AI in Education

Module 1: AI Foundations & Opportunity Mapping

Topics

- Introduction to AI: Machine Learning, NLP, Generative AI
- AI Ecosystem: Tools, Platforms, Integrated Systems in Education
- Global Trends and Case Studies in K–12, Higher Education, Corporate Learning
- Mapping Institutional Workflows to Identify AI Opportunities
- Prioritizing Use Cases Based on Impact and Feasibility

Labs/Case Studies

- *Case Study*: AI adoption success stories in global education
- *Lab*: Workflow mapping exercise & AI opportunity prioritization

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Module 2: AI-Powered Content Creation & Multimedia

Topics

- Advanced Prompt Engineering for Educational Content (Lesson Plans, Assessments, Learning Objectives)
- AI for Research, Summarization, and Multilingual Adaptation
- AI Image Generation for Pedagogical Visuals
- Integration with Adobe Creative Cloud & eLearning Tools (Articulate Storyline)
- Evaluating AI-Generated Content Quality and Relevance

Labs/Case Studies

- *Lab*: Prompt design for differentiated lesson plans
- *Lab*: Creating AI-generated visuals and integrating into courseware
- *Case Study*: Comparing human-created vs. AI-generated content

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Module 3: AI for Assessment & Analytics

Topics

- Designing AI-Assisted Assessments: Formative & Summative

- Automated Grading and Personalized Feedback

- Adaptive Testing and Question Bank Generation

- Learning Analytics: Interpreting AI Dashboards for Insights

- Ethical Considerations: Privacy, Bias, and Fairness in Assessment

Labs/Case Studies

- *Lab*: Building AI-generated question banks and rubrics

- *Lab*: Data analytics exercise using anonymized learner data

- *Case Study*: AI-powered adaptive learning in action

Module 4: Strategic AI Integration in Education

Topics

- Creating an AI Adoption Roadmap

- Assessing Organizational Readiness and Infrastructure Needs

- Vendor Evaluation and Selection Framework

- Budgeting for AI: Pilots vs. Scaling

- Change Management: Training, Buy-in, Cultural Shifts

- Drafting Institutional AI Usage Guidelines

Labs/Case Studies

- *Lab*: AI adoption roadmap creation & scenario planning

- *Case Study*: Vendor evaluation and scoring

- *Role-Play*: Stakeholder communication simulation

Module 5: Ethics, Compliance & Institutional AI Policy

Topics

- Ethical Challenges: Bias, Transparency, Academic Integrity, Access

- UAE/GCC Data Protection and AI Compliance Frameworks

- Policy Development for Safe and Inclusive AI Use

- Emerging Trends and Future-Proofing AI Strategies

- Capstone: AI Integration Playbook & Stakeholder Presentation

Labs/Case Studies

- *Case Study*: AI ethics failures & lessons learned

- *Lab*: Policy drafting and peer review

- *Capstone Project*: Presenting an AI Integration Playbook for your institution