

BPM301 LCC and Sustainable Design and Construction

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

Synopsis:

BPM301 LCA and Sustainable Design and Construction provides an understanding in sustainable design and construction, the usefulness of life cycle analysis, illustrates the various renewable energy as well as its applications. It also covers the principles and techniques of sustainable design and construction. The course also develops students' knowledge in appraising a design or construction for its sustainability.

Topics:

- The Triple Bottom Line – People, Planet and Profit/ Social, Environmental and Economical Sustainability
- Corporate Social Responsibility for Sustainable Design and Construction
- Sustainable Design
- Sustainable Construction
- Integration between Design and Construction
- Business Case for Green Buildings
- Carbon Foot-Print in Construction and Buildings
- Life Cycle Management
- Life Cycle Costing and Life Cycle Assessment
- LEEDS, Green Mark and Green Buildings
- Importance of Energy Efficiency
- Renewable Energy Systems in Buildings

Textbooks:

BPM301 Study Guide
ISBN-13: SG-1175

Learning Outcome:

- Demonstrate understanding of the concept of life-cycle-costing
- Discuss the principles and techniques of sustainable design and construction
- Appraise a design or construction for its sustainability
- Illustrate how buildings can be designed to be more energy efficient and therefore more environmentally sustainable
- Discuss the business case for green buildings
- Propose ways for a sustainable construction

Assessment Strategies - Regular Semester (Evening Class):

Components	Description	Weightage Allocation (%)
Overall Continuous Assessment	PRE-CLASS QUIZ 1	2
	PRE-CLASS QUIZ 2	2
	PRE-CLASS QUIZ 3	2
	GROUP BASED ASSIGNMENT 1	10
	TUTOR-MARKED ASSIGNMENT 1	14
Overall Examinable Components	Written Exam	70
Total		100

*The information listed is subject to review and change.