

Two weeks Special Course on Energy Audit – Topics to be covered

The course coverage would have four modules. The topics to be covered in each of the modules are indicated below:

Module 1: General Aspects of Energy Management and Energy Audit ✓

- Energy Scenario
- Energy Conservation Act, 2001 and Related Policies
- Basics of Energy and its Various Forms
- Energy Management and Audit
- Material and Energy Balance
- Energy Action Planning
- Financial Management
- Project Management
- Energy Monitoring and Targeting
- Energy Efficiency and Climate Change
- New and Renewable Energy Sources

Module 2: Energy Efficiency in Thermal Utilities ✓

- Fuels and Combustion
- Boilers
- Steam System
- Furnaces
- Insulation and Refractories
- FBC Boilers
- Cogeneration
- Waste Heat Recovery
- Heat Exchanges

Module 3: Energy Efficiency in Electrical Utilities ✓

- Electrical System
- Electric Motors
- Compressed Air System
- HVAC and Refrigeration System
- Fans and Blowers
- Pumps and Pumping System
- Cooling Tower
- Lighting System
- Diesel/Natural Gas Power Generating System
- Energy Conservation in Building and ECBC

Module 4: Energy Performance Assessment for Equipment and Utility Systems

This module will cover Performance Assessment of most of the equipments / systems discussed under Module 2 and 3. In addition to the above, it will also cover Energy Management Systems in the following Sectors.

- Thermal Power Station
- Steel Industry
- Cement Industry
- Building and Commercial Establishments
- Textile Industry
- Pulp and Paper Industry
- Fertilizer Industry

