MVSR Engineering College, Nadergul.

Department of Mechanical Engineering

COURSE OUTCOMES

Class: B.E.III Year II Sem (Mech. Engg.)

Name of the Course: **CAD/CAM**

Course Code: ME 353

At the end of the course student is able to

N0.	Course Outcome	POs Mapped
ME 353.1	Understand the basic design process. Explain basic geometrical elements and their creation. Define wireframe entities. Describe interpolation and approximation of curves. Explain parametric and non-parametric representation of curves. Classify different curves like circle, helix and splines. Explain Synthetic curves andthe concept of NURBS.	PO1,PO2, PO3
ME 353.2	Define and Explain Surface modeling with different analytic and synthetic surfaces.Distinguish between the solid modeling approaches of C-rep and B-rep.Explain the design applications. To perform different 2D transformations with concatenation.	PO1,PO2, PO3,PO4
ME 353.3	Explain CAD database and data exchange formats. Understand the features and elements of NC. Explain the criteria of classifying NCMTs.Describe the canned cycle, Define tool length compensation and cutter radius compensation.NC programs for simple machine components and distinguish between manual and computer aided part program.	PO1,PO2, PO3
ME 353.4	Explain CNC. Differentiate between NC and CNC systems. Describe the various AC systems withtheir configurations and relative features. Explain machining center and its applications. Introduction to FANUC, SINUMERIC controllers. Explain theanatomy of industrial robots and configurations. Classify the different robot controls and drivers. To Know different programming methods and applications of Robos.	PO1,PO3, PO4, PO5
ME 353.5	Explain and describe GT.Explain CAPP and discriminate variant and generative process planning. Describe FMS and CIM with their elements.CAI and CAQC. Explain the contact and non-contact inspection systems.Explain CMM, machine vision and scanning laser beam devices. The concepts of CAD/CAM Integration,RPT and Reverse Engineering.	PO1,PO2, PO3, PO10, PO11