



Cybersecurity & Cloud Tech Specialist

Inland Empire/Desert Region (Riverside-San Bernardino-Ontario Metropolitan Statistical Area)

Summary

- The cybersecurity specialist occupational group is projected to have **2,148 job openings** over the next five years (2017-2022) in the Inland Empire/Desert region.
- The **entry-level wage** for each occupation in the cybersecurity specialist occupational group is **above the MIT Living Wage estimate of \$12.30 per hour** for a single adult living in the Inland Empire/Desert region.
- There appears to be an **opportunity for program growth** based on the average annual number of program completions for the selected community college program (**11 average annual community college credentials**) and the annual openings for cybersecurity specialist jobs in the region (**430 annual job openings**).

Introduction

The worldwide web administration program prepares students for employment in the methods to develop and maintain web servers and hosted web pages and to function as Webmaster. This includes computer systems and networks, servers, web design and editing, information resources management, web policies, and security.¹ The report focuses primarily on the security aspect of this program. The occupations included in the cybersecurity specialist occupational group are:

- Computer Network Architects
- Computer Network Support Specialists
- Database Administrators
- Information Security Analysts
- Network and Computer Systems Administrators
- Web Developers

This report also contains a section on demand for cloud technology skills, beginning on page eight.

¹ The Taxonomy of Programs, 6th Edition, February 2004

Job Opportunities

In 2017, there were 4,974 cybersecurity specialist jobs in the Inland Empire/Desert region. This occupational group is projecting to increase employment by 9% over the next five years. Employers in the region will need to hire 2,148 workers over the projection period to backfill jobs that workers are permanently vacating (includes retirements). Appendix A, Table 1 displays the projected job growth, wages, education, training, and work experience required for each of the occupations in this group for the Inland Empire/Desert region.

Exhibit 1: Five-year projections for the cybersecurity specialist occupational group in the Inland Empire/Desert region

2017 Jobs	5-Yr % Change (New Jobs)	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
4,974	9%	2,148	430	13%

Source: EMSI 2018.3

Cybersecurity Specialist Demand

A real-time search for employers seeking cybersecurity specialists was conducted to hone in on the jobs that require cybersecurity skills. This search identified employers, in-demand skills, minimum education requirements, and certifications required explicitly for cybersecurity jobs. Subsequent sections summarize the results of this search. For an in-depth analysis of cybersecurity employment demand in California, visit the COE website. <http://coecc.net/reports/Cybersecurity>

Exhibit 2 shows the number of job ads posted during the last 12 months along with the regional and national average time to fill. On average, it takes 47 days for employers to find qualified candidates to fill open positions in the Inland Empire/Desert region. This is eight days longer than the national average, indicating that when compared to the nation, open positions are more challenging to fill in the region.

Exhibit 2: Job ads by each of the cybersecurity specialist occupations in the Inland Empire/Desert region and time to fill, November 2017 – October 2018

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
Information Security Analysts	206	48	40
Computer Network Architects	122	49	41
Network and Computer Systems Administrators	77	41	34
Computer Network Support Specialists	16	39	32
Database Administrators	11	45	37
Web Developers	3	47	39
Total	435	-	-

Source: Burning Glass – Labor Insights

Earnings

The entry-level wage for each of the occupations in the cybersecurity specialist occupational group is above the MIT Living Wage estimate of \$12.30 per hour for a single adult living in the Inland Empire/Desert. These wages are also sufficient for two working adults and one child (\$14.50 per hour, per adult or \$30,160 annually for each adult). Exhibit 3 displays wage information for this occupational group.

Exhibit 3: Earnings for the cybersecurity specialist occupational group in the Inland Empire/Desert region

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Avg. Annual Earnings
Information Security Analysts	\$29.77 to \$59.87	\$47.46	\$96,700
Computer Network Architects	\$32.71 to \$60.01	\$43.97	\$98,200
Database Administrators	\$30.25 to \$51.09	\$41.16	\$85,200

Occupation	Entry to Experienced Hourly Earnings Range*	Median Wage*	Avg. Annual Earnings
Network and Computer Systems Administrators	\$28.61 to \$45.86	\$35.93	\$77,700
Computer Network Support Specialists	\$24.74 to \$39.94	\$29.52	\$68,100
Web Developers	\$17.53 to \$30.09	\$20.97	\$52,500

Source: EMSI 2018.3

*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage.

