



Faculty of Computer Studies (FoCS)

Course Name: Identity and Access Management

(UG/PG): PG

Number of Credits: 3

Level: 4

Learning Objectives: The major focus of this course is to generate the knowledge of the principles and methods of access control, authentication, and authorization by designing various identity models.

Pre-learning:

Pedagogy:

Lectures
Class work discussion

Course Outline:

Sr. No.	Topic	Hours
1	Identity and Access Management (IAM) Concepts: Trust Boundaries and IAM, IAM Challenges, IAM Definitions, IAM Practices in the Cloud. IAM Cloud Service Providers	6
2	IAM Architecture and Practice, Relevant IAM Standards and Protocols for Cloud Services, Identity Models - Local, Networked, federated, global	7
3	Cloud Authorization Management: IAM- authentication System Modeling	6
4	Authentication and Access Control: Understanding the Environment Identification of Users and required Access Controls, Risk Assessment and Gap Analysis, Access Management Models - RBAC, MAC, DAC, ACLs	8
5	Single Sign-on and Federated Authentication,	8
6	Public Key Infrastructure OAuth and OpenID	10
	Total	45

Books Recommended:

1. Identity Management for Internet of Things -By Parikshit Narendra Mahalle , Poonam N. Railkar River Publication
2. Raghu Yeluri and Enrique Castro-Leon, Building the Infrastructure for Cloud Security A
a. Solutions view, Apress open.
3. Ronald L. Krutz and Russell Dean Vines, Cloud Security A Comprehensive Guide to Secure
a. Cloud Computing, Wiley
4. Identity Management: A Primer By Graham Williamson, David Yip
5. https://www.coresecurity.com/sites/default/files/resources/2016/08/IAMforDummies_ebook_CoreSecurityedits.pdf
6. IDENTITY AND ACCESS MANAGEMENT IN CLOUD COMPUTING: Developing a Prototype of Identity and Access Management in Cloud Computing - Lambert Academic Publications

Suggested Evaluation Methods:

On line Test
Viva
Assignments

Parallel/Similar courses the existing curriculum:

S.No.	Name of the course	Institute where it was offered
1	Identity and Access Management	Columbia University
2	Identity and Access Management	Boston University
3	Identity and Access Management	SPPU