Cloud Computing – Certificate of Achievement

Units: 21

(State Code: XX; TOP Code: XX; Academic Plan: XX)

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.

PROGRAM STUDENT LEARNING OUTCOMES

1. Design Infrastructure as a Service (IaaS) solutions by provisioning computing instances, establishing virtual private networks, managing databases, and storage within a secure online environment.
2. Analyze performance metrics of cloud architecture to respond dynamically to information and computing technology workloads and optimize service costs.
3. Collaborate in a team designing business solutions in an industry-aligned project.

PROGRAM REQUIREMENTS

Requirements for the Cloud Computing certificate of achievement may be met by completing 18 units of required courses with a grade of "C" or better.

REQUIRED COURSES (21 UNITS)

CS 101	INTRODUCTION TO COMPUTER SCIENCE	3
CIS 192	INTRODUCTION TO CLOUD COMPUTING	3
CIS 193	DATABASE ESSENTIALS IN AMAZON WEB SERVICES	3
CIS 194	COMPUTER ENGINES IN AMAZON WEB SERVICES.	3
CIS 195	SECURITY IN THE CLOUD	3
CIS 219	(formerly CO SCI 186) INTRODUCTION TO ORACLE SQL: AND PL/SQL	3
CS 112 OR	(formerly CO SCI 162) PROGRAMMING IN JAVASCRIPT	3
CS 119	(formerly CO SCI 124) PROGRAMMING IN PYTHON	