**EE4951W – Battery Power Monitor**

**Demonstration Description**

A system comprised of a laptop, cellular modem, and a load-box will be used to demonstrate the functionality of the battery power monitor (BPM). The BPM will monitor the voltage and current of the cellular modem during transmission and log all data to an on-board SD card. In addition to data logging, minimum, maximum, and average values of the power consumption will be displayed on an attached LCD display. These statistical calculations can be reset via a push-button. Real-time sensor data will be sent over USB to the laptop and displayed on screen. In addition to monitoring the cellular modem, the general nature of the BPM will be demonstrated by using a load box to simulate a variety of loads.