

Branch Name:	Information and Communication Technology
Program Code:	ET208
Subject Title:	Advanced Computer Networks Practical
Subject Code:	2ET2080203P
Pre-requisite Course:	Basics of Computer Network

Course Objectives:

1. This course will provide better understanding on the fundamental concepts of advance computer network.
2. To learn a wide range of topics, e.g., routing, congestion control, network architectures, datacenter networks, network virtualization, software-defined networking, and programmable networks, with an emphasize on core networking concepts and understand the topological and routing strategies for an IP based networking infrastructure.
3. Also analyze traffic engineering.
4. Students gain knowledge of simulator/tool and how to use simulator/tool for advance networking.

Credit	Teaching Scheme Hours per week				Evaluation Scheme (Marks)									Total (Marks)
					Theory (Marks)				Practical (Marks)					
	L	T	P	Total	SEE		CCE		SEE		CCE			
					Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.		
1	-	-	2	2	-	-	-	-	10	25	10	25	50	

LAB/Practical List:

- (1) To study about TCP/IP model.
- (2) To study traffic analysis using wireshark tool.
- (3) To study cisco routing mechanism.
- (4) To implement Routing Information Protocol (RIP).
- (5) To implement Interior Gateway Routing Protocol (IGRP).

- (6) Configure VPN.
- (7) To install and study NS3.
- (8) NS3 client server programming.
- (9) Implement routing protocol in NS3.
- (10) Implement TCP variants in NS3.
- (11) Mini Project to establish and set up network using simulation tools.