Fundamentals of Energy Efficiency

New Course for Winter 2017

Open to graduate students and juniors/seniors with instructor's permission.

Instructor:
Alan Meier

Input energy

Device

Output

Services or

Product

Losses

1:40 - 3:00

Tuesday & Thursday

Location: 3 Wellman

Two course options:

TTP 289A-001, 3-units letter graded, CRN 42341

TTP 2898B-001, 1 unit S/U graded, CRN 42346

You will learn how energy is transformed into useful services such as thermal comfort, information, and mechanical drive. Basic concepts of heat transfer, motor operation, and other equipment will be explained. A framework for evaluating energy-saving technologies will be introduced. The role of behavior will also be explored.

Many real-world examples—including field trips—will give you a practical appreciation for these theories. You will measure energy use of appliances and learn why it varies. We will explore the technical and policy relationships between sustainability, renewable energy, and efficiency.

Insulation values for clothing help determine thermal comfort



Questions? akmeier@ucdavis.edu