Course Number and Name

BME4L3&Thermal Engineering & Fluid Mechanics Lab

Credits and Contact Hours

2 & 45

Course Coordinator's Name

Mr.Arun Rejus Kumar

Text Books and References

Text Books:

Lab Manual

Course Description

To equip students with the knowledge of the initiation of combustion in Internal Combustion Engines, their classification, basic operating cycle and the functioning of various parts.

Prerequisites	Co-requisites					
Nil	Thermal Engineering & Fluid Mechanics					
required, elective, or selected elective (as per Table 5-1)						

Required

Course Outcomes (COs)

CO1: To apply theoretical concepts developed in course work of thermodynamics to hands-on experiments

CO2: To apply theoretical concepts developed in course work of fluid mechanics to hands-on experiments

CO3: To conduct thermodynamics experiments and analyze experimental data

CO4: To understand the operation of all thermodynamic and fluid mechanic equipment's

CO5: To gain knowledge in designing and troubleshooting various problems in engines

Student Outcomes (SOs) from Criterion 3 covered by this Course

Student Outcomes (SOS) from effection e covered sy this course												
COs/SOs	а	b	с	d	e	f	g	h	i	j	k	1
CO1		S		М	S		М	Н		S	S	Μ
CO2				L	S	Н	М				S	S
CO3	S	L	S	S		L	S	Н	Н	М	Н	S
CO4	S	М	S	S		L	S	Н	Н	М	М	
CO5	S	Н	М	Н	М	М	М	М	L	Н	L	М

List of Topics Covered

1. Load test on a diesel engine

2. Performance test on a refrigerator

3. Performance test on a reciprocating pump and on a centrifugal pump

4. Performance test on a air – compressor, air pressure measure and regulation

- 5. Plain turning and taper turning operation on a lathe
- 6. Drilling and tapping on a radial drilling machine
- 7. Round to hexagon on a milling machine.