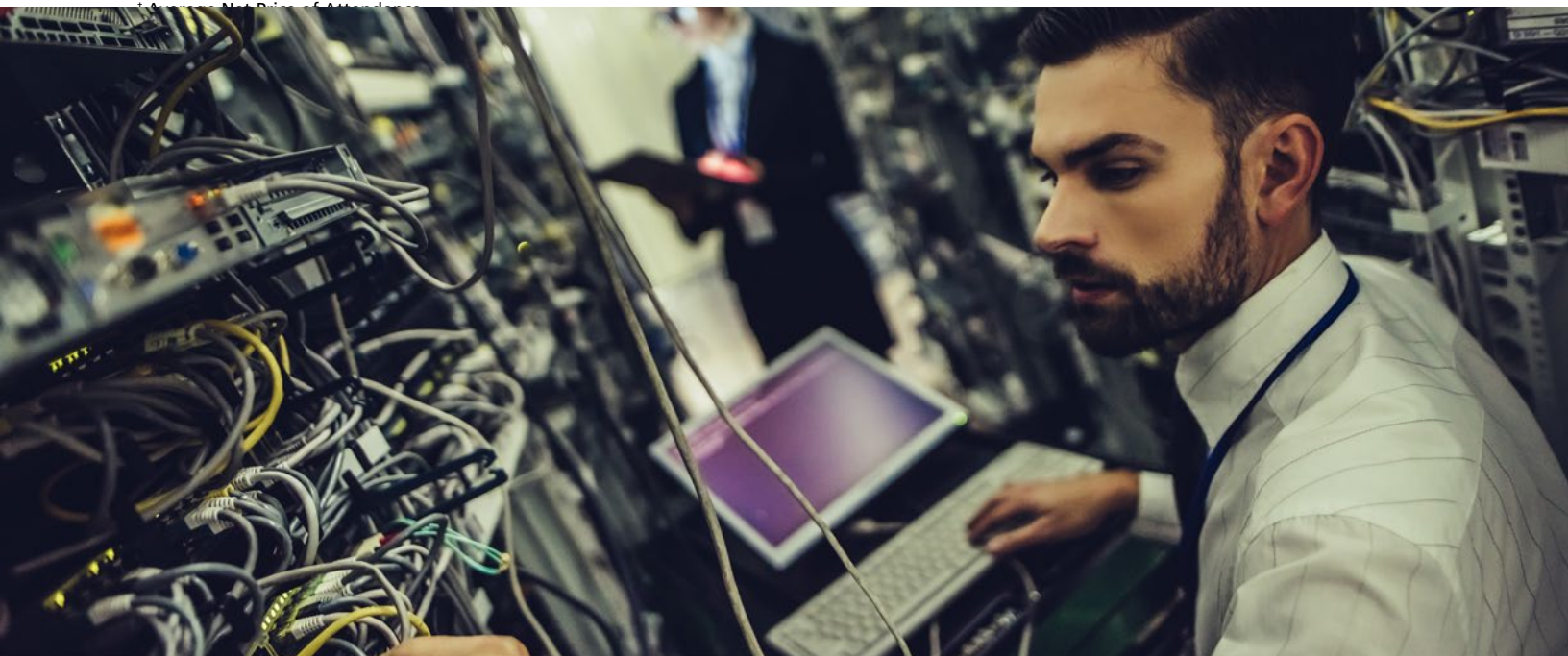


APPENDIX H: POSTSECONDARY CYBERSECURITY PROGRAMMING IN CALIFORNIA

List of IPEDS-reporting Postsecondary Institutions Providing Cybersecurity Programming in California, with Institutional Characteristics, by Region (continued)

