

MISR UNIVERSITY FOR SCIENCE AND TECHNOLOGY
COLLEGE OF ENGINEERING
MECHATRONICS DEPARTMENT



MTE 405 SENSORS AND MEASUREMENTS

LAB 5 – SPRING 2019

Lab 5

Goals Of The Lab

Introduction to Sensors and Signal Conditioning with Virtual Prototyping



Measuring Servo Motor
Speed

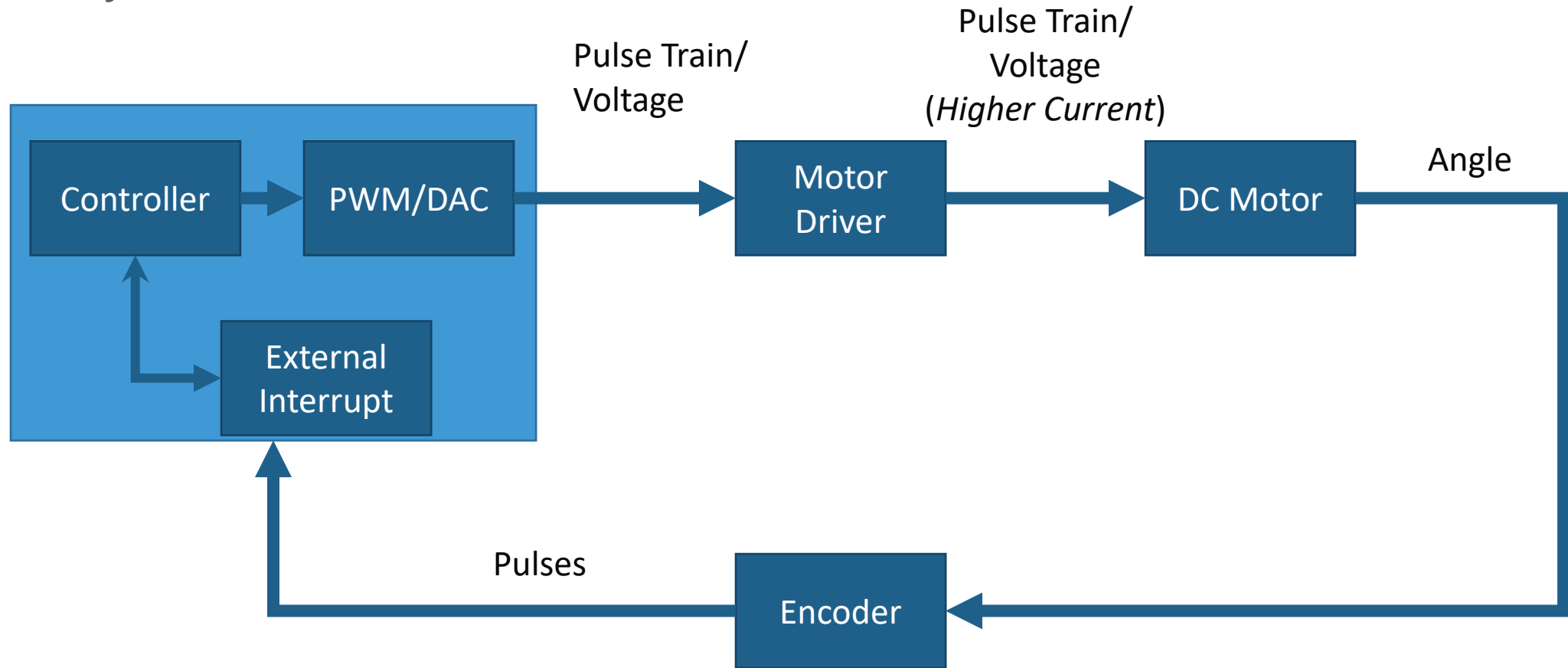
Lab 5

Servo Motor

Monitoring



Servo System



Angle = Measurable Speed = Calculated

Lab 5

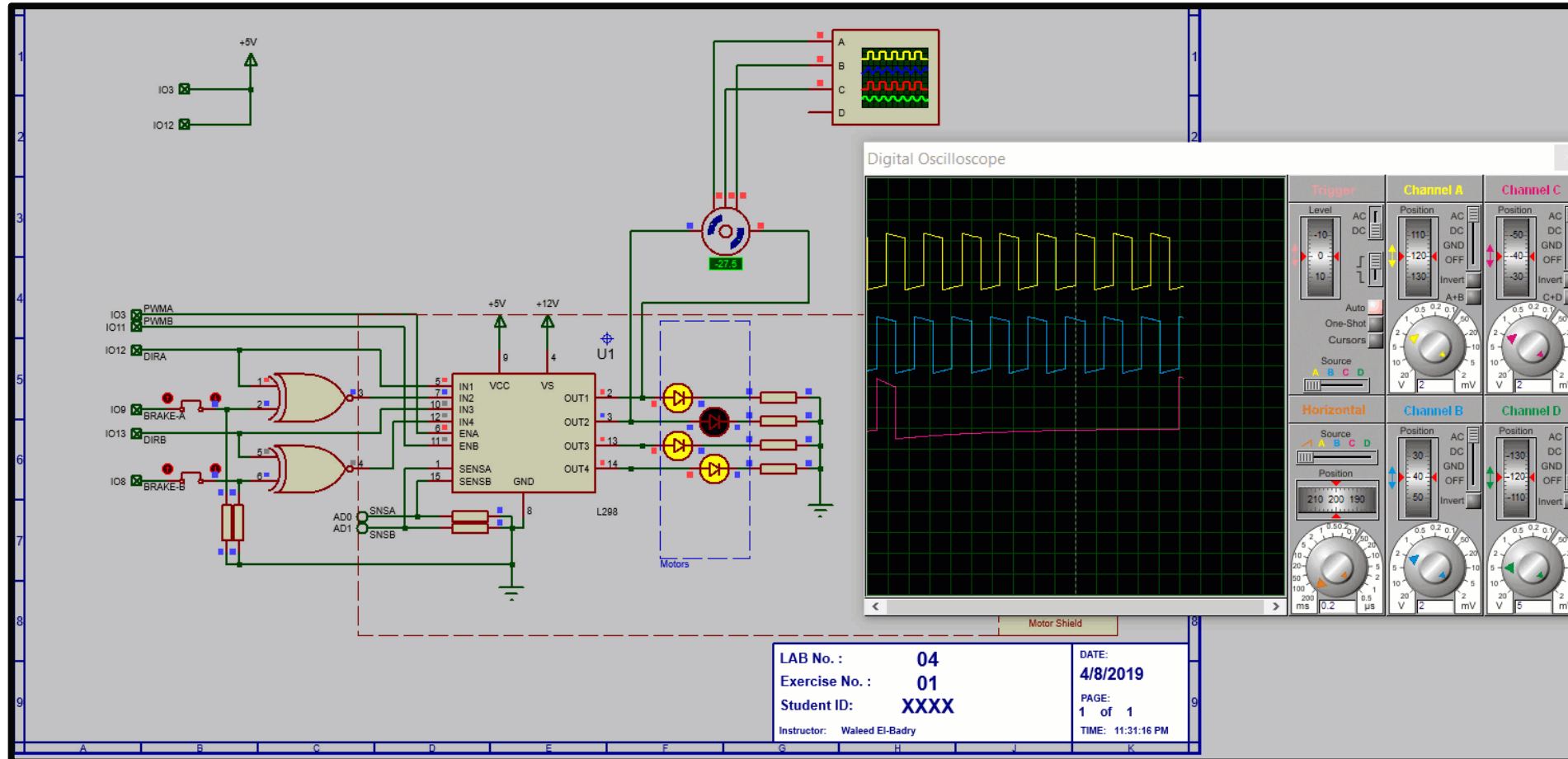
Exercise 1

Encoder Anatomy



Lab 5

Reading Servo Motor Encoder On Oscilloscope



Lab 5

