ECE Department Seminar Communications and Networking Lab (CNL)

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Date: April 17, 2009 Time: 6:00-7:00 pm Location: Robinson B Rm 210

## **Overview of Mobile WiMAX Technology**

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**Abstract** - In this presentation, we will provide an overview of the technical aspects of Mobile WiMAX features and capabilities. Mobile WiMAX is one of the 4G wireless technologies promising tens of megabits per second of wireless capacity to mobile users. The scalable architecture, low cost deployment, network efficiency and open eco-system make mobile WiMAX one of the leading solutions in wireless industry. We will review network architecture, then turn our focus to WiMAX air interface and orthogonal frequency division multiple access (OFDMA) technologies. We will learn about how WiMAX advanced features such as adaptive antenna systems (AAS), QoS, interference management, adaptive modulation and coding can significantly improve customer experience. At the end, we will review network performance data and challenges in design and implementation of the network.