CS525 The Internet of Things including underlying Wireless Sensor Networks

This course explores new emerging issues around the concept known as the Internet of Things (IoT). The course will use the current literature to investigate topics that include broader issues such as the interdependencies between the Internet of Things to current activities such as M2M (machine-to-machine) protocols, Cloud support, Big Data issues and anticipating the impact of future IoT traffic on current network infrastructure that includes cellular 4G LTE and WiFi networks. Part of the course will focus on Wireless Sensor Networks (WSNs) as they apply to IoT issues and consider current issues in the IoT community about new initiatives both academic and corporate that involve IoT topologies, networking standards, protocol stacks and security issues. Students taking the course need to have fundamental knowledge of computer networks as found in CS4516, CS513 or ECE506. While prior network programming experience will be useful, course prerequisites do not include a strong programming background.