CENTER FOR A COMPETITIVE WORKFORCE

CLOUD COMPUTING
REGIONAL PROGRAM ADVISORY MEETING

Los Angeles Community College Program Look Book

POWERED BY

California Community Colleges

CALIFORNIA CLOUD WORKFORCE

LAEDC

LOS ANGELES COUNTY
ECONOMIC DEVELOPMENT CORPORATION
Collaboratively Advancing Growth and Prosperity for All

In partnership with the Center for a Competitive Workforce, the Regional Directors of Employer Engagement, and the Los Angeles County Economic Development Corporation

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MEETING AGENDA

Date and Time	March 26, 2021 from 10am-12pm
Occupation	Cloud Computing
Opening Remarks	Welcome and Introductions	Isabel Duran, LAEDC Center for a Competitive Workforce	Richard Verches, CCW Sector Overview	Charlotte Augenstein, Regional Director
Discussion Moderated by Claire Anderson	Topics: - Industry workforce trends - The evolution of technology - Opportunities to bridge knowledge, talent and certification gaps - Industry trends used to access entry-level talent
Curriculum Review	Colleges represented include: - Cerritos College - East Los Angeles College - El Camino College - Glendale Community College - Los Angeles City College - Los Angeles Harbor College - Los Angeles Mission College - Los Angeles Pierce College - Mt. San Antonio College - Pasadena City College - Rio Hondo College - Santa Monica College - West Los Angeles College
Closing Remarks	Next Steps and Adjournment	Richard Verches, CCW

CENTER FOR A COMPETITIVE WORKFORCE

Mission

Center for a Competitive Workforce (CCW) was established in 2017 as a Strong Workforce Program regional project of the 19 community colleges in the Los Angeles region in collaboration with the LA/OC Center of Excellence for Labor Market Research (COE) hosted at Mt. San Antonio College and the Los Angeles County Economic Development Corporation (LAEDC).

In partnership with the COE and LAEDC Institute for Applied Economics, CCW has published multiple labor market reports that analyze labor supply and demand data for middle-skill occupations in high-growth industries to inform and influence the development of new or modified career education and workforce development programs and curricula. CCW supports quarterly convenings with education, workforce, nonprofit, government and industry leaders in three of the LA region's most highly concentrated and fastest growing industry sectors of advanced transportation, bioscience and digital media/entertainment, with the co-equal goals to strengthen industry engagement with community college faculty and to connect more community college students to meaningful work-based learning opportunities, as one of the best ways to constructively prepare them for the 21st century jobs and careers in the fast-emerging and rapidly-changing knowledge-intensive industries that will drive our regional economy today and tomorrow.

CCW, in partnership with the regional directors for employer engagement, is piloting seven regional advisory committees to further strengthen regional alignment of and ongoing connections between faculty and industry. CCW has developed two online platforms: a biosciences industry portal and a regional Workforce and Education Partner Portal that employs technology to increase the speed and richness of industry-college connections, to seamlessly access and deploy the economic intelligence gleaned through industry engagement, and to rapidly expand and scale the number of work-based learning and employment opportunities for career education students and graduates with certificates and degrees.

Learn more at www.CompetitiveWorkforce.LA.

Contact Information

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Claire Anderson, Workforce Development Program Manager, LAEDC
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Isabel Duran, Administrative Manager, LAEDC
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REGIONAL DIRECTORS OF EMPLOYER ENGAGEMENT

Regional Directors play a key role in implementing activities and achieving outcomes for their designated sector by working with community colleges in the designated region to strengthen connections between career education and business and industry.

The Regional Directors develop partnerships with business and industry, working closely with key talent including Regional Chairs, Centers of Excellence, Technical Assistance Providers, Pathway Coordinators, Statewide Directors, and other Regional Directors of Employer Engagement.

For more information regarding Regional Directors and their industry sectors, use the following link:

www.laocrc.org/member-resources/rdee

Los Angeles County Regional Directors

Bruce Noble, Energy, Construction and Utilities
Bruce.noble@riohondo.edu

Charlotte Augenstein, Information and Communication Technology (ICT) and Digital Media
Caugenstein@hotmail.com

