

MCIT102 Teaching Creative Design

ECTS Value: 5 ECTS

Overall Objectives and Outcomes

The role of technology is imperative in shaping the design and employment of new media for educational environments. In this module learners will explore new technologies for teaching and learning that may be used to overcome the digital divide in the current and future educational environments. Educational technology is a dynamic field that intersect many other disciplines. It offers a vast range of opportunities for individuals with varied interests and talents. The application of Instructional Design (ID) principles to educational technology, emphasise instructional design models, capture learner characteristics, and guide in assessing instructional outcomes.

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The module will focus on learning and service-learning using technology applying instructional design and usability principles. Research, theory, and project model implementation will be used as the foundation for critical thinking, reflection, and decision making with the aim to diffuse and explore emerging technologies relevant to teaching and learning.

By the end of this module, the learner will be able to:

Competences

- a. Apply the use of innovative technological tools as part of a blended approach to learning;
- b. Develop a technological educational framework for a valid and sustainable online, blended and flipped learning;
- c. Apply Interactive Media modalities in a creative manner for game and web design development;
- d. Develop Interactive Media Technology content associated with games and web design development;
- e. Develop a game strategy design including Sprite Animation, Digital Graphic Design, Programming and Audio Technology;
- f. Apply technological concepts for game and web development projects.

Knowledge

- a. Describe different perspectives of learning and instruction, established methodologies and pedagogies through the use of appropriate strategies;
- b. Identify different methodologies and pedagogies to design strategies for digital teaching and learning;
- c. Use the acquired essential technologies to effectively develop games and Web Designs strategies;
- d. Describe principles of Interactive Media Technologies including development techniques;

- e. Identify a range of Interactive Media Technologies and suitable software for Digital Graphics, Game and Web Development;
- f. Identify adequate designs and solutions specified for Game and Web Development including, Digital Graphics, Animation, Programming and Audio

Skills

- a. Demonstrate a general understanding of the philosophy of technology in education;
- b. Understand technology and its relationship to education;
- c. Apply storytelling strategies that are to be creatively developed online through online Interactive Technologies;
- d. Demonstrate the implementation of Interactive Media Technologies in Game and Web Development;
- e. Understand technical requirements for a Digital Interactive Designer including hardware, electronic equipment, software and applications;
- f. Demonstrate an effective and sustainable use of ICT for learning using the appropriate Digital Media, Digital Literacy and Digital Devices.

Assessment Methods

This module will be assessed through: Presentation and Assignment

Suggested Readings

Core Reading List

1. Robinson, K. (2017). Out of Our Minds: The Power of Being Creative.
2. Brown, A.H. (2019). The Essentials of Instructional Design.
3. Huang, R. and Spector, J.M. (2019). Educational Technology: A Primer for the 21st Century.

Supplementary Reading List

1. Greenhow, J. Sonnevend, J. and Agur, C. (2016). Education and Social Media: Toward a Digital Future (The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning)
2. Liu, D., Dede, C., Huang, R. and Richards J. (2017). Virtual, Augmented, and Mixed Realities in Education/