EENG-4395 (2024-SPRING) 002

Course Logistics and Instructor Contact Information

Course Title - Undergraduate Research
Course Number and Section - EENG 4395.002
Scheduled Class Days and Times - MWF 10-noon

Instructor Name Yasser Mahgoub & Rafe Biswas
Office Location A201 & A214
Phone Number
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Best way to contact: Email or Canvas message

Office Hours: By appointment

Course Information

Objectives

a)Implement a data acquisition system to monitor and analyze the performance of the thermal fluid system.

b) Design a Control System for the Thermal Fluid System and the Solar Charging Station. Control the key variables: the temperature and the flow for the thermal fluid system and the current and the voltage for the Solar charging system.

Timeline

Weekly assignments must be submitted that includes literature review of at least 1 article and meeting minutes and agenda as well as any notes/updates related to the project.

The proposed research will be conducted over a period of 3 months, divided into the following phases:

a.The flow (air & water) & temperature control with Data acquisition system development by April 26

C. Control system design and implementation for the Solar charging system in April (optional)

d. Complete the report by the last week of classes.

Lab exercises to edit are here: 3211_eBook.pdf Download 3211_eBook.pdf& check Teams for lab manual example.