



Course Name: Data Center Infrastructure Management

(UG/PG): PG

Number of Credits: 3

Level: 5

Learning Objective(s): To be able to provides basic aspects of architecture, design and security of Data Center.

To be able to recommend configurations for Data Center

Pedagogy:

Lecture with latest development on Data Centers

Pre-Reading and presentations

Case based Teaching

Pre-learning:

Networking, Information Security, Network Infrastructure.

Course Outline:

Sr.No.	Topic	Hours
1	Data Center Infrastructure Architecture Overview: Data Center –site location and site configuration Various Elements in a Data centre-their functions Hardware and Software Recommendations Software Recommendations Data Center Multi-Layer Design Network Management	9
2	Data Center Infrastructure Design: Data Center Design Models Routing Between the Data Center and the Core, Switching Architecture for the Server Farm,	6
3	Call Centre Characteristics:- Call Centre layout and Operations Monitoring of performance Critical elements Back-up	6

4	Data Center Infrastructure Configuration :- Configuring Network Management VLAN Configuration Spanning Tree Configuration Switch-To-Switch Connections Configuration Server Port Configuration Promise of UC	9
5	Virtual datacenter :- What is a Virtual data Centre Virtual Data Centre management Remote Management	4.5
6	NOC :- Network Operations	1.5
7	Data Center Security :- Security aspects in a DataCentre Packet Filtering: Aggregation Layer Packet Filtering: Access Layer Security for Multi-Tier Server Farms Intrusion Detection Sensors	6
8	Back-up and recovery :- Disaster Recovery Alternate site	3
	Total	45

Books Recommended:

1. Data Center Fundamentals” by Mauricio Arregoces, Maurizio Portolani, Cisco Press 2003. ISBN 1587050234
2. http://www.commbits.com/html/premium_data_center.php
3. http://www.cisco.com/en/US/netsol/ns340/ns394/ns224/ns304/networking_solutions_design_guidances_list.html
4. <http://www.cisco.com/go/datacenter>
5. <http://www.datanets.ro/datacenter.htm>

Suggested Evaluation Methods:

Parallel/Similar courses the existing curriculum:

S.No.	Name of the course	Institute where it was offered

Name of Member					
Designation					
Org. / Inst.					
Signature					

Name of the Expert:

Signature:

Date: