Conquering the Energy Code for Architects and Engineers: Residential
Course Outline

At the end of this course, participants will:

• Understand the structure and rationale behind the energy code
• Be able to differentiate the various compliance pathways and understand the requirements for compliance
• Sharpen communication and coordination practices as related to clients, the design team, code officials and the construction team to remove barriers to compliance
• Understand the interdependence of the building envelope, mechanical and lighting systems and their impacts on energy consumption

And finally, inspire design professionals to build above code minimum.
Please note: any building four or more stories in height must comply with the commercial energy code.

PART 1: OVERVIEW

1. Introduction: Energy Code Basics
   • Benefits and Trends
   • Basic Parameters
2. Energy Codes are a Systems-Based Approach
   • Whole Building Design
   • Systems regulated by code:
     o Building Envelope
     o Mechanical and Service Water Heating
     o Electrical Power and Lighting Systems
3. Coordination and Communication
   • Team Communication
   • Integrated Design Approach

PART 2: RESIDENTIAL ENERGY CODE PROVISIONS

1. Scope and Compliance
   • Overview and Definitions
   • Selecting Compliance Paths
2. Prescriptive Path
   • Building Thermal Envelope
   • Systems
   • Electric Power and Lighting Systems
3. Simulated Performance Alternative
4. Energy Rating Index
5. Existing Buildings

PART 3: DOCUMENTATION AND INSPECTIONS

1. Introduction
2. Compliance
   • Plan Review & Documentation
   • Supporting Documentation
   • Progress Inspections
3. Common Objections
4. Local Laws
5. Resources