

### MCAST PROGRAMMES - PUBLIC INFORMATION TEMPLATE (FULL TIME)

Institute of Information and Communication Technology

Department	-

**Programme Title** Bachelor of Science (Honours) in Digital Games Development If the programme **Course Code** includes a WBL element. IT6-A04-23 Apprenticeship To be filled in by Admissions Dept. How is it accredited? MCAST -Malta College Type MQF/ EQF Level Level 6 Qualification Awarding Body of Arts. (refer to Appendix 1 for Parameters) Science and Technology Accredited via MCAST's Self Accreditation Process (MCAST holds Accreditation Status Self-Accrediting Status as per 1st schedule of Legal Notice 296/2012) Duration(Acad Mode of Mode of Delivery Face to Face 3 Years Full-Time emic Years or Semesters) Attendance **Total Number of Total Learning Hours** 180 credits 4500 hours Credits (25 Total Learning  $\overline{H}$ ours for each ECTS) **Qualified Professional Developers** • interested in a career shift or in upgrading their skillset within the Digital Games Sector. Target Group Students that have completed an • (the type of learners that the Ages 16 -Advanced Diploma at MCAST ICT in **Target Audience** educational institution 65 iGaming / Software Development / anticipates joining this Multimedia Software Development. programme) Students in possession of Mathematical / Scientific / Programming gualifications at Advanced Level. There are no fees applicable to Maltese and other EU Nationals (as will be evidenced by their Identity Document) Fees apply for other International Applicants... for fee information and any related Programme updates it is best to communicate with MG2i International through Fees applyinternational@mcast.edu.mt One may consider checking about possible eligibility or otherwise for any exemption from fees by contacting the relevant section within MEYR (Floriana) - or visit the servizz.gov.mt website here Date of Next For further information regarding upcoming student intake and applications time Student Intake windows for same kindly click here The official language of instruction at MCAST is English. All notes and textbooks are Language of in English (except for language courses, which will be in the respective language Instruction being instructed). International candidates will be requested to meet English language certification requirements for access to the course. Applications to full-time courses are received online via the College Management Application Information System. Applicants can log-in using Maltese Electronic ID (eID) in order to access the MCAST Admissions Portal directly and create one's own student Method account with the identity being verified electronically via this secure service.



	Non-EID applicants need to request account creation though an online form after that they confirm that their local Identification Document does not come with an EID entitlement Once the identity is verified and the account is created on behalf of the applicant, one may proceed with the online application according to the same instructions applicable to all other applicants. For more information about how to apply online for a course at MCAST, please visit <u>: https://mcast.edu.mt/how-to-apply-online-2/</u>		
Information for Non-EU Citizens	Non-EU candidates require a study visa in order to travel to Malta and join the course applied for (on a Full Time delivery mode). For further information re study- visa please access <u>https://www.identitymalta.com/unit/central-visa-unit/</u> . Further information International / TCN applicants should take note of before requesting to being considered for a programme of studies at MCAST, can be obtained through the respective FAQ found on <u>https://mcast.edu.mt/important-information/</u>		
IMPORTANT note to Non-EU Nationals / TCNs	In instances where a TCN is applying for an MCAST programme of studies which includes Apprenticeship / Placement / Internship, it is the applicant's responsibility to check with the relevant Maltese Authority whether one would be eligible to have the necessary permits to be able to carry out the accredited Apprenticeship / Placement / Internship, success from which is expected in order to be able to successfully complete the selected programme of studies. Further information can also be obtained through the respective FAQ found on:		
Address where the Programme will be Delivered	MCAST has four campuses as follows: MCAST Main Campus Triq Kordin, Paola, Malta All courses except for courses delivered by the Institute for the Creative Arts, the Centre of Agriculture, Aquatics and Animal Sciences and the Gozo Campus are offered at the Main Campus address (above). Courses delivered by the Institute for the Creative Arts, the Centre of Agriculture, Aquatics and Animal Sciences, or the Gozo Campus, are offered in one of the following addresses as applicable: Institute for the Creative Arts Mosta Campus Misraħ Għonoq Tarġa Gap, Mosta Institute of Applied Sciences Centre of Agriculture, Aquatics and Animal Sciences, Luqa Road, Qormi Gozo Campus J.F. De Chambray Street MCAST, Għajnsielem Gozo		



