Subject Name	Description
Mathematics-III	• The course intends to provide an overview of Matrices which occur in physical and engineering problems • This course helps in translating a physical or other problem in to a mathematical model • To provide an overview of discovering the experimental aspect of modern applied mathematics • This course creates the ability to model, solve and interpret any physical or engineering problem
Engineering Economics & Industrial Management	• Understanding of the concept of cost estimation, depreciation, Industrial management & Materials management
Thermodynamics	• To understand basic concepts of Thermodynamics • To study Laws of Thermodynamics • To study concept of Entropy • To study properties of pure substances
Strength of Material-I	• To study concept of Stress & Strain • To Study Shear Force & Bending moment • To study Deflection in Beams
Machine Drawing	• Students should be able to understand the drawing of the machine components
Kinematics of Machine	• Students will learn about analysis of motion and forces in machine components
Production Technology-I	• To learn basic tool geometry and cutting mechanism of a single point as well as double point cutting tool. • To learn about Tool life and its calculations • To understand about Jigs and fixtures
Kinematics of machine Lab	• To learn about velocity and acceleration diagram • To determine coefficient of friction
Thermodynamics Lab	• To understand the principal & working of engines and boilers

Strength of Material Lab	• Students will perform the test related to properties of the materials including hardness test • Students will know about the Mechanical Advantage and efficiency of machines
Personality Development	After thorough learning of Quantitative Aptitude and Reasoning, a student • Will be able to critically evaluate various real life situations by resorting to Analysis of key issues and factors • Will be able to read between the lines and understand various language structures • Will be able to demonstrate various principles involved in solving mathematical problems and thereby reducing the time taken for performing job functions
Production Technology II	• To understand the kinematics of machine tool • To understand various manufacturing methods • To understand machine tool vibration & dynamometry.
Material Science	• To understand the crystal structure & defects • To understand the phase diagrams & TTT curves • To understand deformation & failure of materials • To understand the phenomenon of creep & corrosion
Strength of Material II	• To understand concept of strain energy and Impact loading • To study Unsymmetrical bending • To Study Thick cylinders and Spheres
Fluid Mechanics	• Students will study the fluid properties and their importance • Students will analyze the flow of fluid through various channels
Dynamics of Machine	• Students will learn static force analysis • Students will learn about turning moment diagrams • Students will have understanding of governors and balancing • Students will learn about gear trains
Production Technology Lab	• Student should be able to perform operations on milling machine, Lathe machine, TIG/MIG welding, Slotter
Fluid Mechanics Lab	• The students will analyze the effect of forces generated when fluid flow takes place over a solid object, applications of the control volume approach, demonstration of the momentum and energy equations, viscosity measurement and engineering correlations.

Dynamics of machine Lab	• Students will be imparted practical knowledge on design and analysis of mechanisms for the specified type of motion in a machine. With the study of rigid bodies motions and forces for the transmission systems