

# **SCHOOL OF ENGINEERING**

## **FINAL REPORT**

### **AIR DENSITY DATA LOGGING SYSTEM**

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**ABSTRACT**UCSI  
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This measurement device is accomplished to display the air temperature, pressure, humidity and density within the measuring environment. Three respective sensors of the parameters mentioned above are used to compute air density using parametric method. The total operation from receiving sensor yield to reproduction of readings is unified by a core microcontroller. Interaction between sensor, display module and the microcontroller is configured properly to ensure smooth operation on handling various data range. The development of this measuring instrument also incorporates a computer interface, data logging system which responsible to record and perform analysis on the relevant data. Graph plots of measurements data can be obtained from the data logging system after a series of synchronization with the instrument.