

Course Title: Network Administration (3 Cr.)
Course Code: CACS406
Year/Semester: IV/VII
Class Load: 6 Hrs. / Week (Theory: 3Hrs. Practical: 3 Hrs.)

Course Description: The course introduces the theoretical as well as practical concepts of Network Administration. The course includes concepts of work station, server and services, Network infrastructure, Implementing different network services.

Course Objectives: The objectives of this course is to make the students to design and implement enterprise level network with its services.

Course Contents:

- Unit I: Introduction [4Hrs.]**
 Network administrator as a Profession, Network administrator professional ethics, Recent trends in network administration.
- Unit I: Work Station, Server and Services [16Hrs.]**
 Workstation: Architecture design, Hardware strategies, OS installation. Servers: Hardware Strategies, Hardware Features & Specifications. Service: Requirements, Planning and Engineering, Service Launch, Disaster Recovery.
- Unit II: Infrastructure [6Hrs.]**
 Network Architecture, Network Operations, Datacentres Overview and Running Datacentres.
- Unit III: Service Recommendation [16Hrs.]**
 Server Upgrade, centralizing a service, Service Monitoring, Namespaces, Email Service, Print Services, Data Storage, Backup and Restore, Software Repository, Web Services.
- Unit IV: [6Hrs.]**
 Preparing procurement plan/document for enterprise level network setup

Laboratory Works:

The laboratory work includes implementation of the mentioned content in syllabus using LINUX and Windows operating system.

Teaching Methods

The major teaching methods that can be followed for this course includes class lectures, laboratory activity, group discussions, presentations and case studies.

Evaluation

Examination Scheme				
Internal Assessment		External Assessment		Total
Theory	Practical	Theory	Practical	
20	20 (3 Hrs.)	60 (3 Hrs.)	-	

Text Book:

1. The Practice of System and network administration, 3rd Edition, Thomas A. Limoncelli, Christina J. Hogan, Strata R. Chalup
2. Mastering Windows Server 2019: The complete guide for IT professionals to install and manage Windows Server 2019 and deploy new capabilities, 2nd Edition
3. Ubuntu and Centos Linux server administration, MD. Tanvir Rahman, 2019

