

## **Zero Energy Building**

### **Content:**

#### **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

#### **Break**

##### **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

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

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

**Test & Certification [1 Hrs]**

**Take Away kits will be given to all participants**

**The Faculty:**

The faculties are people from top academic institutions, industries and research institutions. They have experience in the industries at the same time had the best education in this field. In fact some of them are pursuing master and Doctorate at Top notch universities to build their knowledge base.

**Note: Techfest, IIT Bombay Certificates to all participants (only if participant attends all the sessions).**