

COURSE OUTCOME ASSESSMENT AND ATTAINMENT (R16)

COURSE NAME: MECHANICS OF SOLIDS

CODE: R1621032

COURSE OUTCOMES: Students are able to

CO	STATEMENT
C01	01.Predict mechanical behavior of the member by determining the stresses, strain and deflections produced by the loads up to the elastic limit [K6]
C02	02. Analyze to construct shear force and bending moment diagrams for statically determination beam due to concentrated loads[K3]
C03	03. construct bending & shear stresses in machine elements[K3]
C04	04. Evaluate slope &deflection of statically determinate beams subjected to concentrated load, UDL,UVL[K3]
C05	05. To analyze and design thin &thick cylinders[K3]
C06	06. Analyze and design thin thick cylinders and springs. [K3]

MAPPING CO'S WITH PO'S

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C01	3	3	2	1			2					1		
C02	3	3	2	2			2					1		
C03	3	3	2	1			2					1		
C04	3	3	2	1			2					1		
CO5	3	3	3	1			2					1		
CO6	3	3	3	1			2					1		
Avg.	3	3	2.33	1.66			2					1		

MAPPING COURSE WITH PO'S

Course	PO 1	PO 2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO1 2	PSO 1	PSO 2
MECHANICS OF SOLIDS	3	3	2.33	1.66			2					1		

COURSE OUTCOME RUBRIC

Course	Assessment Methods with weightage	Method	Attainment Level 1 (Average)	Attainment Level 2 (Good)	Attainment Level 3 (Excellent)
Theory Course Outcome	Internal tests (40%)	Direct	60% students scoring more than 50% marks out of the maximum marks	70% students scoring more than 50% marks out of the maximum marks	80% students scoring more than 50% marks out of the maximum marks
	University Average Mark (60%)	Direct	50% students scoring more than 35 % of University Max marks	60% students scoring more than 35 % of University Max marks	70% students scoring more than 35 % of University Max marks

MEASURING CO ATTAINMENT THROUGH INTERNAL ASSESSMENTS		
INTERNAL TEST		
Attainment	:	65out of 68 students got more than 15 (50% of max internal Marks 30) marks. So,95.55% of students got marks more than target marks.
Attainment level	:	3
MEASURING COURSE OUTCOMES ATTAINED THROUGH UNIVERSITY EXAMINATIONS (DIRECT METHOD)		
Attainment	:	55out of 68 students got more than D GRADE of University Max O GRADE. So, 80.88% of students got marks more than target marks
Attainment level	:	

Total Attainment of Theory Course

Assessment Tool with weightage	Method	Level of attainment			
		3	2	1	0
Internal Exam (40%)	Direct	3			
University Exam (60%)	Direct		2		

Course Attainment = $0.4 \times 3 + 0.6 \times 2 = 2.4$. Since the attained level (2.4) is greater than the target level (2), all specified outcomes are achieved.

Course-PO Attainment for MECHANICS OF SOLIDS:

$$\text{Final PO attainment value} = \frac{\text{CO-PO Mapping Average} \times \text{Course Attainment Value}}{3}$$

Final COURSE Attainment WITH PO'S

Final Course PO attainment

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
Co average	3	3	2.33	1.66	-	-	2	-	-	-	-	1	-	-
R1621032	2	2	1.86	1.328	--	-	1.6	-	-	-	-	0.8	-	-