Judy Fox, Business and Entrepreneurship
Jfox@cerritos.edu

Katie Mishler, Advanced Transportation and Logistics
Kmishler@cerritos.edu

Ozzie Lopez, Health
Olopez63@mtsac.edu

Ruth Amanuel, Global Trade
Ramanuel@lbcc.edu

Shari Herzfeld, Health
Sherzfeld@riohondo.edu

INDUSTRY REPRESENTATION

Feli Michaca, Senior Field Systems Engineer at Managed Solutions

Feli was born in Puebla Mexico in 1968 and came to America after the loss of his Father in 1987. As the oldest in the family he had no choice but to move to America and work hard, provide for his family and follow pursuit The American Dream. Against all odds (and after failing a couple of Microsoft Exams) he was persistent and stayed focus during his internship at a financial firm in Newport Beach, CA. Feli worked for 6 months with no pay but was later hired in his first position as a Computer Repair Technician. His "can do" attitude was soon discovered as he was promoted to a Systems Engineer Position in 2004. Feli is now the Senior Field Systems Engineer at Managed Solution for VIP Customers in Orange, LA and IE Counties. Feli has a passion for the Industry which he has been serving for the last 19 years with a focus in outstanding customer experiences, innovation and a strong emphasis in Cloud Services, specifically systems like Office 365 and Azure. His recent activities includes visiting the Microsoft Technology Center in Irvine with low income community students to expose them to the latest developments in technology, and working with Public Officials and media teams to impact future generations. Feli is a frequent speaker at Tech Community functions and serves as the Host of "TECH30", a TECH Talk show in one of the biggest Latino Networks in California, with regular guests appearances at Univision, the number one Television Latino Network in United States. His vision is to empower his community in the technology sector and inspire the next generation.

Joshua Stoermer, Cloud Platforms and Architectures Department Manager at The Aerospace Corporation

Joshua graduated from the University of California, Berkeley, with a major in Engineering Physics and minor in Astrophysics. After graduating, he joined the Computer Systems Research Department at The Aerospace Corporation in 2013. In 2018, he became the Engineering Manager of the Site Reliability Engineering section in the Cloud Platforms & Architectures Department. His team built the Cloud Technologies Lab (CTL), the largest (non-IT) datacenter at Aerospace, which provides Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), and Software-as-a-Service (SaaS) capabilities to project teams across the enterprise. Joshua is currently the platform lead for a couple of teams, helping them architect and build their enterprise cloud platforms.

Katheryn Baker, Vice President at Artic Consulting

Katheryn has been starting and building technology consulting firms for over 15 years, focusing on providing innovative solutions that provide business value. This includes leading teams in virtualization technologies, Cloud services, custom application development, and end-to-end data platforms directly for Microsoft as a consultant. Her current firm focuses on guiding clients through successful project executions that provide ROI on technical investments, primarily using Cloud, or hybrid technologies.

Mariana Holliday, International Program Manager on the AWS Educate Cloud Degree Team

Mariana works to help institutions around the world build and scale academic and workforce programs in cloud computing. Mariana began her career as an elementary school teacher in Houston, TX as part of Teach For America. Prior to joining AWS, she worked at Mckinsey Social Initiative as one of the founding members of their global youth employment initiative, Generation. Mariana has a B.A. from Claremont Mckenna College and an M.S. from Columbia University.

Mike Berman, Principal Program Manager for AWS Educate

Mike helps institutions and school systems around the world build academic and workforce programs in cloud computing. Mike began his career as a middle school teacher with Aspire Public Schools in California. He later co-founded a high school serving low-income, first-generation college students – the school achieved a 100% admissions rate to four-year universities. Mike has worked as a professional services director for Agile Mind, supporting teachers and leaders in implementing programs developed by the Charles A. Dana Center at The University of Texas at Austin. Before joining AWS, Mike led the curriculum development team at TenMarks, an Amazon subsidiary focused on K12 math and writing programs. Mike has a B.A. and M.A. from Stanford University.

Myra Roldan, Lead Technical Curriculum Program Manager on the AWS Educate Cloud Degree Team

Myra is the Lead Technical Curriculum Program Manager on the AWS Educate Cloud Degree team. She has worked one-on-one with over 150 institutions across the globe to create new programs of study and modify existing ones that align to cloud jobs. Myra brings 18 years of technical experience to AWS Educate. As a former System Engineer and Associate professor, Myra is passionate about the future of technology and education.

Owen Scott, Solution Architect at Blackfin Cloud Services

Owen is a Solution Architect for Blackfin Cloud Services, located in Orange County, CA. He has been a professional technologist since 1997 and has been designing and building software solutions for the last fifteen years using low-code platforms. He has worked with a wide variety of public and private sectors, such as K-12, Upper Education, Aerospace, Healthcare, Real Estate, State and Local Government, Entertainment, Manufacturing and Financial Services. His most recent projects have been with Los Angeles County and the Los Angeles Unified School District. He is a strong believer in and an advocate of the concept of the "citizen coder" and enjoys the ongoing and evolving discussion around "build vs. buy" for software solutions.