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	In the case of courses delivered via Online Learning, students will be following the programme from their preferred location/address.		
	Programmes delivered via Blended Learning, and which therefore contain both an online and a face to face component shall be delivered as follows:		
	<ul> <li>Face to Face components – as per above address instructions</li> <li>Online components – from the student's preferred address.</li> </ul>		
Course Description (Refer to Programme Specification)	The degree in Digital Games Development offers learners the extra edge when it comes to the creation of entertainment software. The taught component provides insight on the various stages involved in game design and development. Students will learn to utilize state of the art tools and technologies for implementing digital games. Such artefacts require a variety of skills alongside 3D game engines. These skills include ux/ui design, game level design, software development, software testing, content creation (through audio/visual tools), 3d modelling, networking, game logic, ai, mathematics, physics etc. Additionally, work placements will not only allow learners to understand the roles and responsibilities in an organization. They will work on real-world problems and will understand the importance of decision making, problem-solving, whilst being effective team players. Finally, through the research component, students will explore how to investigate, resolve, and present findings related to a research problem in a given domain. There is also a "double degree route" for those aspiring game developers who would like to extend their studies and work experience abroad and take their existing qualification in Digital Games Development, Multimedia Software Development or Software Development to the next level.		
Deskrizzjoni tal- Kors (Refer to Programme Specification)	II-kors fl-lžvilupp tal-Logħob Diġitali joffri lill-istudenti vantaġġ meta niġu għall-ħolqien ta' software tad-divertiment. II-komponent mgħallem jipprovdi ħarsa dwar id-diversi stadji involuti fid-disinn u l-iżvilupp tal-logħob. L-istudenti se jitgħallmu jutilizzaw għodod u teknoloġiji avvanzati għall-implimentazzjoni tal-logħob diġitali. Dawn jeħtieġu varjetà ta' ħiliet flimkien ma' magni tal-logħob 3D. Dawn il-ħiliet jinkludu disinn ux/ui, disinn fil livell tal-logħob, żvilupp ta' software, ittestjar ta' software, ħolqien ta' kontenut (permezz ta' għodod awdjo/viżivi), immudellar 3d, netwerking, loġika tal-logħob, ai, matematika, fiżika eċć. Barra minn hekk, pjazzamenti ta' xogħol mhux biss se jippermettu lill-istudenti jifhmu r-rwoli u r-responsabbiltajiet f'organizzazzjoni. Huma se jaħdmu fuq problemi tad-dinja reali u se jifhmu l- importanza tat-teħid tad-deċiżjonijiet, is-soluzzjoni tal problemi, filwaqt li jkunu plejers effettivi tat-tim. Fl-aħħarnett, permezz tal-komponent ta' riċerka, l-istudenti se jesploraw kif jinvestigaw, isolvu, u jippreżentaw sejbiet relatati ma' problema ta 'riċerka f'qasam partikolari. Hemm ukoll "rotta ta' grad doppju" għal dawk l- iżviluppaturi tal-logħob li jixtiequ jestendu l-istudji u l-esperjenza tax-xogħol tagħhom barra l-pajjiż u jieħdu l-kwalifika eżistenti tagħhom fl-lżvilupp tal-Logħob Diġitali, l- lżvilupp ta 'Software Multimedjali jew l-lżvilupp ta' Software għal-livell li jmiss.		
Career Opportunities:	Game Designer, Game Programmer, Game Artist, Game Writer, Level DesignerUI/UX Designer, Sound Designer, Quality Assurance Tester, Game Producer, Technical Artist, Game Server Developer, Online Service Developer, Game Network Programmer		
Entry Requirements	Internal Progression Route MCAST Advanced Diploma in IT (iGaming <u>or</u> Software Development <u>or</u> Multimedia Software Development)		



