**Virtual and Augmented Reality**

**COURSE CONTENT:**

1. **Introduction to Virtual Reality (VR) and Augmented Reality (AR)**
    - Definition of key concepts, historical evolution, and applications of Virtual and Augmented Reality with a focus on education.
2. **Technological Infrastructure of Virtual and Augmented Reality**
    - Analysis of core technologies, devices, and platforms used in implementing AR/VR systems in education.
3. **Algorithms and Programming in Virtual and Augmented Reality**
    - Learning the fundamental algorithms and programming techniques for developing AR/VR applications in education.
4. **Design and Implementation of Virtual and Augmented Reality Systems**
    - Applying knowledge in practice through the design and implementation of AR/VR prototype projects using tools such as CoSpaces Edu, Metaverse Studio, and Zappar.
5. **Evaluation and Optimization of AR/VR Applications**
    - Evaluation criteria, user testing, and optimization for optimal application performance.
6. **Ethical and Social Issues in Virtual and Augmented Reality**
    - Analysis of ethical and social challenges faced by AR/VR technologies.
7. **Applications and Future Developments**
    - Exploring exciting applications and future trends in Virtual and Augmented Reality.

The **first unit** provides a comprehensive introduction, while **units two and three** focus on the technological and programming aspects. **Unit four** promotes practical application, and **units five and six** address evaluation, optimization, and ethical considerations. Finally, **unit seven** covers the latest developments and applications, providing a complete view of the future landscape of Virtual and Augmented Reality in education.