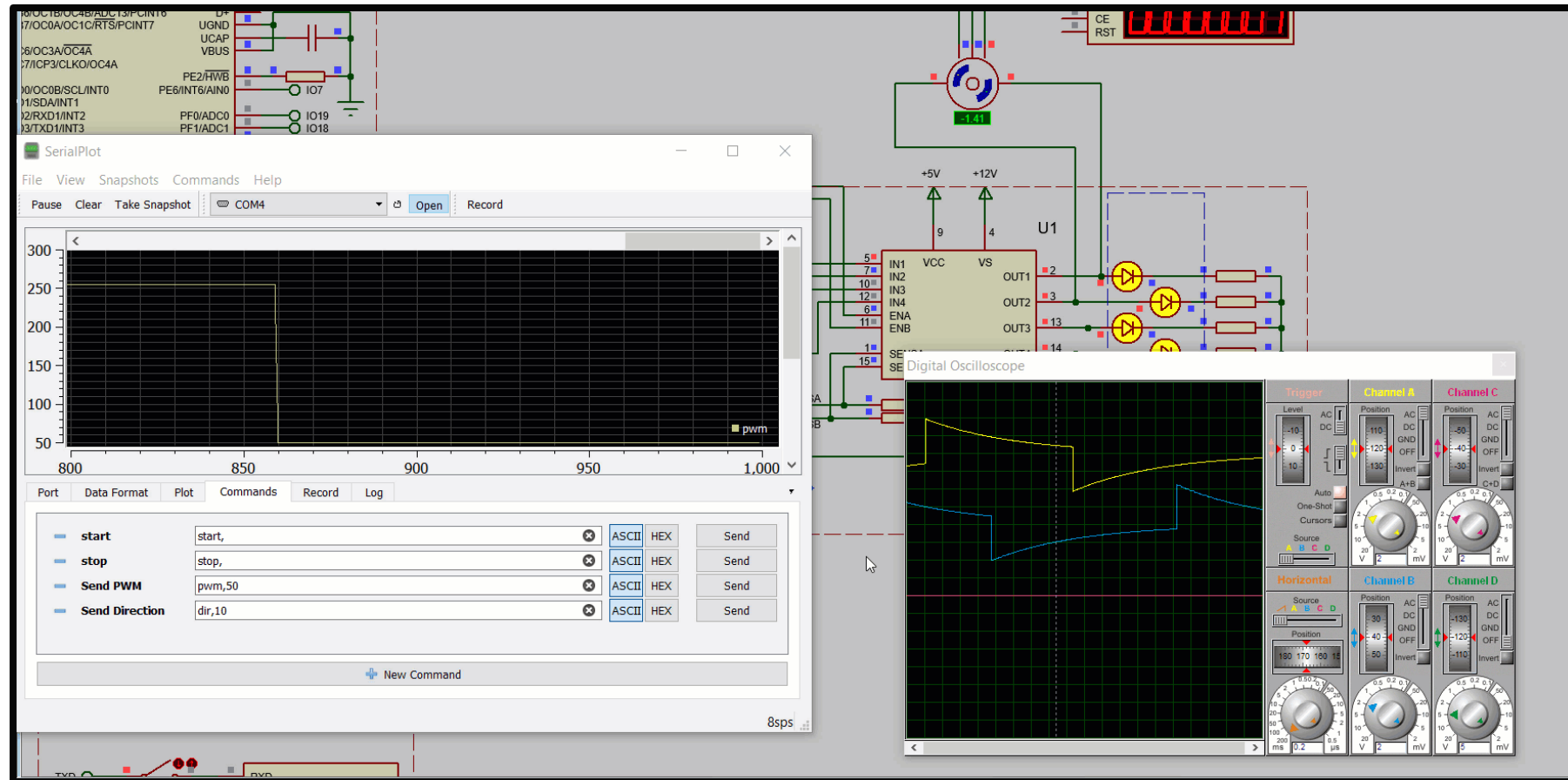
Exercise 2

PWM motor driver

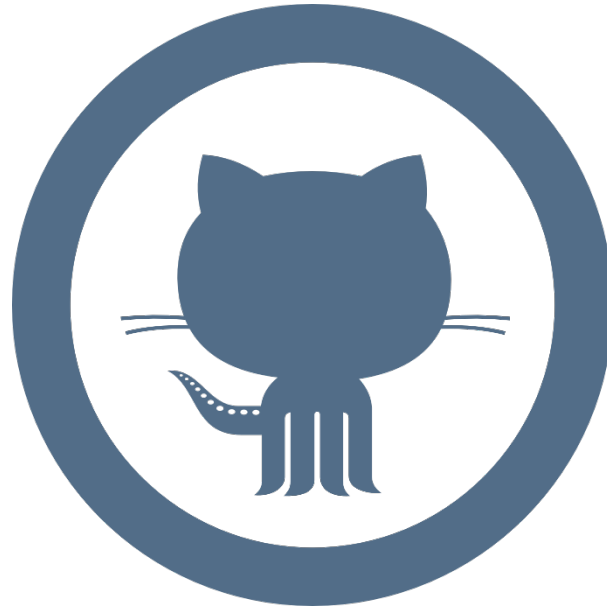


Lab 5

PWM motor control



**SOME PWM VALUES DIDN'T
AFFECT DC MOTOR. WHY?**



Don't forget to pull the lab update from.

<http://github.com/wbadry/mte405>

END OF Lab 5