

MCAST PROGRAMMES - PUBLIC INFORMATION TEMPLATE (FULL TIME)

Institute	Institute of Engineering and Transport
Department	Mechanical Engineering Department

Programme Title	Bachelor of Engineering (Honours) in Mechanical Engineering (Manufacturing)						
Course Code To be filled in by Admissions Dept.	ME6-W02-23		If the programme includes a WBL element, How is it accredited?		Placemer	Placement / Internship	
MQF/ EQF Level	Level 6	Type (refer to Appendix 1 for Parameters)	Qualification Awarding B		ing Body	MCAST – Malta College of Arts, Science and Technology	
Accreditation Stat	tus	Accredited via Self-Accreditin	MCAST ng Statu	「's Self Acc s as per 1st	reditatior schedul	n Process (l e of Legal N	MCAST holds Notice 296/2012)
Mode of Delivery	Face to Face	Duratio emic Yea Semester	ON (Acad rs or rs)	4 Years	Me At	ode of tendance	Full-time
Total Number of Credits	240 credits	Total Learnin (25 Total Learning I	g Hours Hours for e	5 ach ECTS)	6000 ho	urs	
Target Audience	Ages 16 - 65	Target Group (the type of learners that the educational institution anticipates joining this					
Programme Fees	 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 updates it is best to communicate with MG2i International through 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 				will be nd any related r any exemption – or visit the		
Date of Next Student Intake	For further information regarding upcoming student intake and applications time windows for same kindly click here						
Language of Instruction	The official language of instruction at MCAST is English. All notes and textbooks are in English (except for language courses, which will be in the respective language being instructed). International candidates will be requested to meet English language certification requirements for access to the course.						
Application Method	Ianguage certification requirements for access to the course.Applications to full-time courses are received online via the College ManagementInformation System. Applicants can log-in using Maltese Electronic ID (eID) in orderto access the MCAST Admissions Portal directly and create one's own studentaccount with the identity being verified electronically via this secure service.Non-EID applicants need to request account creation though an online form afterthat they confirm that their local Identification Document does not come with an EIDentitlement.Once the identity is verified and the account is created on behalf of theapplicant, one may proceed with the online application according to the sameinstructions 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 https://www.identitymalta.com/unit/central-visa-unit/ . 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 https://mcast.edu.mt/important-information/
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:
	MCAST has four campuses as follows:
	MCAST Main Campus Triq Kordin, Deele Melte
	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:
Address where the Programme	Institute for the Creative Arts Mosta Campus Misraħ Għonoq Tarġa Gap, Mosta
will be Delivered	Institute of Applied Sciences Centre of Agriculture, Aquatics and Animal Sciences, Luqa Road, Qormi
	Gozo Campus J.F. De Chambray Street MCAST, Għajnsielem Gozo
	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:
	 Face to Face components – as per above address instructions Online components – from the student's preferred address.



Course Description (Refer to Programme Specification)	This Mechanical Engineering degree programme provides the learners with a solid understanding of relevant engineering fundamentals and prepares them for a broad range of career options in the manufacturing field. This field is becoming increasingly more and more high tech. The programme is structured around studies which will develop in learners a firm understanding of principles and disciplines which are needed in the modelling, measuring, analysis and design of mechanical components and systems. On completing the course, graduates will be expected to demonstrate that they have assimilated the professional skills necessary for formulating and executing engineering projects. The course also provides training in teamwork and effective communication skills. This course is recognised by the Board tal-Inginiera as a prerequisite for the application of the Engineering Warrant (Ing.) as established by ACT No. XLVIII of 2021.
Deskrizzjoni tal- Kors (Refer to Programme Specification)	Dan il-programm li jwassal għal baċellerat fl-Inġinerija Mekkanika jipprovdi lill- istudenti fehim sod tal-elementi fundamentali tal-inġinerija rilevanti u jħejjihom għal firxa wiesgħa ta' għażliet ta' karriera fil-qasam tal-manifattura. Dan il-qasam qed isir ta' livell teknoloġiku li kulma jmur isir dejjem ogħla. Il-programm huwa mfassal madwar studji li jiżviluppaw fl-istudenti fehim sod tal-prinċipji u d-dixxiplini li huma meħtieġa fl-immudellar, il-kejl, I-analiżi u d-disinn ta' komponenti u sistemi mekkaniċi. Dawk li jiggradwaw minn dan il-kors huma mistennija juru li jkunu assimilaw il-ħiliet professjonali neċessarji biex jifformulaw u jwettqu proġetti tal-inġinerija. Il-kors jipprovdi wkoll taħriġ fil-ħidma f'tim u ħiliet ta' komunikazzjoni effettiva. I-kors huwa rikonoxxut mill-Bord tal-Inġiniera bħala rekwiżit għall-applikazzjoni tal Inġinerija Warrant (Inġ.) kif stabbilit mill-ATT Nru XLVIII tal-2021.
Career Opportunities:	Manufacturing Process Engineer, Engineering Designer, Quality Control Engineer, Engineering Manager, Production Engineer/Manager/Superintendent, Engineering Laboratory Manager, Mechanical Engineer
Entry Requirements (Refer to Prospectus / Course Page on MCAST website)	Internal Progression Route MCAST Advanced Diploma in Manufacturing (with an overall mark of 60% or higher) or MCAST Advanced Diploma in Polymer Process Technicians (with an overall mark of 60% or higher) or MCAST Undergraduate Diploma in Foundations of Engineering OR 2 A-Level passes and 2 I-Level passes <u>Compulsory</u> A-Levels: Physics and Mathematics (Pure or Applied) Applicants need to obtain an average Grade C across their A-Levels in Mathematics and Physics (such as Grades C. C: Grades B. D: Grades A. E)
Other Notes related to this Programme, and which are to be taken note of	Applicants submitting their application under the Maturity Clause, MUST be in possession of the MCAST MQF level 5 Undergraduate Diploma in Foundations of Engineering, in order for their application to be considered
Programme Learning Outcomes (Refer to Programme Specification)	 At the end of the programme the learner will be able to: 1. Take decisions based on pertinent information related to the manufacturing processes. 2. Manage the operational function of a manufacturing organisation. 3. Source, validate and apply information to find solutions to engineering related issues. 4. Design products, the manufacturing systems and facilities required for the