Tim Ryder, General Manager at Microsoft Manufacturing

Tim Ryder is a Microsoft General Manager in the Manufacturing space with responsibility for Microsoft's high performing enterprise account teams. His organization is responsible for Microsoft's largest US-based manufacturing customers. In his role, Tim enables high tech, discreet and process manufacturing, as well as distribution clients to harness the power of Intelligent Cloud Computing to drive efficiencies in supply chain, production, customer engagement, and the development of new innovative cloud-based products and services. With a comprehensive and rapidly expanding solution portfolio of Intelligent Edge,

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IoT, Big Data, Business Application, and Intelligent Cloud services, Microsoft enables manufacturing and distribution customers to grow revenue and margin by rapidly deploying solutions with the support and economies of scale of one of the largest cloud providers in the world. Within this context, Tim is experienced in cultivating experienced enterprise account teams that guide their customers through a digital transformation journey. He focuses heavily on team culture, learning, and employee development to help his teams evolve in a rapidly changing marketplace. His previous experience includes developing both manufacturing and Data and AI focused teams in the US Southwest for Microsoft. Tim cultivates a philosophy of customer and partner obsession to help his teams and customers thrive in a growing marketplace.

Zack Davis, Senior Cloud Advisor and Account Executive at nClouds

Zack is an account executive at nClouds, an AWS premier consulting partner. He works as an extension of AWS to help customers with their cloud journey. He also developed a training program called Dev to DevOps. The training course is a way to invest back into the technology community and challenge the status quo by opening opportunities for more diverse candidates. He is a career changer, having moved from entertainment in Television to AWS cloud computing.

COMMUNITY COLLEGE REPRESENTATION

- Cerritos College
- East Los Angeles College
- El Camino College
- Glendale Community College
- Los Angeles City College
- Los Angeles Harbor College
- Los Angeles Mission College
- Los Angeles Pierce College
- Mt. San Antonio College
- Pasadena City College
- Rio Hondo College
- Santa Monica College
- West Los Angeles College

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Cerritos College

Program Name(s)	Cloud Computing
Website	https://www.cerritos.edu/online/_includes/docs/2020_CLOUD_COMPUTING_ua.pdf
Competencies Focus	The Cloud Computing program prepares students to design solutions for Infrastructure as a Service (IaaS) architectures by provisioning computing instances, establishing virtual private networks, managing databases and storage within a secure online environment. Students produce dynamic solutions responsive to information and computing technology workloads with on-demand pay-as-you-go pricing allowing flexibility for small business, entrepreneurship and enterprise adoption. Industry certifications are embedded to prepare for occupations in Cloud Technicians, Cloud Support Associate, Cloud Architect, or Cloud Engineer.
Cohort Size	30 students
Hiring Timeframe	Following the Spring semester or Summer session

For more information, contact Kenny Lou at klou@cerritos.edu or (562) 860-2451 x 2721.

East Los Angeles College

Program Name(s)	Certificate of Achievement in Cloud Computing
Website	https://www.elac.edu/Academics/Departments/Business-Administration/Computer-Science-Information-Technology/CSIT-Certificate-of-Achievement
Competencies Focus	The Certificate of Achievement in Cloud Computing introduces students to the highly scalable internet architectures of cloud computing that differentiates from on-premise infrastructures. The certificate provides students with the industry standard skills to understand and develop applications for the cloud. Students will learn a range of topics that cover the technical principals of the hardware and software requirements to run systems in the cloud, including storage, database management and soft-ware systems while maintaining secure access.

The certificate requires 18 units.
Five (5) required courses:
• CIS 101 - Introduction to Computer Information Systems (3 Units)
• CIS 192 - Introduction to Cloud Computing (3 Units)
• CIS 193 - Database Essentials in Amazon Web   Services (3 Units)
• CIS 194 - Computer Engines in Amazon Web Services (3 Units)
• CIS 195 - Security in Amazon Web Services (3 Units)

At least one (1) elective course:
• CS 115 - Programming in C# (3 Units)
• CS 116 - Programming in Java (3 Units)
• CS 119 - Python Programming (3 Units)
• CS 152 - Server-side Ruby Web Programming (3 Units)

Cohort Size	30 students
Hiring Timeframe	Summer following Spring semesters

For more information, contact Mei-Lee at wanm@elac.edu.

