

1.	Title of the course	Network Economics
2.	Course number	EE541L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To EE5047/16
6.	To be offered by	Department of Electrical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	Nil
9.	Course Objective(s): To introduce fundamental tools and techniques used in network economics. To understand the network effect on economics and policy decisions.	
10.	Course Content: Introduction to networks and graph theory; Introduction to economics and networked markets; Network externalities; Network effects: economy with network effects, power laws and cascading behavior in networks; Introduction to game theory; Social optimal pricing; Competition models: monopoly, perfect competition, oligopoly; Auction theory; Regulatory issues; A case study in internet markets: economic models for ISPs and different pricing models, economics of net neutrality.	
11.	Textbook(s): 1. Easley D and Kleinberg J, <i>Networks, Crowds and Markets: Reasoning about a highly connected world</i> , 1st Edition, Cambridge University Press (2010). 2. Huang J and Gao L, <i>Wireless Network Pricing</i> , 1st Edition, Morgan & Claypol Publishers (2003).	
12.	Reference(s): 1. Courcoubetics C and Weber R, <i>Pricing Communication Networks: Economics, Technology and Modelling</i> , 1st Edition, John Wiley & Sons (2003). 2. Jackson M O, <i>Social and Economic Networks</i> , 1st Edition, Princeton University Press (2008). 3. Varian H R, <i>Intermediate Microeconomics: a modern approach</i> , W.W. Norton & Company (2010).	