# **ECED 4260 IC Design and Fabrication**

# **Tutorial A: Quartus Prime Introduction Using VHDL/Verilog Designs**

## **Tutorial Material:**

- Intel Tutorial: Quartus Prime Introduction Using VHDL Designs

OR: Intel Tutorial: Quartus Prime Introduction Using Verilog Designs

#### Please note that:

- The screen captures in the tutorial were obtained using earlier version. Your screen may be slightly different.
- For Section 5 Design Entry Using VHDL/Verilog Code, you can create your own design file using a Text Editor or download and modify the **light.vhd / light.v** provided.
- For **VHDL** version: Section 8 Programming and Configuring the FPGA Device, the device order should be flipped in Figure 31. Figure 31 in the Verilog version has the correct order, but make sure the device corresponds to the one on your FPGA board.

### Submission after the tutorial:

- A **summary** of the design and FPGA implementation steps you've learnt from Tutorial A.
- A copy of **light.vhd** /**light.v** file including your name, B# etc.
- Your pin assignment; a Quartus setup file including your pin assignment is preferred.
- A screenshot of your compilation report after a correct Pin Assignment in Section 7.

Please combine the required items into **one file** (pdf preferred) and submit it into Brightspace.