

1.	Title of the course	Stochastic Geometry for Wireless Networks
2.	Course number	EE546L
3.	Structure of credits	3-0-0-3
4.	Offered to	PG
5.	New course/modification to	Modification To EE5051/16
6.	To be offered by	Department of Electrical Engineering
7.	To take effect from	July 2022
8.	Prerequisite	CoT
9.	Course Objective(s): To introduce techniques from stochastic point process theory to characterize geometrical properties (e.g., percolation, connectivity, and coverage) of wireless networks.	
10.	Course Content: Point processes: introduction, properties, models, sums and products, moment measures, marked point processes, conditioning and Palm theory; Interference and outage in wireless networks; Bond and site percolation; Random geometric graphs and continuum percolation; Connectivity and coverage.	
11.	Textbook(s): 1. Haenggi M, <i>Stochastic Geometry for Wireless Networks</i> , 1st Edition, Cambridge University Press (2013).	
12.	Reference(s): 1. Baccelli F and Blaszczyszyn B, <i>Stochastic Geometry and Wireless Networks: Volume I Theory</i> , 1st Edition, NOW (2009). 2. Baccelli F and Blaszczyszyn B, <i>Stochastic Geometry and Wireless Networks: Volume II Applications</i> , 1st Edition, NOW (2010).	