

Aiming High

Opportunities for Students and Educators

Cloud Computing Program Outline		
Topic	Description	Reference
Lead College	Santa Monica College	LAOCRC Round 2 Funding Proposal LAOCRC Round 3 Funding Proposal LAOCRC Round 4 Funding Proposal
Project Handouts	Development of Cloud Computing Program at an individual college requires a team of individuals covering high school partnerships, counseling, curriculum, work-based learning and employment readiness. These resources help with communication to all stakeholders.	One Pager Handout Presentation Slide Deck Enrollment By College and Term Student Employment Survey Results
College Teams	Individuals working at individuals colleges	LA/OC Regions Contacts Bay Area Region Contacts
Labor Market Information (LMI)	<ul style="list-style-type: none"> 4,876 annual <u>openings</u> with AWS listed with 945 award conferred. 6,107 <u>total annual openings</u> Bay Region with <u>566 awards</u> conferred 	LA/OC Region Bay Area Region
TOP Code	<p>Program - 0707.30 Computer Systems Analysis: Systems analysis and design, including the recognition, definition, and improvement of processes through the use of computer technology and methodologies.</p> <p>Courses - 0707.30 and other 07 TOP codes EXCEPT 0706.00 Computer Science (Transfer)</p>	-Career Education TOP code allows for High School integration and flexible hiring -Description -Low attainment
Program Learning Outcomes	<ul style="list-style-type: none"> Design Infrastructure as a Service (IaaS) solutions by provisioning computing instances, establishing virtual private networks, managing databases and storage within a secure online 	

	<p>environment.</p> <ul style="list-style-type: none"> Analyze performance metrics of a cloud architecture to respond dynamically to information and computing technology workloads and optimize service costs. Collaborate in a team designing business solutions in an industry aligned project. 																
Course Sequence (SMC sample courses)	<p>Core:</p> <table border="1"> <thead> <tr> <th>Course Outline of Record</th> <th>Canvas Shell</th> <th>Units</th> </tr> </thead> <tbody> <tr> <td>CS 79A Introduction to Cloud Computing</td> <td>CS 79A</td> <td>3.0</td> </tr> <tr> <td>CS 79B Database Essentials in Cloud Computing</td> <td>CS 79B</td> <td>3.0</td> </tr> <tr> <td>CS 79C Compute Engines in Cloud Computing</td> <td>CS 79C</td> <td>3.0</td> </tr> <tr> <td>CS 79D Security in Cloud Computing</td> <td>CS 79D</td> <td>3.0</td> </tr> </tbody> </table> <p>Elective: Programming Language Course Networking, or Systems Operations</p>	Course Outline of Record	Canvas Shell	Units	CS 79A Introduction to Cloud Computing	CS 79A	3.0	CS 79B Database Essentials in Cloud Computing	CS 79B	3.0	CS 79C Compute Engines in Cloud Computing	CS 79C	3.0	CS 79D Security in Cloud Computing	CS 79D	3.0	<p>- Some Preparation/ CS 79A -CS 79A Prerequisite for CS 79 B, C, D -Total Instructional Hours (per course): 54</p> <p>-Total Outside-of-Class Hours (per course): 108</p>
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Regional Program Application	<p>LAOCRC Program Recommendation Pre-Approved Programs - Cloud Computing</p> <ul style="list-style-type: none"> Sample Regional Application Information Report Minutes LMI <p>Submit using the link below and use sample application with local college courses : https://www.regionalcte.org/</p>																
Certifications	<p>AWS Cloud Practitioner Notes on preparing for AWS Cloud Practitioner AWS Solutions Architect - Associate</p>	Achievement within Course Sequence Bootcamp preparation for certificate															
AWS Educate	Access to AWS (Step 1-3)																

	<ol style="list-style-type: none"> 1. Personal Account (vouchers to be provided with AWS application approval) 2. AWS Educate Institutional Account <ol style="list-style-type: none"> a. AWS Terms And Conditions 3. AWS Starter Account 4. Classrooms 5. Assistance 	
Regional Data Sections/FTES/Enrollments	LA 07 TOP Code Bay Area 07 TOP Code	Colleges with programming and IT variety are positioned to take advantage of cloud computing.
Cloud Workforce Project Outcomes	<ul style="list-style-type: none"> ● Community of Practice- <i>Develop a network of colleges and high schools to communicate, share resources, evaluate outcomes and iterate best practices.</i> <ul style="list-style-type: none"> ● Curriculum- <i>Create a common core curriculum with high school dual enrollment and 4 year university articulation in a career pathway model.</i> ● Industry Engagement- <i>Alignment of occupational skills and program outcomes by industry councils and advisories.</i> ● Certifications-<i>Develop a model to prepare students for industry certifications.</i> 	<p>-Modeled for Career Pathway development using multiple entries and exits.</p> <p>-Faculty sharing a common platform for curriculum design and change management.</p> <p>-</p>
Cloud Workforce Project Metrics	<ul style="list-style-type: none"> ● Number of Students who got a degree or certificate ● Students Employed in 4 quarters after exit of program ● Change in earnings 	Targeting middle skill occupations
Work Plan, Budget and Reporting	Sample CA Cloud Workforce Work Plan Quarterly Reporting	Diverse college team necessary to achieve project outcomes
Professional Development	CA Cloud Workforce Faculty Workbook Free Online Cloud Practitioner Classes	Workbook containing how to get a AWS account and setup AWS educate.
Internal Listserv Group Chat	Join the CA Cloud Workforce Slack Channel	
Webinars	<ul style="list-style-type: none"> ● 9/13/18 Cloud Core Curriculum and Project Outline Slides 	

	<ul style="list-style-type: none">● 9/20/18 Student Services in Career Pathways Slides● 9/27/18 AWS Solutions and positioning within CC curriculum Slides● 10/4/18 Work Based Learning and Certifications Slides● 10/11/18 Local College Work Plans Q&A Slides	
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