



**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 and Data Types, Object Names, An Example of ASN.1 from ISO 8824; Encoding Structure; Macros, Functional Model.	10

3	Network monitoring Monitoring tools Monitoring traffic between systems, ports, TCP connection statistics,	10
4	Network Troubleshooting	12
5	Case study	20
	<b>Total</b>	<b>60</b>

**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

**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

Name of Member					
Designation					
Org. / Inst.					
Signature					

Name of the Expert:

Signature:

Date: