



MCAST

MQF Level 6

IT6-A03-23

Bachelor of Science (Honours) in Creative Computing

Course Specification

Course Description

The degree in Creative Computing is tailored for learners who are passionate about developing cutting-edge, interactive software applications across a wide range of platforms.

The comprehensive taught component covers a diverse array of skills, including front-end, UX/UI design principles, full-stack, cross-platform, and mobile app development. Learners will gain expertise in client-side and server-side technologies, as well as other areas like software development, audio/visual content creation, data organisation and persistence, machine learning, computer vision, web optimisation, utilisation of third-party tooling/libraries, and research methodologies.

The work-based component of the programme provides invaluable, hands-on experience on real-world projects within an organisation. Finally, the research component in the form of a dissertation will give prospective graduates the opportunity to identify, investigate, and devise solutions for complex problems in their chosen field. The Creative Computing Degree programme is designed to help individuals excel in various fields and stay ahead of the curve and in line with front-end, full-stack, cross-platform and mobile apps development.

Programme Learning Outcomes

At the end of the programme the learner will be able to:

1. *Recognise the theoretical and conceptual underpinnings of Design.*
2. *Apply the acquired knowledge in real-world prototypes.*
3. *Produce a solid Portfolio that is relevant to Front-End / Full-Stack / Mobile Apps development companies.*
4. *Carry out work-based learning within the local ICT Industry.*

Entry Requirements

MCAST Advanced Diploma in iGaming

OR

MCAST Advanced Diploma in Software Development

OR

MCAST Advanced Diploma in Multimedia Software Development

OR

2 A-Level passes and 2 I-Level passes

Compulsory A-Level: Computing

AND

Compulsory A-Level or I-Level: Mathematics (Pure or Applied) or Physics

Current Approved Programme Structure

Unit Code	Unit Title	ECTS	Year	Semester
ITMSD-506-2305	UX Design 1	6	1	1
ITMMD-506-2001	Object Oriented Programming	6	1	1
ITMSD-503-2307	Physical Computing	3	1	1
ITSFT-506-1606	Software Engineering	6	1	1
CDKSK-503-2328	English for Academic Purposes	3	1	1
ITSFT-506-1608	Data Structures and Algorithms	6	1	2
ITSFT-506-2007	Software Test Automation	6	1	2
ITMTH-506-1602	Applied Maths	6	1	2
ITMSD-506-2306	UX Design 2	6	1	2
CDWBL-506-1901	Work Based Learning I	6	1	2
ITSFT-506-2301	Mobile Applications Development	6	1	2
CDWBL-506-1902	Work Based Learning II	6	2	1,2
ITMMD-506-2002	Client Side Scripting	6	2	1
ITMSD-506-2301	Database Essentials	6	2	1
ITMSD-506-2302	3D Graphics	6	2	1
ITMSD-506-2308	Cross Platform Development	6	2	1
ITMSD-503-2309	IoT (Internet of Things)	3	2	1
ITMSD-506-2310	Advanced Web Design	6	2	2
ITMMD-506-2003	Client Side Scripting II	6	2	2
ITRSH-506-2101	Research Design I	6	2	2
CDKSK-604-2336	Entrepreneurship	4	2	2
CDKSK-602-2335	Community Social Responsibility	2	2	2
CDKSK-503-2329	English for Dissertation Writing	3	2	2
ITIMG-606-1601	Image Processing and Computer Vision	6	3	1
ITMSD-606-2311	Advanced Front End Development	6	3	1
ITMSD-606-2312	Full Stack Development	6	3	1
ITMSD-606-2303	XR Development	6	3	1
ITMSD-606-2304	WebGL Development	6	3	2
ITBCK-606-2101	Blockchain	6	3	2
ITSFT-606-1620	Programming for the Cloud	6	3	2
ITRSH-606-2102	Research Design II	6	3	2
ITDIS-612-1601	Dissertation	12	3	2
Total ECTS		180	/	/