

AMITY UNIVERSITY
SCHOOL OF PLANNING AND ARCHITECTURE, AUMP



YEAR -V, SEMESTER – X

Course Title	Alternative source of energy and built environment			L	T	P	S	Credits
Course Code	BAR 1004							
Course Type	EC			1	1	0	0	2

Course Objective:

- Understanding role of alternative sources of energy in built environment
- Understanding the methodology to be followed and application while using other sources of energy in a building.

Course Contents:

Module I: Introduction to alternative sources of energy:

Understanding the other sources of energy – solar energy, wind energy, tidal energy etc. Scope and factors influencing built environment. Site and climatic requirements, site constraints, construction and technical requirements and limitations.

Module II: Understanding Application of Solar energy in architecture

Ways of adopting energy in architecture :-- Active and Passive. Carefully study the examples of both.

Module III: Live study & Application

To understand the thorough application of renewable and alternative energy, students should visit and submit a detailed report on any one building using solar energy.

Student Learning Outcomes:

To familiarize with the technologies using renewable sources of energy in developing and harnessing energy for built environment.

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	CT1	CT2	Theory
Weightage %	05	05	10	10	10	10	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:

17. CLIMATE RESPONSIVE ARCHITECTURE:A Design Handbook for Energy Efficient Buildings.Arvind Krishan (Author), Nick Baker (Author), Simos Yannas (Author),Steve Szokolay (Author)
18. A Golden Thread: 2500 Years of Solar Architecture and Technology by Ken Butti (Author), John Perlin (Author)