

Sensor Suite

- Preliminary Research

Review previous Capstone :: All

Write Product Specification

Write Project Proposal

Project Proposal Signed and Submitt...
- MSP430

Connect with SmartMesh IP

Code mote to transmit data to co...

Connect SmartMesh to MSp430

Code mote to transmit sensor data ...

Debug Code

Working Code

Data Storage

Research / Code Proof of concept

Data Write / Read

Write sensor data

Debug Code

Final Code

Low Power mode

Research / Code Proof of concept

Wake / Sleep cycle

Optimize and Debug Code

Final Code

Code Full Cycle Program

Rough full cycle

Debugged and Optimized

Final code
- GUI Development

GUI displays live data

Display timestamps for data

Display status of operation of motes

Display Graphical representation of ...

Debug Code

Final Code
- Sensors

Get Sensor Data

Get temp/humidity data from sens...

Get NO2 data from sensor

Characterize sensors

Characterize temp/humidity sensors

Characterize NO2 sensor
- Breadboard Prototyping

Rough schematic

Build mote on breadboard

Bill of Materials
- PCB Prototyping

Final schematic

PCB Layout

Place 1st order PCBs

Build 1st PCB

Place 2nd order of PCBs (if needed)

Build 2nd PCB

Minimal Viable Product
- Enclosure

Design weather resistant enclosure

Purchase materials

Finalize enclosure

Install mote into enclosure

Demonstrable Device
- Testing

Write test plans

Perform test plans

Testing Completed
- Documentation

Github collab site completed

Write rough operations guide

Write final operations guide

Complete Capstone Poster

Capstone poster event

Produce stakeholder report

Write rough final report

Write final report

Final Report Presentation

