## Lab 0. Getting Started with Keil MDK-ARM

The first lab is not graded but is supposed to be finished before we get started with Lab 1.

Before the lab meeting time, do the following:

- Go to the **Dev tools** section under **Modules** of CEC 320 page on Canvas. Read the instructions in the following three files carefully:
  - cec32x\_devtool\_11\_installing\_win\_on\_Mac.pdf (if you use Mac), a guide to install Windows 10, which is used to install Keil MDK-ARM, on a Mac.
  - cec32x\_devlool\_12\_Keil\_installation.pdf, a guide for the installation of Keil MDK-ARM tool chain.
  - cec32x devlool\_16\_creating\_new\_Keil\_proj\_via\_modifying\_an\_existing\_one.pdf
- Download the c\_proj\_simulator\_template.zip file under cec32x\_devlool\_16\_creating\_new\_Keil\_proj\_via\_modifying\_an\_existing\_one.pdf.
- Download all the software packages according to cec32x\_devlool\_12\_Keil\_installation.pdf and save them in a USB drive. Note that it may take quite some time to finish the downloading.

Note that you need to bring your laptop to the lab. During the lab meeting time, do the following:

- Ask any questions you may have and discuss the various ideas with your peers. The key is to understand as much as possible regarding the installation of the tools.
- Install the above packages on **your own PC**. If you plan to use a PC in the lab, install the software on that PC as well.
- Create a "Hello World" project using the simulator following the instructions in the cec32x\_devlool\_16\_creating\_new\_Keil\_proj\_via\_modifying\_an\_existing\_one.pdf file. If you don't have the time to finish it in the lab, it's perfectly OK; we are doing a flexible lab.

To see the printout result of the "Hello World" project, you need to do the following:

- Compile the project by clicking the **Build** button (or pressing F7). Make sure there is no error with the application.
- Go to the debug mode by clicking the **Stop/Start Debug Session** button (or pressing Ctrl + F<sub>5</sub>)
- Make sure the **Debug (printf) Viewer** window is activated; if not, click the triangle beside the **Serial Windows** button and click **Debug (printf) Viewer**.