

Cloud Computing Baccalaureate Degree Program (BDP) Application

Board of Trustees Meeting
December 2022



Agenda

- Background and Overview
Steven Sedky
- Cloud Computing at SMC
Howard Stahl
- Student Perspective
Caleb Cohen



Legislative Background

September, 2014

Governor Jerry Brown signed SB 850 to pilot 15 CC degrees

October, 2021

Governor Gavin Newsom signed [AB 927](#) which made permanent the 15 and provides opportunity to create more bachelor's degree programs



National Context

24 States now all CC to offer Bachelor's Degrees

[Mapping the Community College Baccalaureate](#)

State	Year of Authorization	Number of Institutions with Approved CCB Programs	Number of Active CCB Programs
Washington	2005	29	114
Florida	2001	28	172
Texas	2003	16	29
California	2014	15	15
Colorado	2010	9	25
Georgia	1997	7	67
Ohio	2018	7	9
Michigan	2012	5	5
Wyoming	2019	4	6
Nevada	1999	3	26
Missouri	2018	2	0
Oklahoma	2004	2	4
Utah	2012	2	6
West Virginia	1989	2	16
Delaware	2015	1	1
Hawaii	2007	1	2
Idaho	2017	1	1
Indiana	2004	1	15
New Mexico	2004	1	10
North Dakota	2006	1	2
South Carolina	2018	1	0
Vermont	1993	1	15
Arizona	2021	0	0
Oregon	2019	0	0



National Context

Programs by 2-Digit
Classification of Instructional
Program Code

CIP Code Area	# of Programs
Business (52)	117
Health Professions (51)	80
Education (13)	72
Nursing (51.3801)	65
Computer and Information Sciences and Support Services (11)	56
Engineering Technologies (15)	34
Security and Protective Services (43)	24
Biological and Biomedical Sciences (26)	17
Multi/Interdisciplinary Studies (30)	12
Public Administration (44)	12
Natural Resources and Conservation (03)	11
Agriculture (01)	10
Visual and Performing Arts (50)	10
Engineering (14)	9
Personal and Culinary Services (12)	6
Transportation and Materials Moving (49)	6
Communication, Journalism, and Related Programs (09)	5
Communications Technologies (10)	4



[Mapping the Community College Baccalaureate](#)

BDPs as a Great Equalizer

ETHNICITY	Cohort 2016	Cohort 2017	Cohort 2018	Cohort 2019	Cohort 2020	Total
American Indian/Alaskan Native	2%	1%	0%	0%	1%	2%
Asian	14%	16%	11%	18%	13%	14%
Black/African-American	5%	4%	7%	4%	6%	5%
FilipinX	8%	6%	9%	5%	7%	8%
LatinX	26%	31%	28%	32%	32%	26%
Pacific Islander/Hawaiian Native	1%	1%	0%	1%	0%	1%
White	37%	32%	37%	30%	31%	37%
Multi-Ethnicity	5%	5%	5%	7%	5%	5%
Unknown	3%	4%	3%	3%	5%	3%
Total	100%	100%	100%	100%	100%	100%

Gender*	Percent
Female	66%
Male	33%
Unknown	1%

75% belonged to at least one impacted groups** (*first-generation college student, struggled financially, experienced homelessness or housing insecurity, indicated a disability, or is a veteran*)

Source: * MIS and Legislative Analyst Office;
** Statewide Employment Survey

Slide from 2022 Curriculum Institute

Why?

- Equity & Access, Transfer as a Barrier, etc.
- CCC Bachelor's Degree >\$11,000 vs. One UC Semester \$13,000
- CCC are part of communities and have strong industry connections



Student Perspective from Pilot Programs

According to a Statewide Employment Survey of community college students enrolled in a California BDP:

- 51% said they would not have pursued a Bachelor's degree otherwise
- 87% agreed that the value of the program worth the tuition cost, and the tuition cost was affordable
- 92% agreed that community college should continue offering Bachelor's degree



From 2022 Curriculum Institute

Timeline

Spring 2022

- Multiple discussions in CE Committee, Academic Affairs & Workforce
- Academic Senate & Exec voted unanimously to create a joint BDP Ad Hoc Committee to explore the opportunity

Summer 2022

- Joint Ad Hoc BDP Meetings

Fall

- CE Committee unanimously selected Cloud Computing. Academic Senate and Chairs Committee unanimously voted to endorse
- Application team works to complete application including LMI Study from Center of Excellence
- Briefings to Senior Staff, DPAC and Letters of Support being gathered

Winter

- Application Deadline: January 13



Final Thoughts

Baccalaureate Degree Programs...

- Create affordable and locally accessible opportunities for students to earn 4-year degrees
- Reduce equity gaps within higher education and specific career industries
- Create new intergenerational wealth cycles
- Meet labor market demand and employer needs



Slide from 2022 Curriculum Institute



Cloud Computing

Howard A. Stahl

Department Chair, Computer Science Information Systems

Cloud Computing Has Changed Everything...

