

MCAST PROGRAMMES - PUBLIC INFORMATION TEMPLATE (FULL TIME)

Institute	Institute of Engineering and Transport
Department	Aviation, Transportation and Logistics Department incl. Aircraft Maintenance Training Centre

Programme Title	Master of Science in Aerospace Engineering				
Course Code <i>To be filled in by Admissions Dept.</i>	AE7-O01-21p		If the programme includes a WBL element, How is it accredited?	Not Applicable, does not include WBL	
MQF/ EQF Level	Level 7	Type <i>(refer to Appendix 1 for Parameters)</i>	Qualification	Awarding Body	MCAST – Malta College of Arts, Science and Technology
Accreditation Status		Accredited via MCAST's Self Accreditation Process (MCAST holds Self-Accrediting Status as per 1st schedule of Legal Notice 296/2012)			
Mode of Delivery	Face to Face	Duration <i>(Academic Years or Semesters)</i>	4 Semesters	Mode of Attendance	Full-time
Total Number of Credits	120 credits	Total Learning Hours <i>(25 Total Learning Hours for each ECTS)</i>		3000 hours	
Target Audience	Ages 23 - 65	Target Group <i>(the type of learners that the educational institution anticipates joining this programme)</i>	-		
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 servizz.gov.mt website here				
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	Applications to full-time courses are received online via the College Management 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 account with the identity being verified electronically via this secure service. Non-EID applicants need to request account creation through 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.				

	<p>For more information about how to apply online for a course at MCAST, please visit: https://mcast.edu.mt/how-to-apply-online-2/</p>
Information for Non-EU Citizens	<p>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/.</p> <p>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/</p>
IMPORTANT note to Non-EU Nationals / TCNs	<p>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:</p> <p>https://mcast.edu.mt/important-information/</p>
Address where the Programme will be Delivered	<p><i>MCAST has four campuses as follows:</i></p> <p>MCAST Main Campus Triq Kordin, Paola, Malta</p> <p><i>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).</i></p> <p><i>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:</i></p> <p>Institute for the Creative Arts Mosta Campus Misraħ Ġhonoq Tarġa Gap, Mosta</p> <p>Institute of Applied Sciences Centre of Agriculture, Aquatics and Animal Sciences, Luqa Road, Qormi</p> <p>Gozo Campus J.F. De Chambray Street MCAST, Ġhajnsielem Gozo</p> <p><i>In the case of courses delivered via Online Learning, students will be following the programme from their preferred location/address.</i></p> <p><i>Programmes delivered via Blended Learning, and which therefore contain both an online and a face to face component shall be delivered as follows:</i></p> <ul style="list-style-type: none"> ○ Face to Face components – as per above address instructions ○ Online components – from the student's preferred address.