Employers, Skills, Education, and Certifications

Exhibit 4 displays the top employers posting job ads during the last 12 months.

Exhibit 4: The top employers for the cybersecurity specialist occupational group in the Inland Empire/Desert region during the last 12 months, November 2017 – October 2018

Occupation	Top Employers
Information Security Analysts (n=158)	<ul style="list-style-type: none"> • ESRI • California Baptist University
Computer Network Architects (n=80)	<ul style="list-style-type: none"> • NIC Partners • Primus Software Corporation
Network and Computer Systems Administrators (n=63)	<ul style="list-style-type: none"> • VSolvit • Booz Allen Hamilton
Computer Network Support Specialists (n=11)	<ul style="list-style-type: none"> • Rita Technology Services • University of California, Riverside
Database Administrators (n=9)	<ul style="list-style-type: none"> • Booz Allen Hamilton • Atrilogy Solutions Group
Web Developers (n=2)	<ul style="list-style-type: none"> • VSolvit • ICI Services Corporation

Source: Burning Glass – Labor Insights

Exhibit 5 lists a sample of in-demand specialized, employability, and software and programming skills that employers are seeking when looking for workers to fill cybersecurity specialist positions.

Exhibit 5: Sample of in-demand skills from employer job ads for cybersecurity specialist occupations in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Specialized Skills	Employability Skills	Software and Programming Skills
Information Security Analysts (n=188)	<ul style="list-style-type: none"> Information Systems Network Security Project Management 	<ul style="list-style-type: none"> Communication Skills Planning Teamwork/Collaboration 	<ul style="list-style-type: none"> Microsoft Office Linux Vulnerability Assessment
Computer Network Architects (n=122)	<ul style="list-style-type: none"> Network Engineering Voice over IP (VoIP) Telecommunications 	<ul style="list-style-type: none"> Communication Skills Teamwork/Collaboration Multi-Tasking 	<ul style="list-style-type: none"> Virtual Private Networking (VPN) Cisco Switching OSI model
Network and Computer Systems Administrators (n=76)	<ul style="list-style-type: none"> Network Troubleshooting Network Security System/Network Configuration 	<ul style="list-style-type: none"> Troubleshooting Communication Skills Planning 	<ul style="list-style-type: none"> Cisco Microsoft Active Directory Wide Area Network
Computer Network Support Specialists (n=15)	<ul style="list-style-type: none"> Cisco Network Security Network Engineering 	<ul style="list-style-type: none"> Troubleshooting Planning Communication Skills 	<ul style="list-style-type: none"> Cisco Switching F5 Load Balancers Virtual Private Networking (VPN)
Database Administrators (n=11)	<ul style="list-style-type: none"> Data Warehousing SQL Enterprise Resource Planning (ERP) 	<ul style="list-style-type: none"> Troubleshooting Creativity Problem Solving 	<ul style="list-style-type: none"> Oracle PeopleSoft SAP
Web Developers (n=3)	<ul style="list-style-type: none"> SQL Data Management Web Site Design 	<ul style="list-style-type: none"> Communication Skills Teamwork/Collaboration Creativity 	<ul style="list-style-type: none"> Software Architecture Visual Studio Enterprise Resource Planning (ERP)

Source: Burning Glass – Labor Insights

Exhibit 6 displays the entry-level education typically required to enter each occupation according to the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads.

