

Green Fund Hack-a-thon Info-Sheet

Overview:

The purpose of this Hack-a-thon is to develop an interactive dashboard to summarize high-frequency energy consumption data in 81 electricity meters on UNCG's campus. These meters represent power utilization of various buildings across UNCG and will help the university *understand the requirements and usage of energy consumption and efficiency across the campus.*

Students in the Economics department at UNCG have written scripts to clean, summarize, and predict energy use using statistical models with data on meter readings, local weather conditions, and classroom occupancy. These scripts are written in Python and extract data from various API sources. The scripts are provided as a part of the hackathon.

Participants in this Hack-a-thon are tasked with using the data produced by these scripts to write new scripts that create a real-time dashboard that displays a series of interactive graphs. Teams will be judged based on the interactive graphs, dashboard usability, style and aesthetics, coding and documentation. The dashboard created by the winning team will be deployed and hosted by UNCG for use by Facilities Operations staff and the public.

Dates:

Teams will be given access to the programs and data for the Hack-a-thon on **Monday, November 16 at 8:00AM** and must submit all work by **11:59PM on Monday, November 23.**

Prizes:

The first-place team will receive \$1,000 to split among its members. Second place will receive \$600. Third place will receive \$400. All prizes are funded by the UNCG Green Fund.

Teams:

You may enter the Hack-a-thon as a team or as an individual. Teams may be no larger than 5 students. You must be a UNCG student to participate. Participating individuals/teams should email Dr. Mohanty (sdmohant@uncg.edu) and Will Queen (jwqueen@uncg.edu) with details of their team by **11:59PM on Sunday, November 15** to participate. Each individual can only participate as part of one team.

Deliverables:

Teams will submit an open source Github repository with all work by **November 23 at 11:59PM**. Teams will have 15 minutes to present their work in a virtual meeting on **December 2 at 3:00PM**.