Course Description <i>(Refer to Programme Specification)</i>	<p>The MCAST MSc in Aerospace Engineering aims to form graduates that will be able to design and implement aerospace projects focusing on more productive but environmentally friendly technologies so as to respond to today's challenges of a cleaner sky and less noisy and non-polluted environment, as well as to develop safer, faster and cheaper transportation for a growing society.</p> <p>The objective of this Master course is to provide the graduates with the skills required by national and international aerospace companies and with the right profile to match recruitment criteria for agencies as well as public and private bodies in the aerospace sector and also other engineering sectors, for example Automotive. In detail, MCAST's highly targeted learning aerospace pathway aims at developing career-enhancing skills for aerospace professionals in the aviation sector and in the expanding civilian space business in fields such as the management, maintenance and conversion of aircrafts, R&D of technologies for new generations of aircrafts, and civilian applications for smart satellites and sub-orbital spacecrafts.</p> <p>The course offers the students the possibility to specialize in one of three most highly-demanded fields, namely:</p> <ul style="list-style-type: none"> • Structures and Measurements for Aerospace • Aerodynamics • Space Technologies. <p>This course has a strong online component.</p> <p>This course is not related to the Engineering Warrant.</p> <p>Fees:</p> <p>Fees apply - Further information through MG2i (MCAST Gateway to Industry)</p>
Deskrizzjoni tal-Kors <i>(Refer to Programme Specification)</i>	<p>L-MSc in Aerospace Engineering għandu l-għan li jwassal lill-gradwati biex jkunu jistgħu jiddisinnaw u jimplimentaw proġetti aerospazjali li jiffokaw fuq teknoloġiji aktar produttivi iżda li ma jagħmlux ħsara lill-ambjent, sabiex jirrispondu għall-isfidi tal-lum, biex ikun hemm sema aktar nadif u ambjent inqas storbjuż u mhux imniġġes. B'hekk jiġi żviluppat trasport aktar sikur, aktar mgħaġġel u orħos għal soċjetà li qed tikber. L-għan ta' dan il-kors f'livell ta' Master huwa li jipprovdi lill-gradwati bil-ħiliet meħtieġa minn kumpaniji aerospazjali nazzjonali u internazzjonali u bil-profil it-tajjeb biex jaqbel mal-kriterji ta' reklutaġġ għal aġenziji, kif ukoll korpi pubbliċi u privati fis-settur aerospazjali u wkoll setturi oħra tal-inġinerija, bħal per eżempju tal-Karozzi. Fid-dettall, il-mogħdija ta' tagħlim aerospazjali mmirata ħafna tal-MCAST għandha l-għan li tiżviluppa ħiliet li jtejbju l-karriera għall-professjonisti tal-ajruspazju fis-settur tal-avjazzjoni u fin-negozju spazjali ċivili li qed jespandi f'oqsma bħall-ġestjoni, il-manutenzjoni u l-konverżjoni ta' inġenji tal-ajru, R&D ta' teknoloġiji għal ġenerazzjonijiet ġodda ta' ajruplani, u applikazzjonijiet ċivili għal satelliti intelliġenti u vetturi spazjali suborbitali.</p> <p>Il-kors joffri lill-istudenti l-possibbiltà li jispeċjalizzaw f'wieħed mit-tliet oqsma l-aktar mitluba, jiġifieri:</p> <ul style="list-style-type: none"> • Structures and Measurements for Aerospace • Aerodynamics • Space Technologies. <p>Dan il-kors għandu komponent online qawwi.</p> <p>Dan il-kors mhuwiex relatat mal-Warrant tal-Inġiniera.</p> <p>MIŻATI: Japplikaw ħlasijiet - Aktar informazzjoni permezz ta' MG2i (MCAST Gateway to Industry)</p>
Career Opportunities:	<p>-</p>
Entry Requirements <i>(Refer to Prospectus / Course Page on MCAST website)</i>	<p>Applicants must hold a recognised MQF/EQF Level 6 qualification, with at least 180 credits, in any from a Mechanical, Aerospace Engineering or in a related Engineering or Scientific area.</p> <p>Applicants found eligible as per above, will also be asked to successfully complete a Master's Programme Suitability Interview</p>

	<p>In the absence of above entry requirements, applicants aged 27 years and over, can submit an application under the Maturity Clause.... but must present a recognised MQF/EQF Level 5 qualification (at least 120 credits), or its equivalent, in Mechanical, Aerospace Engineering or in a related Engineering or Scientific area, together with clear evidence of a minimum of three (3) years (full time) direct and relevant experience.</p> <p>Applicants under Maturity Clause, will be asked to sit for a combined Maturity and Master's Suitability Interview</p>
Other Notes related to this Programme, and which are to be taken note of	<p>This Master's Programme MAY be available as Full-Time delivery, if this same programme will be taking off for an International Cohort. Fees apply as will be guided by MG2i (MCAST Gateway to Industry). Information about this Master's Programme being offered on a Part-Time delivery mode, can be found on the MG2i Website promoting such programmes - https://mg2imalta.com/.</p>
Programme Learning Outcomes <i>(Refer to Programme Specification)</i>	<p>At the end of the programme the students are able to:</p> <ol style="list-style-type: none"> 1. Apply knowledge of mathematics, science and engineering in aerospace to design and conduct experiments as well as to analyse and interpret data; 2. Design a system, component or process to meet desired needs and to function on multi-disciplinary teams in order to identify, formulate and solve engineering problems; 3. Use the techniques, skills and modern engineering tools necessary for engineering practice; 4. Understand aerodynamics, aerospace materials, structures, propulsion and competence in the integration of aerospace science and engineering topics and their application in aerospace vehicle design 5. Form professionals that can communicate effectively and manage projects and teams; 6. Recognise professional and ethical responsibility.
Teaching, Learning and Assessment Procedures	<p>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.</p> <p>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').</p> <p>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.</p> <p>Students may however be required to provide consumable material for use during practical sessions and projects unless these are explicitly provided by the College.</p> <p>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.</p> <p>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.</p>