Exhibit 6: Educational attainment and online job ads with minimum advertised education requirements for the cybersecurity specialist occupational group in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Work Experience Required	Typical Entry-Level Education Requirement	Two-Year Postsecondary Level of Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
				Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor's degree or higher
Information Security Analysts	Less than 5 years	Bachelor's degree	27%	153	22%	9%	69%
Computer Network Architects	5 years or more	Bachelor's degree	35%	97	7%	2%	91%
Network and Computer Systems Administrators	None	Bachelor's degree	38%	60	22%	8%	70%
Computer Network Support Specialists	None	Associate degree	41%	11	18%	9%	73%
Database Administrators	None	Bachelor's degree	21%	9	-	-	100%
Web Developers	None	Associate degree	25%	3	-	33%	67%

Source: EMSI 2018.3, Current Population Survey, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework

Certifications

Approximately 71% of the job ads for the cybersecurity specialist occupational group requested or required a certification. Knowing which certifications are currently in demand is useful for program faculty and program completers. Exhibit 7 displays the certifications in highest demand for each occupation in the cybersecurity specialist occupational group.

Exhibit 7: Certifications in highest demand for cybersecurity specialist occupations in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Certification
Information Security Analysts (n=118)	<ul style="list-style-type: none"> • Certified Information Systems Security Professional (CISSP) • Certified Information Security Manager (CISM)
Computer Network Architects (n=114)	<ul style="list-style-type: none"> • Cisco Certified Network Professional (CCNP) • Cisco Certified Network Associate (CCNA)
Network and Computer Systems Administrators (n=60)	<ul style="list-style-type: none"> • CompTIA Security+ • Cisco Certified Network Associate (CCNA)
Computer Network Support Specialists (n=13)	<ul style="list-style-type: none"> • Cisco Certified Network Professional (CCNP) • Cisco Certified Network Associate (CCNA)
Database Administrators (n=3)	<ul style="list-style-type: none"> • CompTIA Security+ • Microsoft Certified Solutions Associate (MCSA)
Web Developers (n=3)	<ul style="list-style-type: none"> • Microsoft Certified Solutions Associate (MCSA) • CompTIA Network+

Source: Burning Glass – Labor Insights

Cloud Technology Demand

A real-time job posting search for employers seeking cloud technology skills was conducted to hone in on the jobs that require cloud technology skills. This search identified the employers most frequently posting job ads, in-demand skills from all employers, and certifications required explicitly for cloud technology specialist jobs. Subsequent sections summarize the results of this search.

Exhibit 8 shows the number of job ads posted during the last 12 months along with the regional and national average time to fill. On average, it takes 47 days for employers to find qualified candidates to fill open positions in the Inland Empire/Desert region. This is eight days longer than the national average, indicating that when compared to the nation, open positions are more challenging to fill in the region.

Exhibit 8: Job ads by each of the cloud technology occupations in the Inland Empire/Desert region and time to fill, November 2017 – October 2018

Occupation	Job Ads	Regional Average Time to Fill (Days)	National Average Time to Fill (Days)
Web Developers	32	47	39
Network and Computer Systems Administrators	30	41	34
Information Security Analysts	19	48	40
Database Administrators	19	45	37
Computer Network Architects	12	49	41
Computer Network Support Specialists	1	39	32
Total	113	-	-

Source: Burning Glass – Labor Insights

Employers, Skills, Education, and Certifications

Exhibit 9 displays the top employers posting job ads seeking candidates with cloud technology skills during the last 12 months. Overall, ESRI posted the most job ads during this period with 32 unique postings.

Exhibit 9: The top employers for the cloud technology occupational group in the Inland Empire/Desert region during the last 12 months, November 2017 – October 2018

Occupation	Top Employers
Web Developers (n=16)	<ul style="list-style-type: none"> • ESRI • Kros-Wise Inc.
Network and Computer Systems Administrators (n=26)	<ul style="list-style-type: none"> • Booz Allen Hamilton Inc. • ESRI
Information Security Analysts (n=17)	<ul style="list-style-type: none"> • ESRI • University of California, Riverside
Database Administrators (n=15)	<ul style="list-style-type: none"> • ESRI • AccuSource Inc.
Computer Network Architects (n=9)	<ul style="list-style-type: none"> • San Manuel Band of Mission Indians • Telus Inc.
Computer Network Support Specialists (n=1)	<ul style="list-style-type: none"> • University of California, Riverside

Source: Burning Glass – Labor Insights

Exhibit 10 lists a sample of in-demand specialized, employability, and software and programming skills that employers are seeking when looking for workers to fill cloud technology positions.

