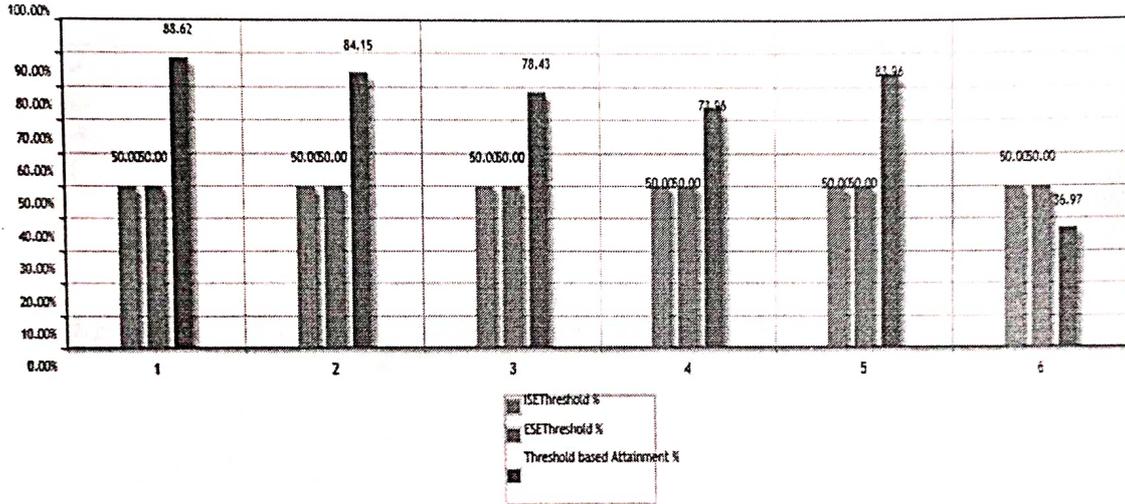
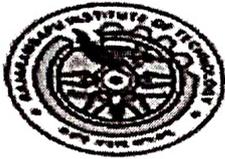




Curriculum: B. Tech. in ME 2019-2023.pdf	A.Y. (2020-21)
Term: 3 - Semester	
Course: ME2032 - Engineering Thermodynamics	



Sl No.	CO Code	CO Statement	ISE Threshold %	ESE Threshold %	Threshold based Attainment %
1	CO1	Apply thermodynamics principles to mechanical engineering applications	50.00 %	50.00 %	88.62 %
2	CO2	Describe entropy, change in entropy and increase of entropy principle	50.00 %	50.00 %	84.15 %
3	CO3	Differentiate between available and unavailable energy with examples	50.00 %	50.00 %	78.43 %
4	CO4	Recognize the properties of pure substances and use thermodynamic property tables, charts	50.00 %	50.00 %	73.96 %
5	CO5	Apply mathematical fundamental to study the properties of steam gas and gas mixtures	50.00 %	50.00 %	83.96 %
6	CO6	Explain the air and vapor power cycles and calculate cycle performance	50.00 %	50.00 %	36.97 %



Note: The above bar graph depicts the overall class performance with respect to the Threshold % for individual Course Outcomes (COs). The Threshold based Attainment % & Average based Attainment % is calculated using the below formula.

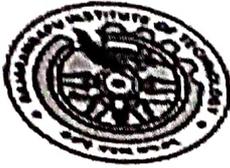
For Threshold based Attainment % = $(x / y) * 100$

x = Count of Students \geq to Threshold %

y = Total number of Students Attempted .

Course - Course Outcomes(COs) to Program Outcomes (POs) Attainment Matrix

CO	PO_1	PO_2	PO_3	PO_4	PO_5	PO_6	PO_7	PO_8	PO_9	PO_10	PO_11	PO_12	PSO_1	PSO_2
CO 1	3 (88.62%)	-	-	-	1 (88.62%)	-	-	-	-	-	-	-	-	-
CO 2	3 (84.15%)	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 3	3 (78.43%)	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 4	3 (73.96%)	-	-	-	1 (73.96%)	-	-	-	-	-	-	-	-	-
CO 5	3 (83.96%)	-	-	-	-	-	-	-	-	-	-	-	-	-
CO 6	3 (36.97%)	-	-	-	-	-	-	-	-	-	-	-	-	-



Program Outcomes (POs) Attainment by the Course

Sl No.	PO	Attainment based on Threshold method %
1	<u>PO_1</u>	74.35 %
2	<u>PO_5</u>	81.29 %

Map Level Weightageundefined

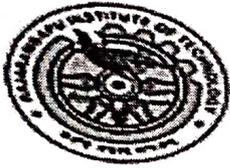
Note: The above bar graph depicts the overall class performance with respect to the Threshold % for individual Program Outcomes (' POs '). The Attainment % for respective columns is calculated using the below formula.

For Attainment based on Threshold method % = X / Y

Where,

X = Sum of all the Course Outcomes(COs) Threshold based Attainment % mapped to the respective Program Outcome(PO)

Y = Count of Course Outcomes(COs) mapped to respective Program Outcome(PO)



CO Attainment Action Plan

Academic Year 2020-2021

Course Name: Engineering Thermodynamics	Course Code:ME2032
Class: B. Tech. in ME 2019-2023	Semester:3 - Semester
Course Teacher: Dr. Sharad Patil	

1. CO attainment:

CO No.	CO Statement	% Attainment
CO1	Apply thermodynamics principles to mechanical engineering applications	88.62 %
CO2	Describe entropy, change in entropy and increase of entropy principle	84.15 %
CO3	Differentiate between available and unavailable energy with examples	78.43 %
CO4	Recognize the properties of pure substances and use thermodynamic property tables, charts	73.96 %
CO5	Apply mathematical fundamental to study the properties of steam gas and gas mixtures	83.96 %
CO6	Explain the air and vapor power cycles and calculate cycle performance	36.97 %

2. Observations from CO attainment:

CO attainment of all the COs is satisfactory except CO6. Attainment of CO6 is very poor which must be improved.

3. Action Plan for improvement of CO attainment:

The threshold will be set higher level as average marks of 62.35 than 50%.

Emphasis will be given to solve numerical on vapor power cycles.

4. Sign of Course In-charge

5. Remark by Head of Department with sign

Good work. However improve attainment of CO6 as per
70% action plan.