Institution Name	ZIP Code Location	Enrollment	Sector	Degree/ nondegree (D/ND) [†]	Tuition & Fees	Net Price [‡]
South Central Coast (continued)						
Laurus College	93401	1,000 - 4,999	Private for-profit, 2-year	D		\$13,098
Moorpark College	93021-1695	10,000 - 19,999	Public, 2-year	D	\$1,388	\$4,223
Oxnard College	93033-6699	5,000 - 9,999	Public, 2-year	D	\$1,388	\$2,997
Santa Barbara Business College- Ventura	93003	Under 1,000	Private for-profit, 4-year or above	D	\$13,619	\$16,554
Santa Barbara City College	93109-2394	10,000 - 19,999	Public, 2-year	D	\$1,374	\$10,984
University of California-Santa Barbara	93106	20,000 and above	Public, 4-year or above	D	\$13,968	\$15,149
Ventura Adult and Continuing Education	93003-0000	Under 1,000	Public, less-than 2-year	ND		\$13,173
Westmont College	93108-1089	1,000 - 4,999	Private not-for- profit, 4-year or above	D	\$41,360	\$34,974
Region N/A						
Computer Training Academy	92507	Under 1,000	Private for-profit, less-than 2-year	ND		\$28,640
DeVry University-California	91768	1,000 - 4,999	Private for-profit, 4-year or above	D	\$19,568	\$27,224
Institute of Technology	93612	1,000 - 4,999	Private for-profit, 2-year	D		\$24,000
University of Phoenix-California	92626	10,000 - 19,999	Private for-profit, 4-year or above	D	\$9,818	\$18,059

[†] Degree-granting status: D is Degree-granting; ND is Nondegree-granting, primarily postsecondary.



APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
San Mateo County Office of Education, ROP	College of San Mateo	Bay Area	IT Applications	4/16/12	Introduction to Computer Information Systems/Applications
East Side Union HSD	Evergreen Valley College	Bay Area	IT Applications	9/9/11	Introduction to Computer Information Systems/Applications
Antioch High	Los Medanos College	Bay Area	IT Applications	2/24/17	Introduction to Computer Information Systems/Applications
Pittsburg High	Los Medanos College	Bay Area	IT Applications	7/4/05	Introduction to Computer Information Systems/Applications
Milpitas High	Mission College	Bay Area	IT Applications	4/28/10	Introduction to Computer Information Systems/Applications
Santa Clara Adult Ed	Mission College	Bay Area	IT Applications	3/19/10	Introduction to Computer Information Systems/Applications
Wilson High	Mission College	Bay Area	IT Applications	3/20/10	Introduction to Computer Information Systems/Applications
Eden Area ROP	Ohlone College	Bay Area	CIS Cisco/A+	4/10/17	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Mission Valley ROP	Ohlone College	Bay Area	CIS Cisco/A+	4/10/17	A+ IT Essentials
Mission Valley ROP	Ohlone College	Bay Area	CIS Cisco/A+	1/1/09	Cisco Networking Academy: Discovery I Networking for Home and Small Business
East Side Union HSD	San Jose City College	Bay Area	IT Applications	5/13/13	Introduction to Computer Information Systems/Applications
Healdsburg High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	5/12/10	A+ IT Essentials
Healdsburg High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	5/13/10	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Middletown High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	5/12/10	A+ IT Essentials
Middletown High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	4/1/10	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
Santa Rosa High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	5/26/10	A+ IT Essentials
Santa Rosa High	Santa Rosa Junior College	Bay Area	CIS Cisco/A+	5/26/10	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Goodwill Industries	Skyline College	Bay Area	CIS Cisco/A+	4/1/10	A+ IT Essentials
Benicia High	Solano College	Bay Area	IT Applications	11/19/14	Introduction to Computer Information Systems/Applications
Sem Yeto High	Solano College	Bay Area	IT Applications	2/27/13	Introduction to Computer Information Systems/Applications
Vanden High	Solano College	Bay Area	IT Applications	3/5/13	Introduction to Computer Information Systems/Applications
Bakersfield Adult School	Bakersfield College	Central California	IT Applications	4/30/15	Introduction to Computer Information Systems/Applications

