## **Getting Started with CECS 346**

## Instruction on setting up software and drivers

1. Install Keil uVision v4.74.

Download the installer here: <a href="https://www.keil.com/demo/eval/armv4.htm">https://www.keil.com/demo/eval/armv4.htm</a>
Enter your contact information with valid address, phone and email. Set your Company to your school. Set your devices to TM4C123GH6PM. Fill in all fields of this form. It should not cost any money, and you can select or not select whether you want email from ARM. Download mdk474.exe and run the installer.

Install Stellaris ICDI (In-circuit Debug Interface) Drivers
 These drivers provide the debugger with access to the JTAG interface and the host PC with access to the Virtual COM Port. Download the drivers here:
 http://www.ti.com/tool/stellaris\_icdi\_drivers

Instructions on how to install the drivers can be found on the Beachboard References folder: <u>Stellaris ICDI and Virtual COM Port Driver Install Instructions</u> Note there are not instructions for Windows 10; just follow the instructions for Windows 7 or 8.

3. Install Texas Install.exe

You can get it from here: <a href="http://users.ece.utexas.edu/~valvano/arm/download.html">http://users.ece.utexas.edu/~valvano/arm/download.html</a>

## Step 2) TExaS Lab Graders for all Labs

We have written DLL extensions to the Keil uVision IDE that will evaluate your lab solutions. We have named this set of DLLs as Test EXecute and Simulate or TExaS. There is also an application called TExaSdisplay that provides interaction with your serial port software running on the LaunchPad. TExaSdisplay is like HyperTerminal or PuTTy but much simpler and adds grading for Labs 5 and 11. The application TExaSdisplay also provides a simple oscilloscope and voltmeter, which is a voltage versus time graphical plot measured from PD3. For those students who did not purchase the optional Nokia display, TExaSdisplay also simulates the graphics display used in Lab 15. You will need to first install Keil before installing TExaS. You will find the lab starter projects in the Keil\text{Labware} folder, and you will find the example projects in the Keil\text{TExaSware} folder. If you have installed TExaS before and you are using this installer to upgrade to the newest version of TExaS, we suggest you backup any software you have edited/written before installing TExaS.

1) Download TExaS for Labs 2, 5-15 saving the 46M file on your computer.

2) Execute the TExaS\_Install.exe file to install TExaS, which will add files to the Keil directory.

A slide show of the process to download and install TExaS can be seen at slide show.