

Institution Innovation Council 6.0

Title of the event:	Extended Reality of MR,AR& VR Technology (Knowledge Tour)
Date of the event:	14 th December, 2023
Name of the coordinator:	Mrs.B.Usha Rani and Mr.K.Abhinash
Participants:	III B.TECHII SEM Students
Number of participants:	56
Name of the resource person:	Mr. Gopi Krishna Sivam
Name of the Organization:	CEMS
Whether assessment is done: (Yes/No)	NO
Basis for organizing the event:	Artificial Intelligence
POs addressed:	PO2,PO,PO5,PO9,PO11,PO12 ,PSO2

Mr. Gopi Krishna Sivam, A industrial Expert Gave us a brief of XR technology that is (extended reality) divided into two parts ie, MR,AR&VR (Mixed Reality ,augmented reality & virtual reality) and explained the applications regarding those fields, the real definitions and meanings of them through practicality (XR, AR & VR)

- Introduction about XR Technology
- Virtual Interaction through extended Reality
- Assembly and disassemble of parts by 3D Model
- 3D Visualization for Architecture
- Virtual reality headsets and haptic actuators through through APP

Key Takeaways:

- Automotive Industries
- Health Care sectors
- Interior Design
- Learning and Development
- Events Conferences and collaborations

S.No	Course Modules	PO's Addressed
1	Introduction about XR Technology	PO2,PO3,PO5,PO9,PO11,PO12,PSO2
2	Over view of Virtual Interaction through extended Reality	PO2,PO3,PO5,PO9,PO11,PO12,PSO2
3	Assembly and disassemble of parts by 3D Model	PO2,PO3,PO5,PO9,PO11,PO12,PSO2
4	Virtual reality headsets and haptic actuators through APP	PO2,PO3,PO5,PO9,PO11,PO12,PSO2

PO2 : Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences (Problem Analysis)

As the students can able to perform basics of XR Technology that is (extended reality) divided into two parts ie, MR,AR&VR (Mixed Reality ,augmented reality & virtual reality

PO3 : Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations (Design/Development of Solutions)

As the students can design the APP through virtual reality headsets and haptic structure

PO5 :Create, Select and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. (Modern Tool Usage)

As the students can able to adopt the technology of Virtual Interaction through extended Reality

PO9 :Function effectively as an individual, and as a member or leader in diverse teams, and in multi-disciplinary settings (Individual and Team Work)

As the students can able to design the 3D Visualization for Architecture

PO11 :Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environment (Project Finance and Management)

As the students can able to apply the principles and design the APP as a team and Individual project in multi-disciplinary environment.

PO 12: Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in broadest context of technological change.(Life Long Learning)

As the students can able to engage in independent and life long learning in the Applications regarding those fields, the real definitions and meanings of them through practicality (XR, AR & VR)

PSO 2 : Demonstrate adequate knowledge in the allied specialization of Mechanical Engineering that adds value addition for professional practices

As the students can able to adequate knowledge in the allied specialization XR Technology for professional practice