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Cesar E. Chavez High	Bakersfield College	Central California	IT Applications	4/30/14	Introduction to Computer Information Systems/Applications
Golden West High	College of the Sequoias	Central California	CIS Cisco/A+	4/28/09	A+ IT Essentials
Granite Hills High	College of the Sequoias	Central California	CIS Cisco/A+	4/28/09	A+ IT Essentials
Porterville High	College of the Sequoias	Central California	CIS Cisco/A+	4/28/09	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Porterville High	College of the Sequoias	Central California	CIS Cisco/A+	4/28/09	Network +
Colusa Community Learning Center	Woodland College	Far North	IT Applications	12/16/10	Introduction to Computer Information Systems/Applications
Maxwell High	Woodland College	Far North	IT Applications	3/15/11	Introduction to Computer Information Systems/Applications
Sutter County One Stop	Woodland College	Far North	IT Applications	3/15/11	Introduction to Computer Information Systems/Applications
Woodland High	Woodland College	Far North	IT Applications	11/29/12	Introduction to Computer Information Systems/Applications
Faith Christian High	Yuba College	Far North	IT Applications	4/6/11	Introduction to Computer Information Systems/Applications
Middletown High	Yuba College	Far North	IT Applications	3/28/11	Introduction to Computer Information Systems/Applications
Sutter County One Stop	Yuba College	Far North	IT Applications	4/7/11	Introduction to Computer Information Systems/Applications
Cordova High	Folsom Lake College	Greater Sacramento	IT Applications	3/6/14	Introduction to Computer Information Systems/Applications
Folsom High	Folsom Lake College	Greater Sacramento	IT Applications	11/17/15	Introduction to Computer Information Systems/Applications
Sheldon High	Folsom Lake College	Greater Sacramento	IT Applications	4/27/17	Introduction to Computer Information Systems/Applications
Davis Senior High	Sacramento City College	Greater Sacramento	CIS Cisco/A+	3/10/15	A+ IT Essentials
Davis Senior High	Sacramento City College	Greater Sacramento	CIS Cisco/A+	3/18/13	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Davis Senior High	Sacramento City College	Greater Sacramento	CIS Cisco/A+	10/6/16	Cisco Networking Academy: Exploration I: Network Fundamentals
Pioneer High	Sacramento City College	Greater Sacramento	CIS Cisco/A+	3/24/17	A+ IT Essentials
Pioneer High	Sacramento City College	Greater Sacramento	CIS Cisco/A+	4/9/13	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Sacramento New Technology High	Sacramento City College	Greater Sacramento	IT Applications	10/6/16	Introduction to Computer Information Systems/Applications
A. B. Miller High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Alta Loma High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/6/14	A+ IT Essentials
Alta Loma High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Baldy View ROP Alta Career Technical Center	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	3/3/15	A+ IT Essentials
Baldy View ROP Career Training Center	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	4/9/18	A+ IT Essentials
Birch High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/14/14	A+ IT Essentials
Birch High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Chaffey High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Citrus High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Colony High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Etiwanda High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Fontana High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Henry J. Kaiser High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Jurupa Hills High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Los Osos High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Montclair High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Ontario High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/6/14	A+ IT Essentials
Ontario High	Chaffey College	Inland Empire/ Desert	IT Applications	5/1/17	Introduction to Computer Information Systems/Applications
Pacific High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/14/14	A+ IT Essentials
Rancho Cucamonga High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Redlands East Valley High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	2/12/15	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Redlands East Valley High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	2/12/15	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
Redlands Senior High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	2/12/15	Cisco Networking Academy: Discovery I Networking for Home and Small Business