El Camino College

Program Name(s)	Cloud Computing
Website	http://catalog.elcamino.edu/preview_program.php?catoid=3&poid=607&returnto=138
Competencies Focus	The Cloud Computing and Programming with Amazon Web Services Certificate is designed for students who wish to learn about AWS cloud solutions. This includes general information on cloud computing, and a variety of learning paths dealing with big data, security, and networking. Students will learn the fundamental technical knowledge of AWS Cloud computing and its supporting infrastructure, AWS services and how to utilize existing, or develop new core business solutions.
Cohort Size	22 students
Hiring Timeframe	During Spring semester

For more information, contact Khai Lu at klu@elcamino.edu and Koda Kol at kkol@elcamino.edu.

Glendale Community College

Program Name(s)	Cloud Computing
Website	https://www.glendale.edu/cloud
Competencies Focus	Program focuses on Amazon Web Services (AWS). Cloud Computing shifts IT from on premises computing infrastructure to elastic cloud systems. The program provides a foundation of cloud computing technologies and provides students with the ability to evaluate and assess the business and technical benefits of cloud computing and cloud applications.
Cohort Size	30
Hiring Timeframe	One year

For more information, contact Simon Mirzayan at simon@glendale.edu.

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Los Angeles City College

Program Name(s)	Cloud Computing (AWS)
Website	https://www.lacitycollege.edu/Departments/CSISA/Programs/Cloud-Computing
Competencies Focus	The Cloud Computing program prepares students to design solutions for Infrastructure as a Service (IaaS) architectures by provisioning computing instances, establishing virtual private networks, managing databases, and storage within a secure online environment. Students produce dynamic solutions responsive to information and computing technology workloads with on demand pay-as-you-go pricing allowing flexibility for small business, entrepreneurship, and enterprise adoption. Industry certifications are Program Proposal Attributes embedded to prepare for occupations in Cloud Architect, Cloud Support Associate, Cloud Engineer, or Cloud Technicians. Some preparation in information technology or computer programming is recommended.
Cohort Size	21 students
Hiring Timeframe	2 semesters of coursework and successful passage of AWS Cloud Computing Practitioner Certification exam results in student eligible for hire in as little as 8 months.

For more information, contact Munir Samplewala at samplewm@lacitycollege.edu and Shawki Dakduk at dakduks@lacitycollege.edu.

Los Angeles Harbor College

Program Name(s)   Amazon Web Services Cloud Computing Certificate Program

Website   https://effectiveness.lahc.edu/academic_affairs/business/SiteP ages/Home.aspx

Competencies Focus The Cloud Computing program develops skills for occupations of cloud architect and cloud technician using Amazon Web Services (AWS), the leading cloud computing provider. The program bridges traditional on-premises data center skills of server installation, database management, and networking set-up and cabling into virtualizations of these information and computing technologies over the online services. Job preparation will include industry certifications of AWS Cloud Practitioner and AWS Solutions Architect Associate mapped to course work. The program will prepare the student to take the AWS Cloud Practitioner Certificate.

Courses include:
- Introduction to Cloud Computing
- Database Essentials in Amazon Web Services
- Introduction to Linux +
- Advanced Linux
- Computer Engines in Amazon Web Services
- Security in Amazon Web Services
- Python Programming
- Programming in Java

Cohort Size   Minimum 25-30 students per cohort; there are currently 10 students going through the pathway

Hiring Timeframe   The goal is for all participants to complete the program and obtain gainful employment industry sector upon completion with 12 months – current focus is on internships.

For more information, contact Dorothy Phillips at philidc@lahc.edu.

Los Angeles Mission College

Program Name(s)	Certificate of Achievement Cloud Computing (M038644D)
Website	https://www.lamission.edu/Computer-Science/Cloud-Computing-Amazon-Web-Services.aspx
Competencies Focus	The Cloud Computing program prepares students to design solutions for Infrastructure as a Service (IaaS) architectures by provisioning computing instances, establishing virtual private networks, managing databases and storage within a secure online environment. Students produce dynamic solutions responsive to information and computing technology workloads with on-demand pay-as- you-go pricing allowing flexibility for small business, entrepreneurship, and enterprise adoption. Industry certifications are Program Proposal Attributes embedded to prepare for occupations in Cloud Architect, Cloud Support Associate, Cloud Engineer or Cloud Technicians. Some preparation in information technology or computer programming is recommended.
Cohort Size	15 students

For more information, contact Milan Samplewala at SampleM@LAMission.edu.

