MARKET & SOCIAL SYSTEM ENGNEER (EG) {MKSE}

312. Theory of Networks. (C) Prerequisite(s): ESE 301 and MATH 312.

Networks are ubiquitous in our modern society, playing an increasingly larger role in everyday life. These include: Social Networks such as Facebook or Twitter, infrastructure networks such as the Internet, or energy networks such as the electric grid. Network Science and Engineering is a new discipline that investigates the structure of large complex networks and their behavior and properties, and then designing technologies that control and manipulate their behaviors to bring about greater benefits to society. In this course students will learn some of the basic tools, methods, and algorithms for analysis of networked systems, as well as practical applications of this new science.

150. Mkt/Soc Sys on Internet. (C)