Course Description

Catalog Description:
This course introduces students to the fundamentals of collecting and processing experimental data for civil and environmental applications. The course begins with an introduction to DC and AC circuits followed by the coverage of sensors used in the civil and environmental field. Examples and hands-on demonstrations will be presented relevant to seismic, environmental, structural and hydraulic monitoring.

Textbook (Optional):

Course Requirements:
- Weekly homework assignments
- In-class quizzes
- Midterm exams
- Laboratory projects

Homework:
Homework will normally be assigned weekly and due the following week in class. Late homework will not be accepted. You are allowed to discuss the homework problems with peers, but you must write up your own homework to hand in. Please submit homework assignments in a neat and presentable manner with all calculations shown. Submission of homework on engineering pad paper is required. Please abide by the University of Michigan Honor Code – it will be strictly enforced.

Grading:
Homework 25%, midterms 40%, labs 25%, quizzes 10%. These weights are approximate; the instructor reserves the right to change later (normally to the students’ advantage).

Prerequisites:
- Physics 240 – General Physics II (strongly recommended)