

	School of Planning and Architecture: Vijayawada	
	(An institution of National Importance under the Ministry of Education, Govt. of India)	
	Survey No.4/4, ITI Road, Vijayawada-520008, Andhra Pradesh, India	
	Department of Architecture	
Course:	MDES 1252 - Design for Circular Economy	Class: M. Des., 1st Year, II Semester 2024-25
Instructors:	Dr. Khuplianlam Tungnung	Internal Assessment: 100
		External Theory Exam: NA (Open Assessment, OA)
Contact Periods/ week: 03 periods. (55 min each)		Total Marks: 100
Time Table:	Tuesday (03 periods)	Credits: 3 (2+1)

Objective:

As a socio-economically responsible agenda, the course will attempt to address concepts, ideas and methods for “Design for Circular Economy” The study would emphasize ways to reduce, reuse, and recycle design works and articulate the principles. Designing products and systems for resource efficiency is expected to reduce carbon footprints and limit climate change. Further, the use of sustainable materials and manufacturing processes, exploration of innovative business models for sustainability, and consideration of lifecycle from extraction to disposal are expected to be learning through interactive and immersive learning experiences.

Week	Lecture Plan	Remarks/Topic of Assignment
Week 1	General introduction and orientation Introduction to the course and syllabus overview.	Lecture + Tutorial/Practical
Week 2	Emphasizing reduce, reuse, and recycle principles	Lecture + Tutorial/Practical

Week 3	Emphasizing reduce, reuse, and recycle principles	Lecture + Tutorial/Practical
Week 4	Designing products and systems for resource efficiency.	Lecture + Tutorial/Practical
Week 5	Designing products and systems for resource efficiency.	Lecture + Tutorial/Practical
Week 6	Using sustainable materials and manufacturing processes.	Lecture + Tutorial/Practical
Week 7	Assessments	Seminar/ Presentations/ Test
Week 8	Using sustainable materials and manufacturing processes.	Lecture + Tutorial/Practical
Week 9	Using sustainable materials and manufacturing processes.	Lecture + Tutorial/Practical
Week 10	Exploring innovative business models for sustainability.	Lecture + Tutorial/Practical
Week 11	Exploring innovative business models for sustainability.	Lecture + Tutorial/Practical
Week 12	Exploring innovative business models for sustainability.	Lecture + Tutorial/Practical
Week 13	Considering lifecycle from extraction to disposal.	Lecture + Tutorial/Practical
Week 14	Considering lifecycle from extraction to disposal.	Lecture + Tutorial/Practical
Week 15	Considering lifecycle from extraction to disposal.	Lecture + Tutorial/Practical
Week 16	Assessments: Make-up classes, if any, may be arranged or accommodated in these weeks.	Seminar/ Presentations/ Test

S. No.	Stages of Evaluation	Weightage
1	Assessments	15
2	Mid Semester Examination	20
3	Assessments	15
4	Final Assessment	50
	Total	100

Outcomes:

Students are expected to develop understanding of product design process & methods, empathy and sensitivity on the topics related to “Design for Circular Economy” including concepts, ideas and methods for “Design for Circular Economy”, empathy and deep appreciation of ways to reduce, reuse, and recycle design works and the principles, products and systems resource efficiency, sustainable materials and manufacturing processes, innovative business models for sustainability, lifecycle cycle assessment, etc.

Course Instructor(s): sd/- (Dr. Khuplianlam Tungnung)	Head of Department: sd/- (Dr. Srinivas Daketi)
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NOTES:

1. In cases where specified units or chapters are not completed within the stipulated time, it will carry forward to the next classes and adjustments will be made accordingly, as required.
2. Make-up classes, if any, may be arranged or accommodated in existing scheduled classes or other appropriate time.