- Amazon Web Services Is The Fastest Growing Tech Startup To Achieve \$10 Billion In Annual Revenue
 - Took About 10 Years
- In 2022, Amazon Web Services Is Expecting Annual Revenue Of \$130 Billion
- Cloud Computing Has Been The #1 Job Category On LinkedIn For The Past 5 Years

Industry Opportunity

ONLY **42 PERCENT**

Of employers believe that new graduates are prepared for the workforce

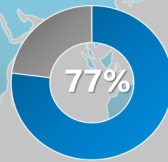
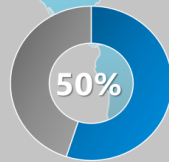


6.2 MILLION

Job Openings in
Cloud-based technologies
By 2022

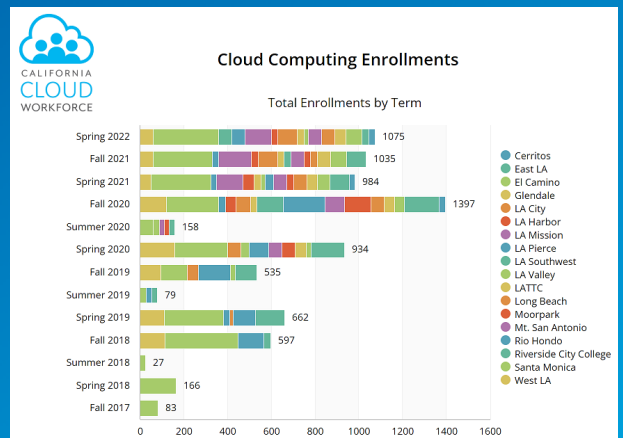


77% of Jobs will require technology skills by 2030



Cloud Computing Regional Project

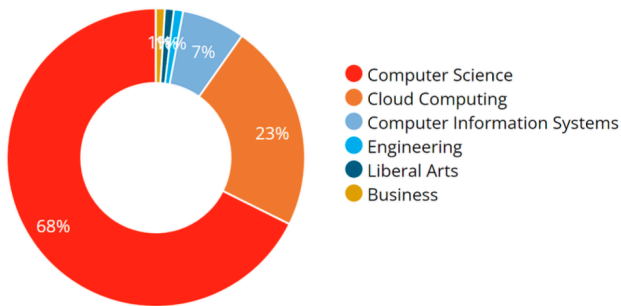
- 19 Local Los Angeles Community Colleges
 - Share A Common Curriculum
 - Built A Community Of Practice
 - Leverage Resources and Expertise
- More Than 7,800 Students Have Enrolled In Cloud Classes In The Past 5 Years
- Our Four Year Partners Are Not Teaching This Kind Of Current Material, Providing Us A Great Opportunity To Do More For Our Students...



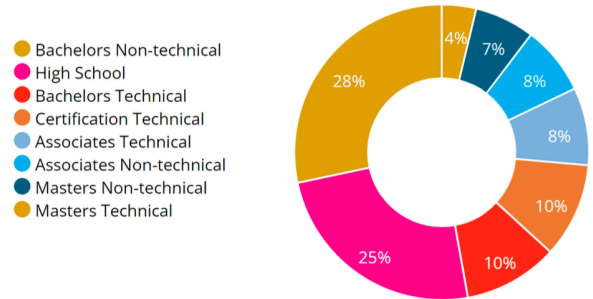
SMC Cloud Students

- 203 Students Answered The Survey In Spring 2022
- 51.3% Already Hold Bachelors Or Master Degrees
- 25.2% Already Hold Associate Degrees Or Industry Certifications

Majors Represented



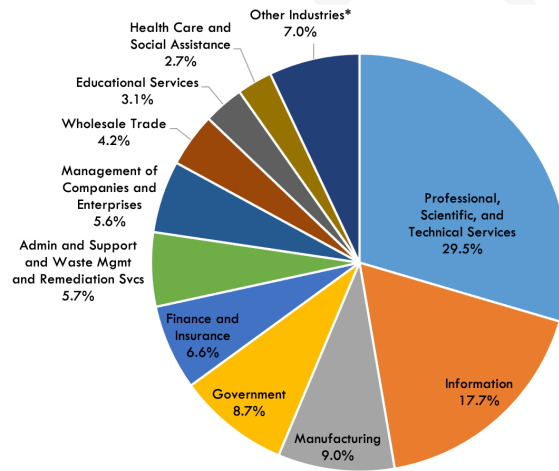
Educational Background



Labor Market Data

In Los Angeles County, Cloud Powers Many Different Industries

Exhibit 7: Industry concentration of cloud computing jobs in 2021



Labor Market Data

In Los Angeles County

- Cloud Computing Occupations Have Grown 41% Over The Past 20 Years
- Sept 21 - Aug 22, 108,000 Cloud Jobs Were Posted Online
 - 63% Of The Postings Required Bachelors Degrees
- Looking Ahead, For Jobs Requiring Bachelors Degrees:
 - 9,500 Annual Job Openings In The Next Five Years
 - Education Gap Of More Than 7,500 Unfilled Jobs

Student Perspective

Caleb Cohen, SMC Alum



Thank you Q&A & Discussion

Additional resources can be found on the [BDP Ad Hoc Committee page](#)
www.smc.edu/senate

