

## Net Zero Energy Building

- **Day I**

### **Green Building Science: An Overview [3 Hrs]**

- Introduction/ Definition(s)/ Concept
- Landscape and Sustainability
- Water and Waste Management
- Materials and Resources
- Indoor Air Quality
- Energy Management

### **Net Zero Energy Building [3 Hrs]**

- Introduction/ Definition(s)
- Types of Net Zero Concepts
- Site Optimization
- Building Fenestration & Envelope
- Thermal Performance & Comfort
- Alternative Energy Sources
- Prerequisite of Demand/ Supply
- Case Studies

### **Discussion and queries [1 Hrs]**

### **Day II**

### **Demand Side Energy Management [2 Hrs]**

- Site Improvement
- Facade Optimization
- Built Space Melioration

### **Building Simulation using Ecotect & eQuest [3 Hrs]**

- Context Weather File Integration
- Orientation Optimization
- Fenestration Simulation
- Shadow Analysis
- Energy Analysis
- Calculation & Reports

### **Regulatory Bodies & Compliance [1 Hrs]**

- NBC Guidelines
- ECBC Guidelines
- GRIHA & IGBC Compliance(s)
- Central & State Govt. Subsidies & Schemes