

University of  
**Waterloo**



# ECE455 Lab 1

## Sample Timing

Mahmoud Salem

[m4salem@uwaterloo.ca](mailto:m4salem@uwaterloo.ca)

Please email through Learn

# Going Through the Lab Manual

- Getting familiar with the IDE
- Create a “hello world” project
  - Use the boards in the lab
- Quickly go through the manual
  - Hint: Focus on sections needed for Lab 1

# Lab 1 Requirement

- Refer to the lab manual – not this slide !
- SW Delay using nested for() loops.
- Hardware timer using interrupts.
- Measure differences to a wall clock or stopwatch after 10 minutes run(s).

# Lab 1 Deliverables

- A zip file that have your KEIL uVision project folder and 2 source folders that should have source files for both implementations; one for the SW delay and one for the HW timer.
  - Don't submit 2 main.c files in the same project folder
- The 2 binary files (.axf) you used to test your code.
- Short pdf report of maximum 1 page that briefly discuss your work and concludes the difference between the accuracy of the two techniques.
  - Please write your name and ID in the report.

# Lab Deadlines

- Posted to LEARN:
  - Lab 1 is due on May 20th
  - Lab 2 is due on June 10th
  - Lab 3 is due on July 4th
  - Lab 4 is due on July 22nd
- E2-2363 Lab is reserved for ECE455 all Thursdays 9.30-11.30am.

# TA Contact

- Use LEARN to send email:  
[m4saalem@uwaterloo.ca](mailto:m4saalem@uwaterloo.ca)
- Office E5-4119
- Learn announcement if I will be in the lab.
- If needed, will announce office hours.