CS6352 - Performance of Computer Systems and Networks

<u>CS 6352</u> Performance of Computer Systems and Networks (3 semester credit hours) Overview of case studies. Quick review of principles of probability theory. Queuing models and physical origin of random variables used in queuing models. Various important cases of the M/M/m/N queuing system. Little's law. The M/G/1 queuing system. Simulation of queuing systems. Product form solutions of open and closed queuing networks. Convolution algorithms and Mean Value Analysis for closed queuing networks. Discrete time queuing systems. Prerequisites: ENCS majors only and a first course on probability theory. (3-0) S