- Catalog Data: EECE456 Embedded Systems Design Lab: This course is for lab/project based computer system design and implementation for all level of students with some background in digital systems and programming. The platforms of the class are Intel provided Galileo board along with Grove-Starter Kit Plus (Intel IoT Edition , Gen 2)board and Texas Instrument MSP430 board (with accessories and booster packs).   However, others platforms such as Arduino and its varieties are allowed and encouraged to interface with the primary platform for one's specific project and responsibilities. Basic system design method will be introduced along with timelines and project management followed by student (or team) schedule and weekly progress reporting duties.

- Instructor: Dr. Charles Kim, LKD #3014   202-806-4821   CKIM@HOWARD.EDU
  Office hours: 2 – 4 TR

- Course Technical Assistant: Derrick Anang

- Textbook: None

- Pre-Requisite: Digital System or Instructor's approval

- Lab Course >> Mobile Lab Course >> Lab hours are used for *either* Demo of the lab of the week (already finished before) *or* Actual work and Demo of the lab for the week.

- First 4-Week Schedule
  - WK1 M Jan 11 : (1) Class Introduction
  - WK2 M Jan 18 (Makeup date T Jan 19 (1) Selection of Platform; (2) Picking up a Platform board, and (3) Going through a tutorial (to be posted) for Wk3 class
  - WK3 M Jan 25: (1) Completion of the initial set-up of the chosen platform and (2) Completion of the tutorial
  - WK4 M Feb 1: (1) Grove-Starter Kit or TI accessories , (2) Lab report submission

- Grading Policy
  - Lab Reports[1] 50% - Submit a hardcopy every Monday before the class starts, from February 2, for the lab done the week before.
  - Project (with a Project report) 20 % - Internet (Ethernet/Wi-Fi) enabled project
  - Final Exam 25 % - Measuring if you know what you have done with the Labs.
  - Others (Assignments) 5 %
  - Attendance 5 %

    A >89   90>B>79   80>C>69   70>D>59   F<60

- Class Website: WWW.MWFTR.COM/emblab.html then select the semester.

- **Assignment #1:**
  After basic understanding of the Galileo/TMP430 board ("Board") (through the Class note website and/or Web search) and thorough familiarity with what first to do in your computer and installation of the software development tool/kit so that the computer recognizes the Board, when connected via USB or mini-USB, (1) run a sample code (available from the software development kit/tool) and show it works, and (2) submit in hardcopy or electronics medium (via email) on Jan 25 the evidence (photos, video clips, screen shots, etc.) in free format of your work and success.

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[1] The format of the Lab Report will soon be discussed.