

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Semester: III

Mechanical (Machine Design)

Subject Name: **GEAR DESIGN (Major Electives – 4)**

Sr.No	Course content
1.	Principles of gear tooth action, gear geometry
2.	Analysis and design of spur, helical, bevel and worm gearing, working stresses, bearing loads, shear stresses and power losses in gear drives
3.	Modes of gear failure and remedial measures
4.	Gear materials, gear lubrication, design of gear boxes, special applications of gears

Reference Books:

1. Fundamentals of Gear Design by Raymond J. Drago - Butterworths
2. Handbook of Gear Design by G.M. Maitra - Tata McGraw Hill
3. Gear Design Handbook by W.A. Tuplin - Machinery
4. Gear Handbook by D.W. Dudley - McGraw Hill