



# Internship Course on AR/VR App Development offered by Department of Information Technology, University Institute of Technology, RGPV, Bhopal in association with TechXR Innovations Private Limited

Last Date to Register: 31st December 2021 Internship starts from: 12th January 2021

**Duration: 6 weeks** 

Link to register: https://forms.gle/8r7JpRUEKK2jw7Xa9

## **Objective of the Course:**

- To provide students first-hand experience of cutting-edge technologies of AR/VR and their use cases in Education, Training, Skill Development, Remote Collaboration and Gaming.
- To enable students to develop immersive AR/VR applications (with 6 DoF interactions) as per growing market demand and to acquire these skills to increase their entrepreneurship skills and employability in the Global AR/VR/MR market.
- To enable Indian AR/VR developers to make good and affordable AR/VR content well suited for India.
- To enable students to demonstrate their AR/VR Projects to prospective employers
- To enable them join Global AR/VR Developer community well suited of AR-VR Ecosystem

# **Learning Outcomes of the Course:-**

### Students will be able to Learn

- Latest Technologies AR/VR and their potential use cases in different verticals.
- Development process of AR/VR applications and content development including basics of game development.
- First-hand experience of AR App development on Unity, Vuforia, ARCore
- Development of immersive and interactive AR/VR App with 6 DoF interaction
- Deploying AR/VR apps on various platforms such as Desktop, Smartphone etc

**Eligibility:** Minimum qualification - Engineering Student in 3rd semester or higher and having basic knowledge of any programming Language.

### Syllabus of the Course:

- Introduction to Augmented Reality and Virtual Reality and Metaverse
- Introduction to 6 Degrees of Freedom Interaction in AR-VR
- Getting Started with Unity3D -
  - Interface and Components
  - Basics of App/Game Development
  - Working with 3D Models/Assets
  - Understanding concepts of Rigid Bodies/Colliders etc
  - Learning Interactions Using Buttons
  - Basic Animation
- Creative Design in 3D Learn 3D modelling/CAD design in easy manner
- Augmented Reality App Development
  - Making Image Tracking Based AR App
  - Making Markerless AR App
  - Making Interactive 360 degree trackable AR App Using TechXR Developer Cube
- Virtual Reality App Development
  - Introduction to VR App Development for Smartphones
  - Making First VR App with 6 DoF Interaction
  - Introduction to Multiuser VR Environment Experiencing Metaverse

The Course has been designed by a team of IITians and AR-VR Faculty at premium institutes like NIFT. Same team will deliver and manage the Internship course.

# **Learning And Teaching Methods:**

- 6 Weeks program
- Online Lectures Once a week
- Online Pre- recorded Video Tutorials Learn anywhere anytime
- Projects Templates (Source Codes for Sample Projects)
- Assignments Projects to be submitted online [3 AR + 1 VR Project]
- Online Doubt Clearing Support [Technical support for issues being faced]
- Useful Online Resources Sharing

### **Professional Outcome of the Course:-**

- Internship Recognition by RGPV & AR/VR Developer Certificate on Satisfactory Performance in the Assignments
- Access to TechXR Developer Platform to host Projects/Applications to monetise & display professional skills
- Paid Internship/ Placement Offer to top Performers by TechXR Innovations Pvt Ltd
- Access to AR-VR Developer Community to explore employment opportunities/ latest developments/Resources

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