

Program Creation Sign-Off

Program Title: Cloud Computing

Program Units: 18 units

Division: PSME

Proposing Faculty name(s): Mike Murphy

Type of Program: _____ Transfer or xx_____ Workforce

Type of Award:

xx_____ Transcriptable certificate

_____ Certificate of Achievement

_____ AA/AS Degree

Documentation checklists:

Transfer documentation

_____ Catalog Description

_____ List of Courses

_____ Articulation & transfer data

_____ Identification of existing program(s) at CSU/UCs

_____ Completer Projections

_____ Identification of any additional resources needed to establish program (i.e. faculty, equipment, etc.)

Workforce documentation

xx_____ Catalog Description

xx_____ List of Courses

xx_____ Completer Projections

xx_____ Labor Market information

xx_____ Identification of any similar program(s) in the area

xx_____ Identification of any additional resources needed to establish program (i.e. faculty, equipment, etc.)

Transfer/Workforce Work Group:

Recommended

Not Recommended

Comments:

Work Group Signature: _____

Date: _____

Supervising Vice President:

Recommended

Not Recommended

Comments:

Vice President Signature: _____

Date: _____

Planning & Resource Committee:

Recommended

Not Recommended

Comments:

PaRC Signature: _____

Date: _____

Division Curriculum Committee:

Recommended

Not Recommended

Comments:

Division CC Signature: _____

Date: _____

Foothill College
Credit Program Narrative
Certificate of Achievement: Cloud Computing

Item 1. Program Goals and Objectives

The goal of the Cloud Computing Certificate is to provide the industry standard skills to understand and develop applications for the cloud. Students 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 software systems, while maintaining secure access.

Program Learning Outcome:

Upon completion of the program, students will be able to host a database and run queries using an interface from a commercial provider and run a file-server service using a provider of their choice.

Item 2. Catalog Description

The Cloud Computing Certificate is designed for people who are seeking employment with companies that use cloud computing. The program provides 18 units of instruction on the industry standard skills to understand and develop applications for the cloud. Students 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 software systems, while maintaining secure access.

Item 3. Program Requirements

Course Number	Title	Units
CS 55A	Introduction to Cloud Computing in Amazon Web Services	4.5
CS 55B	Database Essentials in Amazon Web Services	4.5
CS 55C	Compute Engines in Amazon Web Services	4.5
CS 55D	Security in Amazon Web Services	4.5

Proposed Sequence:

Year 1, Fall = 4.5 units, CS 55A

Year 1, Winter = 4.5 units, CS 55B

Year 1, Spring = 9 units, CS 55C + 55D

Total Units = 18 units

Item 4. Master Planning

Foothill College offers programs and services that empower students to achieve goals as members of the workforce. There is currently a high demand for qualified individuals who are well-versed in cloud computing, which delivers vast data capacity to organizations of all shapes and sizes without requiring expensive on-site servers. It is considered one of the biggest growth arena in technology today. This certificate program will allow companies to hire individuals who are familiar with cloud storage, database management, security principles with web services applications.

Item 5. Enrollment and Completer Projections

Currently, there is a significant undersupply of cloud computing workers compared to the demand in the Bay Area region. The median hourly wage for jobs in cloud computing is slightly under \$60/hr. Due to the high demand and relatively high wages for cloud computing jobs, we foresee that the demand for the certificate will be at least twenty students per year. In addition, we expect to offer the courses as

hybrid/online split format, which will attract a number of students statewide. The other community college offering this certificate is Santa Monica Community College, which has had a huge burst of enrollment in the cloud computing courses.

Item 6. Place of Program in Curriculum/Similar Programs

Foothill College offers many different computer science courses, some of which are language-based, while others are in the enterprise networking arena. However, there is no other program similar to the Cloud Computing certificate at Foothill.

Item 7. Similar Programs at Other Colleges in Service Area

Currently, there are no other colleges that offer this program. There is discussion of other community colleges such as Canada Community College, creating such a program. The proposed program is based off the highly successful cloud computing certificate program offered at Santa Monica Community College. Other Bay Area colleges are looking to replicate Santa Monica's program.

Additional Information Required for State Submission:

TOP Code: *0707.00

Annual Completers: 20 plus

Net Annual Labor Demand: See attached Labor Market Information report

Faculty Workload: 0.121 – 0.242 load/quarter

New Faculty Positions: None, courses will be taught from current FT/PT faculty

New Equipment: \$0

New/Remodeled Facilities: \$0

Library Acquisitions: \$0

Gainful Employment: Yes

Program Review Date: TBD

Distance Education: 50 – 99%

ATTACH THE FOLLOWING:

- 1. Labor Market Information and Analysis**
- 2. Advisory Committee Recommendation**
- 3. Regional Consortia Approval Meeting Minutes**