Spring 2019
Computer Science
Special Topics

CS 491-5 / CS 591-5

Tuesday, Thursday
9:35 - 10:50 AM
Location – EGRA 220

Instructor – Dr. Neda Saeedloei

Cyber-Physical Systems and Internet of Things

(Graduate Category 3)

Cyber-Physical Systems (CPS) are dynamical systems which have both continuous and discrete components. Prime examples of such systems are aircraft, cars and medical devices which are also safety-critical systems.

The course will cover topics in modeling, simulation, analysis and verification of CPS. The goal of the course is to introduce both theoretical aspects of CPS and utilize the theory into practice with tools from the industry.

Prerequisite: Calculus I

Textbooks: *Lee & Seshia: Introduction to Embedded Systems - A Cyber-Physical Systems Approach (Free online)*

Rajeev Alur: Principles of Cyber-physical Systems (optional)