

2. Understand the issues related to steam generators and turbines	2,5,7
3. To Know the working principles of Refrigeration & Air conditioning.	3,4,6
4. Have basic understanding about the engineering materials, its properties and applications.	1,5,8
5. Basics of lathe, drilling machine, milling machine and its operations .	4,5
6. Basics of casting ,joining, forging and powder metallurgy and components manufactured by them.	4'5

COURSE TEACHING AND LEARNING ACTIVITIES

S.No.	Week	Topic	Mode of Delivery
1	1 st week	Briefing of thermodynamics laws. Thermodynamic systems, entropy and Adiabatic cycle. IC engine parts and its working principle. PV & TS Diagram.	Lecture C& T
2	2 nd week	Introduction to Air compressors working principles. Principle of Turbo machines. Properties of steam ,steam generators.	Lecture C& T
3	3 rd week	Introduction to Automobile parts and their functions. Explanation about gas turbines.	Lecture C& T
4	4 th week	Briefing of Refrigeration and Air condition.	Lecture C& T
5	5 th week	Introduction to engineering materials, selection of materials. materials properties. Structure of materials.	Lecture C& T
6	6 th week	Basic machine elements. Transmission system Fasteners and support system.	Lecture C& T
7		CYCLE TEST-I	
8	7 th week	Introduction to manufacturing techniques of machine components. Classification of lathe and its parts functions.	Lecture C& T
9	8 th week	Explanation about drilling machines and its types. Operations. Milling machines working principles and its parts.	Lecture C& T
10	9 th week	Milling machine operations. Introduction to casting technique.	Lecture C& T
11	10 th week	Metal joining process. Types of joining process.(arc & gas welding) basic of riveting.	Lecture C& T
12	11 th week	Introduction to forging process. Types of forging. Forging operations	Lecture C& T
13		CYCLE TEST-II	