	production of products.
Teaching, Learning and Assessment Procedures	The programmes offered are vocational in nature and entail both theoretical lectures delivered in classes as well as practical elements that are delivered in laboratories, workshops, salons, simulators as the module requirements dictate.
Trocedures	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 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.
	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 https://www.mcast.edu.mt/college-documents/ , apply.
Grading System	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. All 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: <u>https://www.mcast.edu.mt/college-documents/</u> (Refer to DOC 003, 004 and 005)
Exit Point (where and as applicable)	Where a student will not make it to the Final Certification achievable 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 https://www.mcast.edu.mt/college-documents/_kindly refer to DOC 077 Procedure for the processing of Claims for Certificates at Interim Exit Points.
Contact details for Further Learning Opportunities	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. MCAST Career Guidance Tel: 2398 7135/6 Email: <u>career.guidance@mcast.edu.mt</u>
Regulatory Body/ Authority Contact (where applicable - in the cas leading to Regulated Professi	Competent Details of a programme n) Not Applicable

) MCAST

Programme	Unit Code	Unit Title	ECTS	Year	Semester
Structure	ETMTH-606- 1809	Mathematics for Engineers 1	6	1	1 & 2
	ETDSN-606- 1801	Engineering Design & CAD	6	1	1
	ETMEC-606- 1805	Thermodynamics 1	6	1	1
	ETE&E-606- 1802	Fundamentals of Electrical and Electronics Technology	6	1	2



ETMTS-606-	Strength of Materials 1	6	2	1
ETMEC-606-	Fluid Mechanics 1	6	1	1 & 2
ETMEC-606- 1807	Mechanics for Machines 1-	6	1	2
ETMEC-606-	Workshop Practice	6	1	1 & 2
ETMEC-606- 1804	Applications of Pneumatics	6	1	1
ETWBL-603- 1802	Work Based Learning Internship Part 1	3	1	2
CDKSK-603- 2111	Academic English	3	1	1
ETMTH-606- 1811	Mathematics for Engineers 2	6	2	1 & 2
ETDSN-606- 1802	Engineering Design 2	6	2	2
ETMTS-606- 1802	Engineering Materials	6	2	2
ETMFG-606- 1801	Advanced Manufacturing Technologies : Jig and Tool	6	2	2
ETENG-606- 1805	Energy Management	6	2	1
ETMEC-603- 1817	Metrology	3	2	1
ETMFG-606- 1802	Component Manufacture	6	2	1
ETENG-606- 1507	Dynamics and Kinematics	6	2	1
ETMEC-606- 1815	Mechatronics	6	2	2
ETWBL-603- 1803	Work Based Learning Internship Part 2	3	2	2
ETMFG-606- 1803	Quality Lean Manufacturing	6	3	1
ETMTH-606- 1812	Mathematics for Engineers 4	6	3	1 & 2
ETMEC-606- 1814	Problem Based Learning	6	3	2
ETENG-606- 1505	Control Engineering	6	3	2
ETELE-606-1815	Electrical Power Systems	6	3	1&2
ETMEC-606- 1816	Simulation of Advanced Management Systems in Manufacturing Engineering	6	3	2
ETMTS-606-	Materials and Manufacturing	6	3	1
ETMEC-606-	Mechanics of Machines 2	6	3	1 & 2
1517				
EIDSN-606- 1803	Engineering Design 3	6	3	1
ETMEC-606- 1522	Vibrations	6	3	2
CDKSK-604- 1909	Entrepreneurship	4	2	2



CDKSK-602-	Community Social	2	2	2
ETMTH-606-	Mathematics for Engineers 3	6	3	1&2
1813	6			
ETPRD-606-	Production Technology	6	4	2
1501				
ETPRD-606-	Product Design	6	4	1
1502				
ETMGT-606-	Management for Engineers	6	4	1
1804				
ETPMR-606-	Polymers and their	6	4	2
1503	Manufacture			
ETPRD-606-	Production Planning and	6	4	2
1503	Control			
ETMEC-606-	Mechatronics for	6	4	1&2
1520	Manufacturing Cells			
ETQLS-606-	Quality Assurance	6	4	1
1501				
ETRSH-600-	Research Methods	0	4	1&2
1502				
ETDIS-612-1501	Dissertation	12	4	1 & 2

Allocation of	The total learning hours required for each unit or module are determined as follows:			
Total	Credits (ECTS)	Indicative	Self-Learning and	Total Student
Learning		contact hours ¹	Assessment Hours ³	workload (hrs) ²
Hours (per	1	5 – 10 hrs	20 - 15 hrs*	25 hrs
Unit)	2	10 – 20 hrs	40 - 30 hrs*	50 hrs
	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	d Assessment Hours ³ ' amount	to the difference between the Indicat	tive Contact Hours' ¹ and the 'Total
	Note: The 'Self-Learning an Student Workload' ²	ad Assessment Hours ³ ' amount	to the difference between the 'Indicat	tive Contact Hours' ¹ and the 'Total



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, 5th 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
/	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, 5th Revised Edition.