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Los Angeles Pierce College

Program Name(s)	Cloud Computing and Networking for AWS
Website	http://piercecollege.edu/schedules/index.asp
	http://piercecsit.com/industry-partnerships/amazon-aws/
Competencies Focus	The Cloud Computing program prepares students to design solutions for Infrastructure as a Service (IaaS) architectures by provisioning computing instances, establishing virtual private networks, managing databases and storage within a secure online environment. Students produce dynamic solutions responsive to information and computing technology workloads with on-demand pay-as-you-go pricing allowing flexibility for small business, entrepreneurship and enterprise adoption. Industry certifications are embedded to prepare for occupations in Cloud Architect, Cloud Support Associate, Cloud Engineer or Cloud Technicians.
Cohort Size	30-40 students

For more information, contact Luis Celada at celadalj@piercecollege.edu or (818) 710-3009

Mt. San Antonio College

Program Name(s)	Computer Information Systems
Website	https://www.mtsac.edu/cis/
Competencies Focus	The Mt. SAC CIS Department strives to be recognized as teaching state of the art courses, responsive to current industry needs, with top-quality instruction with 70+ courses covering programming, database management, computer networking, cybersecurity, web development, open source, big data, virtualization, and soon cloud computing.
Cohort Size	2019-20 School Year Totals: 180+ sections taught by 10 full-time faculty and 15 adjunct faculty, serving 4800+ enrollees

For more information, contact Barry Andrews at bandrews@mtsac.edu.

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Pasadena City College

Program Name(s)   Computer Information Systems - System and Network Administrator

Website   https://pasadena.edu/academics/degrees-and-certificates/certificates-of-achievement/system-network-administrator.php

Competencies Focus   This system and network administrator program prepares students with necessary skills to seek entry-level employment in the field of Information Technology to administer an enterprise network infrastructure and/or a network operating system infrastructure. Instruction includes training in installing, configuring, maintaining, and troubleshooting network devices and end devices with an emphasis on Cisco enterprise network infrastructure administration. Upon completion of coursework, students will have the foundation needed to pursue industry certifications such as CompTIA Network+, Cisco CCNA Routing and switching, Cisco CCNA CyberOps, and Microsoft MCSA Windows Server or CompTIA Linux+/LPI Linux Administrator.

A Certificate of Achievement is awarded upon completion of all required courses with a grade of C or better.

For more information, contact Earlie Douglas at earlied1@aol.com.

Rio Hondo College

Program Name(s)   Cloud Computing Practitioner

Website   https://www.riohondo.edu/cloud

Competencies Focus   The Cloud Computing Practitioner Certificate of Achievement introduces students to cloud computing infrastructure as a highly scalable, service-oriented architecture for information technology. Students learn concepts of cloud computing technologies through practical hands on activities which provide them with an understanding for how to assess an organization for cloud implementations that solve organizational problems. Analyze of a variety of cloud services, including storage, servers and networking, lead students towards an understanding of how DevOps Engineering concepts can then be used to implement solutions for organizations.

For more information, contact Brenda Harlow at bharlow@riohondo.edu.

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Santa Monica College

Program Name(s)	Cloud Computing with Amazon Web Services and Cloud Computing with Microsoft Azure
Website	http://www.smc.edu/csis
Competencies Focus	Cloud computing—which delivers vast data capacity to organizations of all shapes and sizes without requiring expensive on-site servers—is widely considered the biggest growth arena in technology today. It is also set to open a world of opportunity for Santa Monica College students, in one of the highest paying IT fields.

Students learn:

- Cloud Computing
- Networking
- Cybersecurity
- Software Development
- Cloud Application Development

Cohort Size	100 students
Hiring Timeframe	3-6 months

For more information, contact Howard Stahl at (310) 434-8015 or stahl_howard@smc.edu.

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West Los Angeles College

Program Name(s)	Certificate of Achievement in Cloud Computing - Amazon Web Services (AWS)
Website	http://www.wlac.edu/Computer-Science/Amazon-Web-Services-(AWS).aspx
Competencies Focus	Learning outcomes:

- Cloud Computing
- Virtualization
- Server Technology
- Serverless Computing
- Kubernetes
- Cloud Security
- Databases

Cohort Size	20-30 students
Hiring Timeframe	3-6 months

For more information, contact Vicky Seno at senov@wlac.edu.