



Department of Mechatronics Engineering

Course Name: Kinematics of Machinery

Class: SE Mechatronics Engineering

Course Code: 217547 (2019 Course)

Course Objectives:

1. To make the students conversant with kinematic analysis of mechanisms applied to real life and industrial applications.
2. To develop the competency to analyze the velocity and acceleration in mechanisms using analytical and graphical approach.
3. To develop the skill to propose and synthesize the mechanisms using graphical and analytical technique.
4. To develop the competency to understand & apply the principles of gear theory to design various applications.
5. To develop the competency to design a cam profile for various follower motions.

Course Outcomes:

On completion of the course, learner will be able to

CO1. APPLY kinematic analysis to simple mechanisms

CO2. ANALYZE velocity and acceleration in mechanisms by vector and graphical method

CO3. SYNTHESIZE a four bar mechanism with analytical and graphical methods

CO4. APPLY fundamentals of gear theory as a prerequisite for gear design

CO5. CONSTRUCT cam profile for given follower motion