

# **National Institute of Electronics and Information Technology Chandigarh**



An autonomous scientific society under administrative control of Ministry of Electronics and Information Technology (MeitY), Government of India

Online Training Programme for Government Officials (GoT-Advanced) on

## **Augmented and Virtual Reality**

Under FutureSkills PRIME Scheme



#### **Executive Director**

Deepak Wasan

01881-257002

#### **Chief Investigator**

Anita Budhiraia Additional Director

01881-257015, 9815988717 a.budhiraja@nielit.gov.in

#### **Co-Chief Investigator**

Dr. Sarwan Singh Joint Director

9815621657 sarwan@nielit.gov.in

#### **Speakers:**

Dr. Sarwan Singh Joint Director, NIELIT

Ms. Suman Heera Technical Officer, NIELIT

Nikshep Paliwal (Project Assistant)

> Free of cost **Training for** Govt. officials

**Limited Seats** 

NIELIT Chandigarh in association with CDAC is organizing ten days free of cost online training programme on Augmented and Virtual Reality (AVR) for Government officials under FutureSkills PRIME Scheme.

### **About Training Programme**

Government of India has sanctioned a project FurtureSkills PRIME (Programme for Re-skilling/Up-skilling of IT Manpower for Employability) which would be implemented as a new Central Sector Scheme under the "Champion Services Sector Scheme (CSSS)". This project will be implemented jointly by NASSCOM, NIELIT and CDAC in PAN India as per the directions issued by the Ministry of Electronics and Information Technology (MeitY), Government of India. The project includes training programmes in ten emerging technologies and Augmented and Virtual Reality (AVR) is one such technology.

### Objective of Training Programme

The objective of the training programme is to ensure continued relevance of the Government Officials in the area of Augmented and Virtual Reality (AVR). This training will create subject knowledge in Virtual Reality of middle and senior level government officials. The course would bring understanding of the role of AVR in varied applications and help in acquiring know how of applications, tools and techniques. The proposed training will create awareness amongst Government officials regarding impact of evolving technological ecosystem.

## Target Audience

The training is for employees having prior experience in IT/ITeS & related areas and working in Central/State Governments, PSUs & Autonomous organizations .

## Pre-requisites

Laptop or PC with 64-bit host OS with min. 8GB RAM. Android or iOS Smartphone for

testing the output.

#### **Brief Contents**

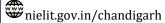
Day	Contents	Day	Contents
1	AVR –Evolution, application areas, Hardware-software	6	Augmented Reality App in Vuforia within Unity SDK
2	Transformation - zooming, panning, clipping, rotation and Rendering	7	Creating – activating Unity project, targets ,scene, etc. frame animation, Morphing.
3	A-Frame: Introduction, Installation, AR/VR Handsets, Web VR Browsers	8	Handling web camera output, canvas, image tracking
4	Introduction to Entity component System, JavaScript, Events	9	Spark AR, AR application development with AR Kit
5	Tools - three.js, 3D Models, Visual Inspector and Dev Tools	10	Case Studies / use cases Education, Public health, etc



**Lead Centre:** Centre for Development of Advanced Computing (CDAC), Pune

**Co-Lead Centre: NIELIT Chandigarh** 

**Ropar Campus:** Bada Phull, Birla Farms, (near IIT Ropar) Ropar Chandigarh: Facility at IETE Building, Sector 30B, Chandigarh

















# National Institute of Electronics and Information Technology (NIELIT)

Ministry of Electronics and Information Technology (MeitY),

Government of India

under FutureSkills PRIME scheme



