

Intro to Internet of Things (CS 4714)

Credit Hours: 3

Pre-Req: Network Centric Computing (CS 382) OR Computer Networks (CS 471)

Instructor: Muhammad Hammad Alizai

Schedule: Monday to Friday (10.15 AM – 12.15 PM)

The Internet of Things (IoT) is transforming the way we interact with the physical world. Advances in technology have enabled a more widespread adoption of IoT. There are billions of IoT devices in homes, factories, oil wells, hospitals, cars, and thousands of other places. With the proliferation of devices, we increasingly need solutions to energize, program and connect them and collect, store, and analyze device data. But what are the building blocks of IoT? And what are the underlying technologies that drive the IoT revolution. This course will deliver an overview of exciting and relevant technical areas essential for students and junior level professionals in the IoT ecosystem. Apart from that, participants will develop an end-to-end IoT application including programming an embedded IoT device with an application, connecting several devices wirelessly to form an IoT network, and connecting this network over the gateway to a cloud application that will analyze the data and drive the function of IoT devices. The course will also include three guest lectures from industry experts