

Department of Computer Science & Engineering National Institute of Technology Srinagar				
Course Title	Computer Networks Lab	Semester	6 th	
Department	Computer Science & Engineering	Course Code	CST355	
Credits	01	L	T	P
Course Type	Lab	0	0	2
Course Objectives				
<ul style="list-style-type: none"> To gain a firm understanding of networking concepts learned in the course work by practical demonstration. Have working knowledge of the protocols to be used at various levels of the architecture 				
Learning Outcomes				
<p>The student should be able to:</p> <ul style="list-style-type: none"> Set up LAN for home, office and similar configurations Secure the network by installing of firewalls and other security measures. 				
Course Synopsis				
The objective of the lab course to familiarise students with networking concepts from a practical perspective.				
Course Outline / Content				
Unit	Topics			Week
1.	Introduction & Network Wire Crimping			1
2.	Ethernet			1
3.	Token Ring			1
4.	Switched LANs			1
5.	Network Design			1
6.	ATM			1
7.	RIP: Routing Information Protocol			1
8.	OSPF: Open Shortest Path First			1
9.	TCP: Transmission Control Protocol			1
10.	Queuing Disciplines			1
11.	RSVP: Resource Reservation Protocol			1
12	Firewalls and VPN			1
1.	Applications			2
Text Books				
1.	William Stallings: Data & Computer Communications, 7 th Ed, PHI			
2.	Andrew Tanenbaum, —Computer Networks, PHI			
3.	Peterson and Davie, "Computer Networks, A Systems Approach", 5th ed., Elsevier, 2011			
References				
1.	Keizer, — Local Area Networks, McGraw Hill			
2.	Sklar, —Digital Communications fundamentals & Applications 2 nd Ed Pearson Pub.			
3.	Ying-Dar Liu, Ren-Hung Hwang, Fred Baker, "Computer Networks: An Open Source Approach", McGraw-Hill, 2011.			