

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
CIS 117S CLOUD FOUNDATIONS  
1 CREDIT HOUR

**COURSE DESCRIPTION**

Introduction to cloud computing and related concepts, including cloud economics and billing, security, networking, compute, storage, databases, cloud architecture, scaling, and monitoring. Prepares students for the AWS Cloud Foundations certification exam. Lab fee.

**COURSE GOALS**

The student will:

Bloom's Level		Program Outcomes
1	1. Define the cloud.	4, 5, 6, 8
2	2. Explain the pricing philosophies of different cloud architectures.	5, 6, 8
1	3. Identify global infrastructure components of the cloud.	4, 5, 6, 8
2	4. Describe security and compliance measures of the cloud.	4, 5, 6, 8
5	5. Create a virtual private cloud (VPC).	4, 5, 6, 7, 8
2	6. Describe and differentiate between disparate compute services.	4, 5, 6, 8
2	7. Differentiate between different cloud storage techniques.	4, 5, 6, 8
2	8. Distinguish between various database services.	4, 5, 6, 8
2	9. Explain the architectural principles of the cloud.	4, 5, 6, 8
2	10. Explain key concepts related to elastic load balancing.	4, 5, 6, 8

**CORE VALUES**

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

**TOPIC OUTLINE**

1. Cloud Concepts Overview
2. Cloud Economics and Billing
3. Global Cloud Infrastructure
4. Cloud Security
5. Networking and Content Delivery
6. Compute
7. Storage
8. Databases
9. Cloud Architecture
10. Automatic Scaling and Monitoring