Energy Efficiency in Building Systems Course

Foothill College

Program Description

Designed to build a pool of entry-level engineers for energy efficiency, this eleven week course offers dislocated engineering professionals training for career transition. The course provides basic skills for these seasoned professionals to determine the energy efficiency opportunities of commercial and industrial customers in a consultant-like role, analyze complex energy systems, and develop a compelling business case toward energy retrofit work for the prospective customer based on the data collected.

Major topics include:

- Overview of Energy Efficiency Fundamentals and Utility Basics
- Basics of Financial Analysis
- Building Envelope
- Heating, Ventilation, and Air Conditioning
- Lighting and Controls
- Solar, Renewables, and Self-Generation
- Data Collection, Integrated Design, and Commissioning
- Practical Applications, including complex system audit and analysis, and Case Studies

Cohort Prerequisites and Backgrounds

Participants in this course were carefully screened for their aptitude for understanding complex commercial and industrial energy systems. Most students have had project management and/or engineering employment, as well as bachelors and often masters level degrees. Some students have Masters in Business Administration. At a minimum, students have a bachelor's degree in engineering or physical science, five years or more in an engineering or complex analytical field of work, knowledge of electronic, mechanical, and software systems. They also have demonstrated abilities for effective communications and customer interface skills.

Target Jobs

Energy Auditor, Energy Efficiency Specialist, Project, Product or Program Manager; Systems Engineer or Analyst; Sales or Account Executive; and Sales Engineer assigned to Program Coordinator.

Instructors

Instructors for this certificate program are practicing energy efficiency professionals, listed on the following page.

Contact for Recruiters

Recruitment and screening of these candidates to meet employer needs is currently done free of charge and paid for with grant funding until July 2012. Job descriptions and/or employer requirements can be sent to the following recruiters and they will send you the top matches from their candidates.

Jo Fleming jo@greencareerspartnership.org (831) 706-7384
Blair Mandell blair@greencareerspartnership.org

Instructors

NAME	COMPANY
Charles Eley, Lead Instructor	Principal Architect
Ryan Stroupe	PG&E Project Manager
Eric Kolderup	Principal, Kolderup Consulting
Steve Mesh	Steven Mesh Lighting Design Consulting
Mark Hydeman	Principal, Taylor Engineering
Greg Cunningham	Principal, Enovity
Jim Kelsey	Principal, kW Engineering
Pete Shoemaker	Renewables Program Coordinator, PG&E Pacific Energy Center
Luke Werner	PG&E
Hal LaFlash	Clean Energy Design Consultant