RCETEEAC06– AUGMENTED REALITY

Course outcomes:

The students will be able to:

- Create a 3D model in blender of any given object and apply texturing and animation.
- Convert the 3D asset in blender into a ready-to-use model for unity.
- Apply functionalities to the model such as movement, rotation, etc., by importing appropriate AR plugins and setup any lighting if required in Unity.
- Create AR application for visualizing through any AR devices.

Syllabus:

UNIT I

Fundamental AR concepts and characteristics, AR industrial applications, Introduction to Metaverse, Digital twin, Taxonomy of Interactive Applications - creative storytelling - gaming industry applications - concept for game - building a prototype.

UNIT – II

Introduction to Variables, Conditions, Loops, Patterns, - Scope of variables – OOPS in Realtime environments – Setting IDE – Scripting vs Programming – Enumeration – Memory management – Program states – Handing exceptions – Device considerations – Input systems – Hardware and Haptics feedback

UNIT – IV Basic concepts of Level designing, Level mapping – Level creation techniques – Grey boxing techniques -Design process – mood board – design specification document – technical project management – AR architecture & frameworks – ARKit – Arcore – Vuforia –Emerging trends in AR MR.