

ME 59700: Industrial Energy Audit

- Class Time:** 11:00-12:30 PM T ET 314H
- Instructor:** Ali Razban, Ph.D., C.E.M. arazban@iupui.edu SL 260P
Phone: (317) 274-8458
- Pre- requisites:** Graduate or senior standing
- Co-requisites:** None
- Office hours:** 1:00-2:00 PM M,W or by appointment
- References:** 1. Handbook of Energy Audits, 8th Edition, Al Thumann, W.J. Younger, T. Niehus
- Grading:** Based on Four audits during the semester, this includes Audit preparation, company visit and final report preparation

The link to the new ME Exam Rules and Policies to your syllabus:

<http://www.engr.iupui.edu/me/documents/MEEExaminationRulesandPolicies.pdf>

Goals: The objective of this course is to give the students practical understanding of industrial energy assessment and audit process by executing actual industrial audits.

Outcomes: Upon the completion of this course, students will be able to:

1. Understand the complete energy audit process
2. Be able to conduct energy assessments following the assessment process
3. Understand the data flow
4. Be able to select and use proper tools for data collection and analysis
5. Be able to use proper equipment for measurements
6. Be able to make recommendations for energy efficiency
7. Be able to complete an assessment report

Assignments,

The students will execute **four actual industrial audits** during the semester. The assignments will include;

Audit leadership

Audits Preparation of pre audit document,

Onsite visit and rough energy saving calculation during the visit for potential AR 's

Detail calculation for potential AR's

Final report

Each student provides a short report on his/her role and contribution for each four audit.

Exams:

There is no Exam for the course.

The students will be evaluated based on;

Their participations in four audits.

Quality of the their audit reports

Leadership when they are lead auditor

To finish reports on time.

Schedule and attendance:

- a. You are expected to **attend all classes**, either in person or remotely.
- b. Please review the administrative withdrawal policy carefully.
- c. **ASK QUESTIONS.** The best time to ask questions about material you don't understand is in class. Also, use the instructor's office hours.

Academic integrity:

You are reminded of university policies on **academic integrity and honesty and student behavior**, as described in the IUPUI "Student Rights and Responsibilities" booklet. Academic misconduct is a very serious matter, and penalties for **cheating or helping someone to cheat** include lowering of a student's grade as well as **disenrollment** from the school.

Personal life stress:

During the semester, if you find that life stressors are interfering with your academic or personal success, consider contacting Counseling and Psychological Services (CAPS). All IUPUI students

are eligible for counseling services at minimal fees. CAPS also performs evaluations for learning disorders and ADHD; fees are charged for testing. CAPS is located in UN418 and can be contacted by phone (317-274-2548). For more information, see the CAPS web-site at:

<http://life.iupui.edu/caps/>

The syllabus might be updated during the semester, and the updated version will be posted on OnCourse. Please check OnCourse for latest version.