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Redlands Senior High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	2/12/15	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
Summit High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/14/14	A+ IT Essentials
Summit High	Chaffey College	Inland Empire/ Desert	IT Applications	11/6/14	Introduction to Computer Information Systems/Applications
Twentynine Palms High	Chaffey College	Inland Empire/ Desert	CIS Cisco/A+	11/14/14	A+ IT Essentials
Upland High	Chaffey College	Inland Empire/ Desert	IT Applications	12/17/14	Introduction to Computer Information Systems/Applications
Valley View High	Chaffey College	Inland Empire/ Desert	IT Applications	11/7/14	Introduction to Computer Information Systems/Applications
Coachella Valley High	College of the Desert	Inland Empire/ Desert	IT Applications	3/30/12	Introduction to Computer Information Systems/Applications
La Familia Continuation High	College of the Desert	Inland Empire/ Desert	IT Applications	3/30/12	Introduction to Computer Information Systems/Applications
Palo Verde High	College of the Desert	Inland Empire/ Desert	IT Applications	6/21/12	Introduction to Computer Information Systems/Applications
Colton-Redlands-Yucaipa ROP	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	1/30/15	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Colton-Redlands-Yucaipa ROP	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	5/6/13	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
Colton-Redlands-Yucaipa ROP	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	6/2/09	Cisco Networking Academy: Exploration I: Network Fundamentals
San Bernardino City USD	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	3/16/10	Cisco Networking Academy: Discovery I Networking for Home and Small Business
San Bernardino City USD	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	3/16/10	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
San Bernardino City USD	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	6/15/14	Cisco Networking Academy: Exploration I: Network Fundamentals
San Bernardino County ROP	Crafton Hills College	Inland Empire/ Desert	CIS Cisco/A+	5/5/09	A+ IT Essentials
Brawley High	Imperial Valley College	Inland Empire/ Desert	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Central Union High	Imperial Valley College	Inland Empire/ Desert	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Holtville High	Imperial Valley College	Inland Empire/ Desert	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
San Pasqual High	Imperial Valley College	Inland Empire/ Desert	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Southwest High	Imperial Valley College	Inland Empire/ Desert	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Lake Elsinore USD	Mt. San Jacinto College	Inland Empire/ Desert	IT Applications	2/21/13	Introduction to Computer Information Systems/Applications
Perris UHSD	Mt. San Jacinto College	Inland Empire/ Desert	IT Applications	2/21/13	Introduction to Computer Information Systems/Applications
Colton-Redlands-Yucaipa ROP	Riverside CCD	Inland Empire/ Desert	CIS Cisco/A+	6/2/11	Cisco Networking Academy: Exploration I: Network Fundamentals
Riverside USD	Riverside CCD	Inland Empire/ Desert	CIS Cisco/A+	6/2/11	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Riverside USD	Riverside CCD	Inland Empire/ Desert	CIS Cisco/A+	6/2/11	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
San Bernardino City USD	Riverside CCD	Inland Empire/ Desert	CIS Cisco/A+	6/2/11	Cisco Networking Academy: Exploration I: Network Fundamentals
Val Verde USD	Riverside CCD	Inland Empire/ Desert	CIS Cisco/A+	6/2/11	Cisco Networking Academy: Exploration I: Network Fundamentals
San Bernardino County ROP	San Bernardino Valley College	Inland Empire/ Desert	CIS Cisco/A+	5/5/09	A+ IT Essentials
San Bernardino County ROP	San Bernardino Valley College	Inland Empire/ Desert	CIS Cisco/A+	3/16/10	Cisco Networking Academy: Discovery I Networking for Home and Small Business
San Bernardino County ROP	San Bernardino Valley College	Inland Empire/ Desert	CIS Cisco/A+	5/4/09	Cisco Networking Academy: Discovery II: Working at a Small-to-Medium Business or ISP
San Bernardino County ROP	San Bernardino Valley College	Inland Empire/ Desert	CIS Cisco/A+	3/16/10	Cisco Networking Academy: Exploration I: Network Fundamentals
San Bernardino County ROP	San Bernardino Valley College	Inland Empire/ Desert	IT Applications	3/5/09	Introduction to Computer Information Systems/Applications
Central County Occupational Center	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/1/14	A+ IT Essentials
Central County ROP	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/1/14	A+ IT Essentials
Central County ROP	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/1/14	Network +
Central County ROP	Coastline College	Los Angeles/ Orange County	IT Applications	4/23/10	Introduction to Computer Information Systems/Applications
Central Orange County CTEP	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/6/16	A+ IT Essentials
Central Orange County CTEP	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/6/16	Network +
Central Orange County CTEP	Coastline College	Los Angeles/ Orange County	IT Applications	5/6/16	Introduction to Computer Information Systems/Applications
Coastline ROP	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	4/23/10	A+ IT Essentials
Garden Grove Unified School District	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	4/23/10	Network +

