Course Offering

EL604 Wireless & Mobile Networking

The presence of wireless links and/or mobile endpoints poses a set of special requirements on network architectures and protocols. For example, mobility management protocols are needed for mobile location management and handoff management. This course teaches the principles behind the protocols needed in wireless and mobile networks. This includes MAC (Medium Access Control), DHCP (Dynamic Host Configuration Protocol), mobile location management, mobile handoff management, and authentication protocols. Network architectures and protocols used in wireless/mobile networks such as mobile IP, cellular networks, GSM, IEEE 802.11, GPRS, WAP, etc. will also be covered.

Prerequisite: EL536, EE136 or equivalent

Outline:

1. Review of networking architectures and protocols
2. Wireless MAC protocols
3. Mobile location management
4. Handoff management
5. Mobile IP and DHCP
6. Cellular (IS41), IS-136 and GSM
7. IEEE 802.11
8. WAP
9. GPRS

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