Exhibit 10: Sample of in-demand skills from employer job ads for cloud technology occupations in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Specialized Skills	Employability Skills	Software and Programming Skills
Web Developers (n=32)	<ul style="list-style-type: none"> • Software Development • Deployment Models • Debugging 	<ul style="list-style-type: none"> • Written Communication • Teamwork/ Collaboration • Problem Solving 	<ul style="list-style-type: none"> • JavaScript • Angular JS • MongoDB
Network and Computer Systems Administrators (n=30)	<ul style="list-style-type: none"> • Cisco • Microsoft Active Directory • VMware 	<ul style="list-style-type: none"> • Troubleshooting • Microsoft Windows • Teamwork/ Collaboration 	<ul style="list-style-type: none"> • Linux • Microsoft PowerShell • Citrix
Information Security Analysts (n=19)	<ul style="list-style-type: none"> • FedRAMP • Open Web Application Security Project (OWASP) • Health Insurance Portability and Accountability Act (HIPAA) 	<ul style="list-style-type: none"> • Communication Skills • Teamwork/ Collaboration • Presentation Skills 	<ul style="list-style-type: none"> • Microsoft Azure • Python • ArcGIS
Database Administrators (n=19)	<ul style="list-style-type: none"> • SQL • ArcGIS • Software Development 	<ul style="list-style-type: none"> • Communication Skills • Troubleshooting • Verbal/Oral Communication 	<ul style="list-style-type: none"> • Software Development • Software as a Service (SaaS)
Computer Network Architects (n=12)	<ul style="list-style-type: none"> • VMware • Project Management • Virtualization 	<ul style="list-style-type: none"> • Communication Skills • Troubleshooting • Teamwork/ Collaboration 	<ul style="list-style-type: none"> • Microsoft Visio • ServiceNow • Microsoft Excel
Computer Network Support Specialists (n=1)	<ul style="list-style-type: none"> • Virtual Private Networking (VPN) • User Interface (UI) Design • Technical Writing/Editing 	<ul style="list-style-type: none"> • Problem Solving • Meeting Deadlines • Editing 	<ul style="list-style-type: none"> • ServiceNow • Linux • CiscoWorks

Source: Burning Glass – Labor Insights

Exhibit 11 displays the entry-level education typically required to enter each occupation according to an employer survey conducted by the Bureau of Labor Statistics, educational attainment for incumbent workers with “some college, no degree” and an “associate degree” according to a survey of incumbent workers by the U.S. Census, and the minimum advertised education requirement requested by employers in online job ads. The majority of employers are seeking a cloud computing job candidate with a bachelor’s degree or higher.

Exhibit 11: Educational attainment and online job ads with minimum advertised education requirements for the cloud technology occupational group in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Work Experience Required	Typical Entry-Level Education Requirement	Two-Year Postsecondary Level of Educational Attainment*	Minimum Advertised Education Requirement from Job Ads			
				Number of Job Postings (n=)	High school diploma or vocational training	Associate degree	Bachelor’s degree or higher
Web Developers	None	Associate degree	25%	19	-	-	100%
Network and Computer Systems Administrators	None	Bachelor's degree	38%	20	30%	-	70%
Information Security Analysts	Less than 5 years	Bachelor's degree	27%	14	-	-	100%
Database Administrators	None	Bachelor's degree	21%	14	-	-	100%
Computer Network Architects	5 years or more	Bachelor's degree	35%	9	11%	-	89%
Computer Network Support Specialists	None	Associate degree	41%	1	-	-	100%

Source: EMSI 2018.3, Current Population Survey, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Credential or Some Postsecondary Coursework

Certifications

Approximately 44% of the job ads for the cloud technology occupational group requested or required a certification. Knowing which certifications are currently in demand is useful for program faculty and program completers. Exhibit 12 displays the certifications in greatest demand for each occupation in the cloud technology occupational group.

