

# **Emerging Technologies**

## **Certified Augmented & Virtual Reality Program**

## Curriculum

## **Program Outline:**

#### Module 1:Fundamentals of AR & VR

- 1. Introduction to AR & VR
  - o Core principles and concepts of AR and VR technologies.
- 2. History and Evolution of AR & VR
  - o Key milestones and breakthroughs in AR and VR development.
- 3. AR & VR Platforms and Tools
  - o Exploring major AR and VR platforms: Unity, Unreal Engine, etc.
- 4. Basic AR Development
  - o Creating and overlaying digital information on the real world.
- 5. Basic VR Development
  - Building and exploring simulated environments.

#### Module 2: Advanced AR & VR Development

- 6. Advanced AR Development
  - Creating complex AR applications.
- 7. Advanced VR Development
  - Developing complex VR applications.
- 8. **3D Modeling for AR & VR**



o Creating and manipulating 3D models for AR and VR.

## 9. User Experience Design for AR & VR

o Designing intuitive and engaging user experiences.

#### 10. AR & VR Security and Usability

o Ensuring security and usability in AR and VR applications.

#### **Module 3: Practical Applications**

## 11. Hands-on AR Projects

o Real-world AR development projects.

## 12. Hands-on VR Projects

o Real-world VR development projects.

## 13. Integration of AR & VR with Other Technologies

o Combining AR and VR with AI, IoT, and more.

## 14. Creating Immersive Experiences

o Designing immersive AR and VR experiences.

## 15. AR & VR Usability Testing

o Conducting usability tests for AR and VR applications.

## **Module 4: Special Topics**

#### 16. AR & VR in Education

o Developing educational AR and VR applications.

#### 17. AR & VR in Healthcare

o Exploring AR and VR applications in healthcare.

#### 18. AR & VR in Marketing

o Utilizing AR and VR for marketing and advertising.

#### 19. AR & VR in Entertainment

o Developing AR and VR applications for gaming and entertainment.

#### 20. AR & VR in Real Estate

o Implementing AR and VR in real estate and architecture.



#### **Elective Modules**

## 21. Data Ethics and Privacy

o Ethical considerations and compliance in AR & VR.

## 22. AI Integration with AR & VR

o Combining AI with AR and VR technologies.

## 23. Cloud Computing for AR & VR

o Using cloud platforms for AR and VR applications.

## 24. AR & VR Project Management

o Leading and managing AR and VR projects.

#### 25. Future Trends in AR & VR

o Exploring the latest trends and future directions in AR and VR.

#### Websites:

- <a href="https://chools.in/">https://chools.in/</a>
- https://ramaqchools.com/
- https://www.choolsgroup.com/