

MMME3085: Lab 1 Programming Assignment

Student Name :

I.D. Number :

Marked By

General

Use of comments in code	1	[1]
Use of meaningful variable names	1	[1]

Interfacing to Different Sensors

Coding of thermistor equations correctly	2	[2]
Coding of thermocouple equations correctly	2	[2]
Use of correct variable types	1	[1]
Function to convert ADC value to voltage	1	[1]
Function to convert degrees K to C	1	[1]
Correct output in screenshot	1	[1]
Transfer of code to TwoSensorsXXX.ino	1	[1]

Quadrature Decoded Flowcharts

Initialise state machine flowchart	2	[2] Flowchart shows correct logic and well laid out [2], Sorme errors in logic or correct logic but difficult to follow [1]
Coding of initialiseStateMachine()	3	[3] Flowchart well laid out with correct logic [3], Well laid out but small errors in logic OR correct logic but difficult to follow which could lead to errors in implementation[2], An attempt has been made but only small part of logic is correct OR layout makes flow very difficult to follow [1]

Quadrature Decoded

Good formatting in if and switch statements	1	[1]
Coding of initialiseStateMachine()	2	[2] Working code with correct use of if/else [3], Good attempt but mistake in logic or use of switch [2]
Coding of updateEncoderStateMachine()	3	[3] Correct use of switch statement [1] + Correct use of if/else/else if, as applicable [1] + Working code (ie correct logic) [1]
Correct output in screenshot	1	[1]
Transfer of code to MotorEncoderXXX.ino	1	[1]
Total Mark	25	

General Comments

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