Artificial Intelligence in Education

COURSE CONTENT:

Unit 1: Introduction to AI in Education
- o Overview of AI in education
- o Advantages and challenges of AI in education
- o Adaptive learning systems, intelligent tutoring systems, game design and AI, personalized learning paths in Learning Management Systems, automated assessment, and feedback

Unit 2: Designing AI-Enhanced Learning Experiences
- o Modern AI applications in education: ChatGPT
- o Developing AI-based educational content
- o Designing written tasks with AI
- o Using AI for timely and targeted feedback
- o Collaborative learning in AI environments
- o Digital games and AI
- o Data analysis for student performance

Unit 3: Advances in AI and Their Connection to Education
- o Core principles of AI
- o Developing AI literacy in students
- o Analysis of key algorithms for optimizing teaching and educational experience
- o Current scientific and technological advancements

Unit 4: Ethical Issues in AI for Educators
- o Ensuring transparency and accountability
- o Privacy and data protection in educational environments
- o Democracy, equal access, and rights in AI-enhanced education

In **Unit 1**, structural concepts from AI and education are synthesized. It explores AI applications in education as they have evolved over time. **Unit 2** focuses on knowledge and skills required to integrate AI tools effectively in educational practice, highlighting the enhancement of teaching practices, personalization of learning experiences, and addressing diverse learner needs. **Unit 3** examines recent advancements in AI and their impact on education, while **Unit 4** focuses on ethical issues and best practices in applying AI in the educational sector.