

Course Type	Course Code	Name of Course	L	T	P	Credit
DP7	CSC307	Computer Networks Lab	0	0	2	2

#### Course Objective

This syllabus is designed in such a manner that it will provide the basic and fundamental practical knowledge on Computer Networks. The proposed syllabus is designed to cover Computer Networks to provide better research and industry oriented understanding for UG students.

#### Learning Outcomes

On successful completion of this unit students will be able to:

- Identify the basic concept and understand the state-of-the-art in protocols, architectures and applications of computer networks.
- Compare, contrast and analyse networks.
- Understand how networking research is done.
- Understand how we can apply networking concepts in industry.

Unit No.	Topics to be Covered	Lecture Hours	Learning Outcome
1	Socket Programming	8	The students can understand how Transport Layer works
2	NS-3 Programming	8	To understand the basics of network architecture and throughput of the network.
3	Cisco Packet Tracer	2	The students can understand how we can configure networks through simulation.
4	FTP and TELNET, Different Networking tools like Wireshark, Filezilla etc.	4	The students can understand how application layer works.

#### Text Books:

1. B. Forouzan, "Data Communication and Network", McGrawHill Publications. 4th ed.
2. A. S. Tanenbaum., "Computer Networks", Pearson Education Asia. 5th ed.

**References:** 1. W. Stalling, "Data and Computer Communication", PHI (EEE). 8th ed.

2. A. L. Garcia and I. Widjaja, "Communication Networks: Fundamental Concepts and Key Architectures", Tata McGraw-Hill. 2nd ed.