Exhibit 12: Certifications in greatest demand for cloud technology occupations in the Inland Empire/Desert region, November 2017 – October 2018

Occupation	Certification
Web Developers (n=1)	<ul style="list-style-type: none"> • CompTIA Security+
Network and Computer Systems Administrators (n=22)	<ul style="list-style-type: none"> • CompTIA Security+ • Microsoft Certified Solutions Associate (MCSA)
Information Security Analysts (n=16)	<ul style="list-style-type: none"> • Certified Information Systems Security Professional (CISSP) • Cisco Certified Security Professional
Database Administrators (n=3)	<ul style="list-style-type: none"> • Microsoft Certified Solutions Associate (MCSA) • Certified Scrum Trainer (CST)
Computer Network Architects (n=7)	<ul style="list-style-type: none"> • IT Infrastructure Library (ITIL) • Cisco Certified Network Professional (CCNP)
Computer Network Support Specialists (n=1)	<ul style="list-style-type: none"> • IT Infrastructure Library (ITIL)

Source: Burning Glass – Labor Insights

Student Completions

Exhibit 13 shows the annual average regional community college credentials (associate degrees and certificates) conferred during the three academic years between 2014 and 2017, with the relevant TOP code. Please note, a credential is not equivalent to a single person in search of a job opening since a student may earn more than one award, such as an associate degree in addition to a certificate. Community College student outcome information is from the CTE LaunchBoard based on the selected TOP code(s) and region.

Exhibit 13: Annual average community college student completions for worldwide web administration programs in the Inland Empire/Desert region

0709.00 – Worldwide Web Administration	Annual Community College Headcount (2016-17)	Community College Annual Average Credentials (2014-17)
Chaffey	200	
Moreno Valley		
Certificate 6 to < 18 semester units		4
Mt. San Jacinto – CIS: Internet Authoring		
Certificate 30 to < 60 semester units		2
Norco College		
Certificate 6 to < 18 semester units		1
Riverside		
Certificate 6 to < 18 semester units		4
Victor Valley	152	
Total community college headcount (2016-17)	352	
Total annual average community college credentials		11

Source: LaunchBoard, IPEDS, COCI

0709.00 – Worldwide Web Administration program Strong Workforce outcomes in the Inland Empire/Desert region in the academic year 2015-16 [unless noted otherwise]:

- Number of course enrollments: 390 (California median: 74) [2016-17]
- Number of students who transferred to a 4-year institution: 20 (CA: 13)
- Employed in the second fiscal quarter after exit: 65% (CA: 64%)
- Median earnings in the second fiscal quarter after exit: \$6,459 (CA: \$8,998)
- Employed in the fourth fiscal quarter after exit: 60% (CA: 63%)
- Median annual earnings: \$21,009 (CA: \$29,866)
- The percentage in a job closely related to the field of study: 100% (CA: 75%) [2014-15]
- Median change in earnings: 25% (CA: 33%)
- The proportion of students who attained a living wage: 44% (CA: 70%)



Sources

O*Net Online

Labor Insight/Jobs (Burning Glass)

Economic Modeling Specialists International (EMSI)

CTE LaunchBoard

MIT Living Wage Calculator

Chancellor's Office Curriculum Inventory (COCI, version 2.0)

The Integrated Postsecondary Education Data System (IPEDS)

Taxonomy of Programs, 6th edition

Michael Goss, Director

Center of Excellence, Inland Empire/Desert Region

michael.goss@chaffey.edu

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Appendix A: Occupation definitions, sample job titles, five-year projections, and earnings for cybersecurity specialist occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Information Security Analysts (15-1122)

Plan, implement, upgrade, or monitor security measures for the protection of computer networks and information. May ensure appropriate security controls are in place that will safeguard digital files and vital electronic infrastructure. May respond to computer security breaches and viruses.

Sample job titles: *Artist, Creative Director, Creative Manager, Design Director, Designer, Graphic Artist, Graphic Designer, Online Producer, Production Artist, Publications Designer*

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 27%

Web Developers (15-1134)

Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content.

