# **AMITY UNIVERSITY**

# SCHOOL OF PLANNING AND ARCHITECTURE, AUMP



# YEAR -IV, SEMESTER - VII

Course Title	Green Buildings		L	Т	P	S	Credits
Course Code	BAR 704		1	0	0	2	2
Course Type	EC			"	U	2	2

# **Course Objective:**

To familiarize students with principles, techniques and guidelines for planning and design of energy conserving architecture

## **Course Contents:**

#### **Module I: Introduction**

Classification and characteristics of resources, Use and exploitation of resources, Resource use in architecture / exploitation of resources for development, Resource shortage and constraint, Concepts and need for conservation, Renewable and non-renewable resources.

## Module II: Energy conserving architecture

Principles of energy conservation, Pattern of energy use in buildings, Technologies and methods of conservation, Economic, technological and environmental implications.

## Module III: Design of energy conserving architecture

Fundamentals of planning and design, Elements and principles of design, Study of design problems, Application of relevant principles for design solutions, Innovative and appropriate construction technologies.

# **Student Learning Outcomes:**

To familiarize with the technologies used for energy conserving Architecture.

## **Pedagogy for Course Delivery:**

The course is delivered through lectures, field trips and presentation by the students

# **Prerequisite:**

Nil

# **Assessment/Examination Scheme:**

Theory %		Lab/ practical/studio %	End Term Examination			
	100 %	NILL	Theory			

## Lab / Practical / Studio Assessment:

	Sessional work				End Term		
Weightage %	50%				50%		
Component drop down	A	S	AS1	AS2	MST	Theory	
Weightage %	05	05	10	10	20	50	

A: Attendance, S: Seminar, PR: Presentation, AS: Assignment, MSE: Mid semester Exam, VV: Viva Voice, C: Case discussion, P: Project, CT: class test, SW: Studio Work, EE: End sem. Exams.

#### **Text & References:**

- Alternative Natural Energy Sources in Building Design: Davies and Schubert.
- Design with nature: I. McHarg
- The Ecological Context: H. McHale.

# References:

- Human Ecosystems: W. B. Jr. Clapham.
- Review our dying planet: S. Devi.
- Energy Conservation Standards: for building design, construction and operation, S. Fred Dubin.