(Refer to Prospectus /	OR			
Course Page on MCAST	OK			
website)	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			
Other Notes				
related to this	Information Technology at A or I Level (or similar) is not a substitute for the			
Programme, and	Compulsory Subject/s as shown in the Entry Requirements for this degree			
which are to be taken note of	programme.			
Programme	At the end of the programme the learner will be able to:			
Learning	1. Recognise the underpinnings of Game Design.			
Outcomes	2. Apply the acquired knowledge in real-world prototypes.			
(Refer to Programme Specification)	<ol> <li>Produce a solid Portfolio that is relevant to Digital Games companies.</li> <li>Carry out work-based learning locally.</li> </ol>			
Teaching,	The programmes offered are vocational in nature and entail both theoretical lectures			
Learning and	delivered in classes as well as practical elements that are delivered in laboratories,			
Assessment	workshops, salons, simulators as the module requirements dictate.			
Procedures				
	Each module or unit entails a number of in person and/or online contact learning			
	hours that are delivered by the lecturer or tutor directly (See also section 'Total			
	Learning Hours).			
	Access to all resources is provided to all registered students. These include study			
	resources in paper or electronic format through the Library and Resource Centre as			
	well as tools, software, equipment and machinery that are provided by the respective			
	institutes depending on the requirements of the course or module.			
	Students may however be required to provide consumable material for use during			
	practical sessions and projects unless these are explicitly provided by the College.			
	All Lipite of study are assessed throughout the condemic year through continuous			
	All Units of study are assessed throughout the academic year through continuous assessment using a variety of assessment tools. Coursework tasks are exclusively			
	based on the Learning Outcomes and Grading Criteria as prescribed in the course			
	specification. The Learning Outcomes and Grading Criteria are communicated to the			
	Student via the coursework documentation.			
	The method of assessment shall reflect the Level, credit points (ECTS) and the			
	schedule of time-tabled/non-timetabled hours of learning of each study unit. A variety			
	of assessment instruments, not solely Time Constrained Assignments/Exams, are			
	used to gather and interpret evidence of Student competence toward pre-established			
	grading criteria that are aligned to the learning outcomes of each unit of the			
	programme of study.			
	Grading criteria are assessed through a number of tasks, each task being assigned			
	a number of marks. The number of grading criteria is included in the respective			
	Programme Specification.			
	The distribution of marks and assessment mode depends on the nature and			
	objectives of the unit in question.			
	Coursework shall normally be completed during the semester in which the Unit is			
	delivered.			
	Time-constrained assignments may be held between 8 am and 8 pm during the			
	delivery period of a Unit, or at the end of the semester in which the Unit is			
	completed. The dates are notified and published on the Institute notice boards or			
	through other means of communication.			
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	Certain circumstances (such as but not limited to the COVID-19 pandemic) may lead Institutes and Centres to hold teaching and assessment remotely (online) as per MCAST QA Policy and Standard for Online Teaching, Learning and Assessment (Doc 020) available via link <u>https://www.mcast.edu.mt/college-documents/</u> The Programme Regulations pertaining to this Programme's MQF/EQF level available at: link <u>https://www.mcast.edu.mt/college-documents/</u> , apply.
	All MCAST programmes adopt a Learner-centred approach through the focus on Learning Outcomes. The assessment of MCAST programmes is criterion-referenced and thus assessors are required to assess learners' evidence against a pre- determined set of Learning Outcomes and Assessment Criteria. For a student to be deemed to have successfully passed a unit, a minimum of 50% (grade D) must be achieved.
Grading SystemAll full time units are individually graded as follows: A* (90-100) A (80-89) B (70-79) C (60-69) D (50-59) Unsatisfactory work is graded as 'U'.	
	Work-based learning units (where applicable) are graded on a Pass/Fail basis only. Some units which follow industry standards and regulations may also be graded on a Pass/Fail basis as per programme regulations referred below. Detailed information regarding the grading system may be found in the Programme Regulations pertaining to this programme's MQF/EQF Level available at:
	https://www.mcast.edu.mt/college-documents/ (Refer to DOC 003, 004 and 005) Where a student will not make it to the Final Certification achievable
Exit Point (where and as applicable)	from this Programme of Studies (as per Programme Regulations), one might wish to look into Exit Point possibilities as may be applicable to this programme for studies. Further information, is available at <u>https://www.mcast.edu.mt/college-documents/</u> , kindly refer to DOC 077 Procedure for the processing of Claims for Certificates at Interim Exit Points.
Contact details for Further Learning	The MCAST Career Guidance Team, offers the service of qualified and experienced Career Advisers who will be very willing to discuss with potential applicants the course which best achieves one's career ambitions, as well as exploring one's education route, or similar.
Opportunities	MCAST Career Guidance Tel: 2398 7135/6 Email: <u>career.guidance@mcast.edu.mt</u>