Sample job titles: *Designer, Technology Applications Engineer, Web Architect, Web Design Specialist, Web Designer, Web Developer, Web Development Director, Web Development Instructor, Webmaster*

Entry-Level Educational Requirement: Associate degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 25%



Database Administrators (15-1141)

Administer, test, and implement computer databases, applying knowledge of database management systems. Coordinate changes to computer databases. May plan, coordinate, and implement security measures to safeguard computer databases.

Sample job titles: *Data Architect, Database Administration Manager, Database Administrator (DBA), Database Analyst, Database Coordinator, Database Developer, Database Programmer, Information Systems Manager, Management Information Systems Director (MIS Director), System Administrator*

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 21%

Network and Computer Systems Administrators (15-1142)

Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Monitor network to ensure network availability to all system users and may perform necessary maintenance to support network availability. May monitor and test Web site performance to ensure Web sites operate correctly and without interruption. May assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software. May supervise computer user support specialists and computer network support specialists. May administer network security measures.

Sample job titles: *Information Analyst, Information Systems Manager (IS Manager), Information Technology Specialist (IT Specialist), LAN Specialist (Local Area Network Specialist), Local Area Network Administrator (LAN Administrator), Network Administrator, Network Coordinator, Network Manager, Network Specialist, Systems Administrator*

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%

Computer Network Architects (15-1143)

Design and implement computer and information networks, such as local area networks (LAN), wide area networks (WAN), intranets, extranets, and other data communications networks. Perform network modeling, analysis, and planning. May also design network and computer security measures. May research and recommend network and data communications hardware and software.

Sample job titles: *Design Engineer, Network Analyst, Network and Security Engineer, Network Consultant, Network Systems Consultant, Networking Systems and Distributed Systems Engineer, Solutions Architect, Telecommunications Analyst*

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 35%

Computer Network Support Specialists (15-1152)

Analyze, test, troubleshoot, and evaluate existing network systems, such as local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system. Perform network maintenance to ensure networks operate correctly with minimal interruption.

Sample job titles: *Computer Network Specialist, IT Consultant (Information Technology Consultant), Network Engineer, Network Specialist, Network Support Specialist, Network Technical Analyst, Network Technician, Personal Computer Network Analyst, Senior IT Assistant (Senior Information Technology Assistant), Systems Specialist*

Entry-Level Educational Requirement: Associate degree

Training Requirement: None

Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework: 41%

Table 1. 2017 to 2022 job growth, wages, education, training, and work experience required for the cybersecurity specialist occupational group, Inland Empire/Desert region

Occupation (SOC)	2017 Jobs	5-Yr Change	5-Yr % Change	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage*	Median Hourly Wage*	Average Annual Earnings	Typical Entry-Level Education & On-The-Job Training Required	Work Experience Required
Network and Computer Systems Administrators (15-1142)	1,828	144	8%	146	\$28.61 to \$45.86	\$35.93	\$77,700	Bachelor's degree & none	None
Computer Network Support Specialists (15-1152)	1,110	95	9%	102	\$24.74 to \$39.94	\$29.52	\$68,100	Associate degree & none	None
Web Developers (15-1134)	1,071	87	8%	94	\$17.53 to \$30.09	\$20.97	\$52,500	Associate degree & none	None
Database Administrators (15-1141)	480	45	9%	41	\$30.25 to \$51.09	\$41.16	\$85,200	Bachelor's degree & none	None
Computer Network Architects (15-1143)	312	34	11%	28	\$32.71 to \$60.01	\$43.97	\$98,200	Bachelor's degree & none	5 years or more
Information Security Analysts (15-1122)	175	31	18%	19	\$29.77 to \$59.87	\$47.46	\$96,700	Bachelor's degree & none	Less than 5 years
Total	4,974	439	9%	430	-	-	-	-	-

Source: EMSI 2018.3

*Entry Hourly is 25th percentile wage, the median is 50th percentile wage, experienced is 75th percentile wage