

Open Course Title: SUSTAINABLE HOUSING, by Department of Civil Engineering

Target Students from Branches: ECE/TCE/EEE/CSE/Mech/Civil/MCA

Total duration of the course: 25 Hours.

No. of Lecture hours: 14 hours

No. of hands on / Practical: 11 hours

Abstract

Sustainability is said to come from the balance and intersection of “the 3E’s”: environment, economics and social equity. Post-industrial residential planning and building practices of recent decades have often neglected to address even one of these E’s, resulting in residential buildings and landscapes that will be – or currently are – unsustainable in even the near future.

This workshop provides working knowledge on use of low cost building materials and planning, and also explores the techniques for low cost and energy efficient housing. Workshop comprises of lectures, hands-on training and site visit. This course is targeted for students who have completed a course on building materials and construction.

Open Course Details

The participants will be able to

CO1: identify the consequence of climate change, scarcity of resources and economic imbalances that effect the construction practices

CO2: become familiar with the practices or approaches in terms of planning and material selection to constructing sustainable residential environment

CO3: understand and compare various green building certification programs for residences/housing

Note: The coordinators shall provide at least three course outcomes for the open course.

Schedule

Day 1:12/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
10-11 AM	Registration & Formalities	Mrs. Shimna & Mrs. Archana	
11:15-12:15PM	General introduction, evolution of housing	Dr Raghunath	CO1
12:15- 1:00 PM	Economics of house construction	Mrs Lakshmi H S	CO2
1-2PM	Lunch		

2-3 PM	Rain water harvesting	A R Shivakumar	CO2
3-4PM	Roofing systems	Mrs. Shobha R	CO2
Day 2 (13th FEB 2019)			
10-11 AM	Domes & Vaults	Mr Pramod/ Varun, Mrinmayee Consultants	CO2
11:15-12:15PM	Affordable housing	Mrs Parvati	CO2
12:15- 1:00 PM	Typical construction methods	Mrs. Shimna	CO2
1-2PM	Lunch		
2-4 PM	Planning & layout, HVAC	Mrs. Shimna/ BMSSA	CO1
Day 3 (14th FEB 2019)			
10-11 AM	Rain water harvesting Theme park visit	Mrs. Shimna & Mrs. Archana	CO2
11:15-12:15PM			
12:15- 1:00 PM			
1-2PM	Lunch		
3-4PM	Climate Sustainable town planning	Dr Rajesh Gopinath	CO1
Day 4 (15th FEB 2019)			
10-11 AM	Embodied Energy	Mrs. Shimna & Mrs. Archana	CO3
11:15-12:15PM	Green Building rating system	Mrs Parvati	CO3
12:15- 1:00 PM	Lunch		
1-4 PM	Site visit to Zed Earth, DB road	Mrs. Shimna & Mrs. Archana	CO2
Day 5 (16th FEB 2019)			
10-11 AM	Alternate Materials	Dr B V Reddy	CO2
11:15-12:15PM	Green buildings & sustainability	Dr Monto Mani	CO3
12:15- 1:00 PM	Assessment of Open Course, Distribution of Certificates, Feedback and Concluding Session	Mrs. Shimna & Mrs. Archana	

Registration Fee: Rs. 300/- per student.

For details Contact:

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