Regulatory Body/ Competent Authority Contact Details (where applicable - in the case of a programme leading to Regulated Profession)	Not
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Programme	Unit Code	Unit Title	ECTS	Year	Semester
Structure	ITDGM-506-2301	Fundamentals of Game Programming	6	1	1
	ITMMD-506- 2001	Object Oriented Programming	6	1	1
	ITDGM-506-2302	Design Concepts	6	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
	ITDGM-506-2303	Procedural Content Generation	6	1	2
	ITMTH-506-1602	Applied Maths	6	1	2
	ITDGM-506-2304	Mobile Game Development	6	1	2
	CDWBL-506- 1901	Work Based Learning	6	1	2
	ITDGM-503-2305	Game Mechanics I	3	1	2
	CDWBL-506- 1902	Work Based Learning II	6	2	1,2
	ITMSD-506-1607	Game Level Design	6	2	1
	ITMSD-506-2301	Database Essentials	6	2	1
	ITMSD-506-2302	3D Graphics	6	2	1
	ITMSD-506-1602	Sound Design	6	2	1
	ITDGM-503-2306	Game Mechanics 2	3	2	1
	ITDGM-506-2307	3D Character Development & Animation	6	2	2
	ITDGM-506-2308	3D Project	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
	ITDGM-606-2309	Game Al	6	3	1
	ITDGM-606-2310	Advanced Game Programming	6	3	1
	ITDGM-606-2311	Enterprise 3d	6	3	1
	ITMSD-606-2303	XR Development	6	3	1
	ITMSD-606-2304	WebGL Development	6	3	2
	ITDGM-606-2312	Multiplayer Game Development	6	3	2
	ITMSD-606-1610	Sound Engineering	6	3	2
	ITRSH-606-2102	Research Design II	6	3	2
	ITDIS-612-1601	Dissertation	12	3	2

The total learning hours required for each unit or module are determined as follows:



Allocation of Total	Credits (ECTS)	Indicative contact hours <sup>1</sup>	Self-Learning and Assessment Hours <sup>3</sup>	Total Student workload (hrs) <sup>2</sup>
Learning	1	5 – 10 hrs	20 - 15 hrs*	25 hrs
Hours (per	2	10 – 20 hrs	40 - 30 hrs*	50 hrs
Unit)	3	15 – 30 hrs	60 - 45 hrs*	75 hrs
	4	20 – 40 hrs	80 - 60 hrs*	100 hrs
	6	30 – 60 hrs	120 - 90 hrs*	150 Hrs
	9	45 – 90 hrs	180 - 135 hrs*	225 hrs
	12	60 – 120 hrs	240 - 180 hrs*	300 hrs
	Note: The 'Self-Learning an Student Workload' <sup>2</sup>	d Assessment Hours <sup>3</sup> ' amount	to the difference between the 'Indicate	ive Contact Hours' <sup>1</sup> and the 'Total



#### **APPENDIX 1**

# MINIMUM CREDITS FOR QUALIFICATIONS AT DIFFERENT LEVELS

MQF Level	Minimum ECTS Required for a Qualification*
8	
7	30
6	180
5	30
4	30
3	60
2	60
1	40

\* Programmes assigned fewer ECTS than indicated will be classified as Awards.

Reference: Fig.1: p48, Malta Further and Higher Education Authority (MFHEA) (October 2024). Referencing Report, 5<sup>th</sup> Revised Edition.



### **APPENDIX 2**

MQF Level	Examples of qualification types at a specific MQF level (The list in this column is not exhaustive)	Number of ECTS *
	Doctoral Programmes:	
8	PhD	N/A
	Professional Doctorate	180
_	Master's Degree	90
7	Postgraduate Diploma	60
	Postgraduate Certificate	30
	Bachelor's Degree	180
6	Bachelor's Honours	240
	Undergraduate Higher Diploma	90
5	Undergraduate Diploma	60
-	Undergraduate Certificate	30
	VET Level 5	60
	Advanced Diploma	120
4	Pre-Tertiary Certificate	30 - 60
-	MATSEC Matriculation Certificate (Advanced and Intermediate)	N/A
	VET Level 4	120
	Certificate	60
3	MATSEC Secondary Education Certificate	N/A
	VET Level 3	60
	Foundation Certificate	60
2	MATSEC Secondary Education Certificate	N/A
	VET Level 2	60
	Introductory Certificate	40
1	VET Level 1	40

# EXAMPLES OF QUALIFICATION TYPES AT A SPECIFIC MQF LEVEL

\* Programmes assigned fewer ECTS than indicated will be classified as Awards.

Reference: Fig.2: p48, Malta Further and Higher Education Authority (MFHEA) (October 2024). Referencing Report, 5<sup>th</sup> Revised Edition.