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Garden Grove Unified School District	Coastline College	Los Angeles/ Orange County	IT Applications	4/23/10	Introduction to Computer Information Systems/Applications
Huntington Beach Adult School	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/6/16	A+ IT Essentials
Huntington Beach Adult School	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/6/16	Cisco Networking Academy: Discovery I Networking for Home and Small Business
North Orange County ROP	Coastline College	Los Angeles/ Orange County	IT Applications	1/0/00	Introduction to Computer Information Systems/Applications
Valencia High	Coastline College	Los Angeles/ Orange County	CIS Cisco/A+	5/21/09	A+ IT Essentials
Central County ROP	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Coast Union High	Golden West College	Los Angeles/ Orange County	IT Applications	4/1/12	Introduction to Computer Information Systems/Applications
Coastline ROP	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
El Toro High	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Laguna Hills High	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Marina High	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
North Orange County ROP	Golden West College	Los Angeles/ Orange County	IT Applications	7/5/05	Introduction to Computer Information Systems/Applications
Calabasas High	Los Angeles Pierce College	Los Angeles/ Orange County	CIS Cisco/A+	11/17/10	Cisco Networking Academy: Discovery I Networking for Home and Small Business
Baldwin Park Adult and Continuing Education	Mt. San Antonio College	Los Angeles/ Orange County	CIS Cisco/A+	10/16/13	A+ IT Essentials
Baldy View ROP Career Training Center	Mt. San Antonio College	Los Angeles/ Orange County	CIS Cisco/A+	2/26/16	A+ IT Essentials
East San Gabriel Valley ROP	Mt. San Antonio College	Los Angeles/ Orange County	CIS Cisco/A+	1/15/15	A+ IT Essentials
Tri-C Adult Education	Mt. San Antonio College	Los Angeles/ Orange County	CIS Cisco/A+	1/0/00	A+ IT Essentials
Santa Fe High	Rio Hondo College	Los Angeles/ Orange County	IT Applications	11/19/12	Introduction to Computer Information Systems/Applications
Capistrano-Laguna Beach ROP	Saddleback College	Los Angeles/ Orange County	CIS Cisco/A+	7/5/05	A+ IT Essentials
Coastline ROP	Saddleback College	Los Angeles/ Orange County	CIS Cisco/A+	7/8/05	A+ IT Essentials
Coastline ROP	Saddleback College	Los Angeles/ Orange County	IT Applications	4/17/13	Introduction to Computer Information Systems/Applications
College and Career Advantage	Saddleback College	Los Angeles/ Orange County	CIS Cisco/A+	7/8/05	A+ IT Essentials

APPENDIX I: ARTICULATIONS BETWEEN SECONDARY AND POSTSECONDARY PROGRAMS

Inventory of Formal Articulations between Regional Secondary and Postsecondary Cybersecurity-related Programs by Region (continued)

Secondary School	Post-Secondary School	Region	Discipline	Date	Template Title/ Agreement Title
Laguna Hills High	Saddleback College	Los Angeles/ Orange County	IT Applications	4/25/17	Introduction to Computer Information Systems/Applications
New Vista School Tech Academy	Saddleback College	Los Angeles/ Orange County	IT Applications	4/25/17	Introduction to Computer Information Systems/Applications
Saddleback Valley USD	Saddleback College	Los Angeles/ Orange County	IT Applications	4/17/13	Introduction to Computer Information Systems/Applications
South Coast ROP	Saddleback College	Los Angeles/ Orange County	CIS Cisco/A+	7/8/05	A+ IT Essentials
Del Norte High	Palomar College	San Diego/ Imperial	IT Applications	3/10/10	Introduction to Computer Information Systems/Applications
Escondido Charter High	Palomar College	San Diego/ Imperial	IT Applications	11/5/10	Introduction to Computer Information Systems/Applications
Rancho Bernardo High	Palomar College	San Diego/ Imperial	IT Applications	5/18/10	Introduction to Computer Information Systems/Applications
Sweetwater Union HSD CTE Division of Adult Ed	Southwestern College	San Diego/ Imperial	CIS Cisco/A+	11/25/08	A+ IT Essentials
Sweetwater Union HSD CTE Division of Adult Ed	Southwestern College	San Diego/ Imperial	CIS Cisco/A+	11/25/08	Network +
Moorpark High	Moorpark College	South Central	CIS Cisco/A+	5/1/08	A+ IT Essentials

