Year & Sem: E2S1	Course Code: ME2105	Course Name: **Machine Drawing**	No. of Credits: 4	L	T&PS	P
				2	2	0

UNIT I: Screw threads and Screw Fastenings using standard Empirical formulae.

UNIT II: Riveted joints, Keys, Cotter-joints, Pin-joints, Shaft couplings: Box and split muff couplings, Flanged, Flexible, Universal and Oldham couplings,

UNIT III: Shaft bearings, Brackets and Hangers, Pipe joints, Orthogonal views and Sectional views of machine parts.

UNIT IV: Assembly drawing of various engine components and machine tool components.

UNIT V: Specifications like fits and tolerances, surface finish, welding symbols.

UNIT VI: Production methods, Introduction to functional design.

Reference Books:

1. N.D. Bhatt, *Machine Drawing*.
2. N. Sidheswar, P. Kanniah and V.V.S. Sastry, *Machine Drawing*.

Lecture Plan: Unit-I & -II syllabus for MID-I, Unit-III & -IV syllabus for MID-II and Unit-V & -VI syllabus for MID-III examinations.

Year & Sem: E2S1	Course Code: ME2102	Course Name: **Dynamics of Machines**	No. of Credits: 4	L	T&PS	P
				2	2	0

UNIT I: Static Force Analysis; Reciprocating Engine Mechanism, Quick Return Mechanism, Four Link Mechanism, Six Link Mechanism Analysis, Friction in Linkages, Slider in Equilibrium under the Action of Concurrent Forces, Slider in Equilibrium under the Action of Nonconcurrent Forces, Inertia Forces of A Reciprocating Engine Mechanism, Four Link Mechanism, Quick Return Mechanism, More Details of Reciprocating Engine Mechanism;

UNIT II: Combined Static and Inertia Force Analysis, Twin Cylinder Engine Example, Dynamics of Reciprocating Engine Mechanism, Correction Torque, Bearing Loads of A Reciprocating Engine Example, Turning Moment Diagram and Flywheel, Turning Moment Diagram and Crankshaft Speed Fluctuation, Fly Wheel, Flywheel of An Internal Combustion Engine, Flywheel of A Punch Press, Analytical Expressions for the Turning Moment, Flywheel