INTERNET FOUNDATIONS (EECS 498)

Prerequisites: ENGR 101 or EECS 183 (recommended)

Time/Location/Credits: MW 3-4:30pm, Room 1010 DOW, 3 credit course

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This course introduces students to the fundamentals of the internet. You use the internet every day, and in this course we permit you to “look under the hood” of the internet. We start by reviewing the differences between various applications, such as world wide web, skype, and Bit-Torrent. The 4-layer internet model will be explained, which includes the application, transport, network and link layers. Internet protocol and TCP/IP communication will be reviewed, along with a detailed discussion of how packet switching and routers work. The link and physical layer description will include explanations of how WiFi and Ethernet networks work. Other topics covered briefly include Network Address Translation, Wireless and Mobile Networks, Multimedia Networking, and Network Security. By taking this course you will have a better appreciation of how computer networks work and how your computer communicates over the internet.