	<p>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.</p> <p>The distribution of marks and assessment mode depends on the nature and objectives of the unit in question.</p> <p>Coursework shall normally be completed during the semester in which the Unit is delivered.</p> <p>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.</p> <p>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 https://www.mcast.edu.mt/college-documents/</p> <p>The Programme Regulations pertaining to this Programme's MQF/EQF level available at: link https://www.mcast.edu.mt/college-documents/, apply.</p>
Grading System	<p>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.</p> <p>For a student to be deemed to have successfully passed a unit, a minimum of 50% (grade D) must be achieved.</p> <p>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'.</p> <p>Work-based learning units (where applicable) are graded on a Pass/Fail basis only.</p> <p>Some units which follow industry standards and regulations may also be graded on a Pass/Fail basis as per programme regulations referred below.</p> <p>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)</p>
Exit Point (where and as applicable)	<p>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 <i>DOC 077 Procedure for the processing of Claims for Certificates at Interim Exit Points</i>.</p>

Contact details for Further Learning Opportunities	<p>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.</p> <p>MCAST Career Guidance Tel: 2398 7135/6 Email: career.guidance@mcast.edu.mt</p>
Regulatory Body/ Competent Authority Contact Details <i>(where applicable - in the case of a programme leading to Regulated Profession)</i>	Not Applicable

Programme Structure	Unit Code	Unit Title	ECTS	Year	Semester
	ETACT-706-2113	Aircraft Propulsion	6	1	2
	ETACT-706-2114	Aerospace Structures 1	6	1	2
	ETACT-706-2115	Aviation Maintenance Management and Law	6	1	2
	ETACT-706-2116	Aerodynamics 1	6	1	1
	ETACT-706-2117	Measurements for Aerospace	6	1	1
	ETACT-706-2118	Methodologies for Integrated Product Development	6	2	2
	Elective 1: Specialisation in Structures and Measurements for Aerospace				
	ETACT-706-2119	Aerospace Structures 2	6	2	1
	ETACT-706-2120	Aerospace Engineering Materials	6	2	2
	ETACT-706-2121	Mechanical FEA with Laboratory	6	2	2
	ETACT-706-2122	Vibrations	6	2	1
	Elective 2: Specialisation Aerodynamics				
	ETACT-706-2123	Aerodynamics 2	6	2	1
	ETACT-706-2124	Atmospheric Flight Dynamics	6	2	2
	ETACT-706-2125	Technology for Sustainable Aviation	6	2	1
	ETACT-706-2126	CFD with Laboratory	6	2	2
	Elective 3: Specialisation Space Technologies				
	ETACT-706-2127	Space Propulsion	6	2	1
	ETACT-706-2128	Spacecraft Systems Design	6	2	2
	ETACT-706-2129	Thermal Control of Aerospace Vehicles	6	2	1

	ETACT-706-2130	Astrodynamics	6	2	2
	Core Units				
	ETACT-760-2131	Research Project (Final Thesis and Dissertation)	60	3	Year

Allocation of Total Learning Hours (per Unit)	The total learning hours required for each unit or module are determined as follows:			
	Credits (ECTS)	Indicative contact hours ¹	Self-Learning and Assessment Hours ³	Total Student workload (hrs) ²
	1	5 – 10 hrs	20 - 15 hrs*	25 hrs
	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
<i>Note: The 'Self-Learning and Assessment Hours³' amount to the difference between the 'Indicative Contact Hours¹' and the 'Total Student Workload²'</i>				

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, 5th Revised Edition.*

APPENDIX 2

EXAMPLES OF QUALIFICATION TYPES AT A SPECIFIC MQF LEVEL

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

* 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.