Source: California Statewide Career Pathways (www.statepathways.org)



APPENDIX J: CYBERSECURITY COURSES AT CALIFORNIA PUBLIC HIGH SCHOOLS

List of Cybersecurity-related and Pre-cybersecurity Secondary Courses at California Public High Schools

Course Number	Course Title	Course Description
4604	Network Engineering	This course prepares students for jobs as network technicians and helps them develop skills required for computer technicians provides a basic overview of routing and remote access, addressing, and security. It also familiarizes students with servers that provide email services, web space, and authenticated access. Students learn about the soft skills required for help desk and customer service positions, and help them prepare for industry certification exams. Students perform a great deal of hands-on work on routers, switches, and firewalls as they learn to design, build, and maintain data networks using with some of the most powerful enterprise network technologies of the day. The course covers some of the most powerful technologies used on enterprise networks including wireless networks, virtual LANs (VLANs), Spanning-Tree Protocol (STP), traffic management with access control lists (ACLs), dynamic routing, and wide area network (WAN) technologies. Course titles may also include: Network Design, Installation & Engineering; Introduction to Networking.
4631	Database Design and SQL Programming	This two-part course teaches data modeling and Structured Query Language (SQL). In the database design curriculum, students learn to analyze complex business scenarios and create a data model, a conceptual representation of an organization's information. In the database programming with SQL curriculum, students implement their database design by creating a physical database using SQL, the industry-standard database programming language. Upon completion of this course, students have the opportunity to take an exam to earn the industry certification Oracle Database SQL Certified Expert.
4633	Computer Repair and Support	This course will explore workplace safety, customer relations, and help ticket documentation. Students will also learn various computer operating systems such as Linux, computer maintenance, electrical measurements and energy conservation, basic troubleshooting, and virus protection. Students will also be introduced to various devices such as tablets, laptops and mobile devices; and, network architecture and internet technologies, as well as careers in the IT industry. This course will prepare students for internships working at a helpdesk, or in a computer repair shop. Course titles may also include: Information Technology Essentials; Computer Service Technology.
4634	Exploring Computer Science	This course provides students with foundational knowledge of computer science. Students will explore topics of human computer interaction, problem solving, web design, computer programming, data modeling, and robotics. Throughout the course, students will understand the algorithmic underpinnings of computer applications and gain technical expertise using computational tools. Course titles may also include: Introduction to Computer Science A; Computer Principles.
4641	CTE AP Computer Science A	Taught by a Career Technical Education (CTE) authorized teacher, CTE Computer Science A emphasizes object oriented programming methodology with a concentration on problem solving and algorithm development and is meant to be the equivalent of a first semester college level course in Computer Science. It also includes the study of data structures, design, and abstraction, but these topics are not covered to the extent that they are in Computer Science AB.
4646	Network Security	This course provides an in-depth study of Network Security fundamentals and provides a comprehensive overview of network security, including computer forensics. Students will gain the knowledge and skills required to identify risk and participate in risk mitigation activities; provide infrastructure, application, operational, and information security; apply security controls to maintain confidentiality, integrity, and availability; identify appropriate technologies and products; and operate with an awareness of applicable policies, laws, and regulations.

Source: California Department of Education, CALPADS Code Sets

APPENDIX K: CYBERSECURITY EDUCATION PROGRAMS SURVEY

Part I: Institution

Q1. Please choose the category that best describes your institution:

California Community College

Other higher education institution, including Colleges and Universities

Q2. Please choose the name of college you represent:

▼Allan Hancock College (1) ... Yuba College (181)

Q2A. Please choose the name of your organization:

▼Cal Poly Pomona (1) ... Westmont College (146)

Q3. This survey is designed to collect information on cybersecurity programs and coursework/training offered at postsecondary institutions in California. We want to make sure we are reaching the right person in your institution with the knowledge regarding cybersecurity offerings to respond to this survey. Are you the best person at your institution to answer these questions?

Yes

No

Q4. (If No to Q3) Please tell us who the best person is at your institution to respond to questions about cybersecurity in the curriculum.

Name: _____

Email: _____

Phone: _____