



Sub Committee - Specialization for Curriculum Development
Post Graduate/ Under Graduate

Course Name: Network Monitoring and Troubleshooting

(UG/PG): UG

Number of Credits: 4

Level: 3

Learning Objective(s):

Pedagogy:

Lectures
Class work discussion
Case studies
Video sessions
Presentations
Research by students

Pre-learning:

Networking basics

Course Content:

| Sr No. | Topic | Hours |
|--------|---|-------|
| 1 | Network Management: Goals, Organization, and Functions- Goal of Network Management, Network Provisioning, Network Operations | 8 |
| 2 | Network Management Standards, Network Management Model, Organization Model, Information Model – Management Information Trees, Managed Object Perspectives, Communication Model; ASN.1- Terminology, Symbols, and Conventions, Objects | 10 |

| | | |
|---|---|-----------|
| | and Data Types, Object Names, An Example of ASN.1 from ISO 8824; Encoding Structure; Macros, Functional Model. | |
| 3 | Network monitoring Monitoring tools Monitoring traffic between systems, ports, TCP connection statistics, | 10 |
| 4 | Network Troubleshooting | 12 |
| 5 | Case study | 20 |
| | Total | 60 |

Suggested Evaluation Methods:

Quiz Examination
Written Examination
Group Projects
Viva

Books Recommended:

Parallel/Similar courses the existing curriculum:

| S.No. | Name of the course | Institute where it was offered |
|-------|--------------------|--------------------------------|
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Benchmarked against similar courses in other national/ international universities /organizations

| S. No. | Name of the Course | Name of University where it is offered |
|--------|--------------------|--|
| 1 | Network Monitoring | University of Buffalo, US |
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| Name of Member | | | | | |
| Designation | | | | | |
| Org. / Inst. | | | | | |
| Signature | | | | | |

Name of the Expert:



Signature:

Date: