2024 / 25

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South East Technological University

Module Descriptor

Digital Imaging (Computing and Mathematics)

Digital Imaging (A06793)

Short Title: Digital Imaging
Department: Computing and Mathematics
Credits: 5 **Level:** Introductory

Description of Module / Aims

This module introduces students to the different aspects of digital imaging including capturing and editing digital images using industry standard equipment and software. Students explore the creative and technical aspects of photography, editing, manipulation and compression of digital images for multimedia and web solutions.

Programmes

		stage/semester/status
COMP-0588	BSc (Hons) in Creative Computing (WD_KCRCO_B)	1 / 2 / M
COMP-0588	BSc in Multimedia Applications Development (WD_KMULA_D)	1 / 2 / M

Indicative Content

- Image Capture: the digital camera, image capture techniques, basics of lighting, photography workflow
- Graphics: graphic types, file types, file size, resolution, storage & compression techniques
- Colour: the human eye, biology of seeing, colour models
- Edit and manipulation of digital images using digital imaging software
- Creation and composition of digital images for multimedia and web solutions

Learning Outcomes

On successful completion of this module, a student will be able to:

1. Describe the theoretical assumptions surrounding digital imaging.
2. Describe and document the skills applied in designing an image rich project.
3. Demonstrate and illustrate the photography process from compositing to capturing digital images.
4. Demonstrate a comprehensive and practical skill set using industry standard image editing software.

Learning and Teaching Methods

- This is a lab based module.
- Class delivery must include one two-hour block.
- Lectures will be delivered in the lab room to introduce new topics and their related concepts where students apply these concepts in a practical manner and engage with the appropriate tools and software for this module.

Learning Modes

Learning Type	F/T Hours	P/T Hours
Lab	48	
Independent Learning	87	

Assessment Methods

	Weighting	Outcomes Assessed
Continuous Assessment	100%	
Portfolio	80%	2,3,4
In-Class Assessment	20%	1

Assessment Criteria

<40%: Unable to interpret and describe key concepts of digital imaging.

40%–49%: Be able to interpret and describe key concepts of digital imaging theory and technology.

50%–59%: Ability to discuss key concepts of digital imaging and ability to integrate related knowledge into similar knowledge domains.

60%–69%: Ability to solve problems within creative digital imaging by experimenting with appropriate skills and tools.

70%–100%: All the above to an excellent level with the ability to analyse and design solutions to a high standard for a range of complex or unseen problems.

Essential Material(s)

- Adobe Press, T. *Adobe Classroom in a Book Series*. Creative Cloud. USA: Adobe Press, 2015.
- Busch, D. *Digital Photography: From Camera to Printer*. UK: Prentice Hall, 2005.

Supplementary Material(s)

- Livingstone, M. *Vision and Art: The Biology of Seeing*. UK: Abrams Publishing, 2002.
- Yue-Ling,, S. and U. Wong. *Digital Media Primer*. USA: Pearson, 2009.

Requested Resources

- Computer Lab: Multimedia Lab