MCAST

MCAST PROGRAMMES - PUBLIC INFORMATION TEMPLATE (FULL TIME)

Institute	Institute of Engineering and Transport
Department	Construction Engineering Department

Programme Title	Diploma in Construction Engineering				
Course Code *To be filled in by Admissions Dept.*	CE3-A02-25		**If the programme includes a WBL element, How is it accredited?**	Apprenticeship	
MQF/ EQF Level	Level 3	**Type** *(refer to Appendix 1 for Parameters)*	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** *(Academic Years or Semesters)*	1 Year	**Mode of Attendance**	Full-time
Total Number of Credits	60 credits	**Total Learning Hours** *(25 Total Learning Hours for each ECTS)*	1500 hours		
Target Audience	Ages 16 - 65	**Target Group** *(the type of learners that the educational institution anticipates joining this programme)*	-		
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 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: https://mcast.edu.mt/how-to-apply-online-2/
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: https://mcast.edu.mt/important-information/
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 *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 course consists of College-based training on various skills related to the building and construction industry. It enables the learners to work in the sector or to continue their studies in related vocational areas, including Construction, Civil Engineering or Building Services. During this course of study learners will be introduced to different types of technical drawings used in the construction industry. They learn how to apply construction drawing standards and conventions to produce sketches and professional working drawings. This course also provides learners with the opportunity to further develop their knowledge of key skills subjects such as Mathematics, Science, English, Maltese, Information Technology.
Deskrizzjoni tal-Kors *(Refer to Programme Specification)*	Dan il-kors jikkonsisti f'taħriġ li jsir fil-Kulleġġ fid-diversi ħiliet relatati mal-industrija tal-bini u l-kostruzzjoni. Dan jgħin lill-istudenti jsibu xogħol fis-settur jew ikomplu l-istudji tagħhom f'oqsma vokazzjonali relatati, inklużi l-Kostruzzjoni, l-Inġinerija Ċivili jew is-Servizzi tal-Bini. Matul dan il-kors ta' studju, l-istudenti jiġu introdotti għal tipi differenti ta' disinji tekniċi użati fl-industrija tal-kostruzzjoni. Huma jitgħallmu kif japplikaw standards ta' disinji tal-kostruzzjoni u konvenzjonijiet biex jipproduċu disinji u tpinġijiet tax-xogħol professjonali. Dan il-kors jipprovdi wkoll lill-istudenti l-opportunità li jkomplu jsaħħu l-għarfien tagħhom fir-rigward tas-suġġetti tal-ħiliet ewlenin, bħall-Matematika, ix-Xjenza, l-Ingliż, il-Malti, it-Teknoloġija tal-Informazzjoni.
Career Opportunities:	Assistant Draughtsperson, Assistant Land Surveyor
Entry Requirements *(Refer to Prospectus / Course Page on MCAST website)*	Internal Progression Route… Any MCAST MQF Level 2 Foundation Certificate OR 2 SEC / SSQ&P or equivalent with a Pass Grade / Level 3
Other Notes related to this Programme, and which are to be taken note of	-
Programme Learning Outcomes *(Refer to Programme Specification)*	At the end of the programme the students are able to 1. Understand the importance of health, safety and welfare in the construction industry; 2. Understand the diversity of the construction industry and the contribution to society by those who work within it; 3. Apply construction drawing standards and conventions; 4. Describe the methods and techniques associated with pre-construction, ground works, substructure, superstructure and building services systems of low-rise domestic buildings.
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. 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 https://www.mcast.edu.mt/college-documents/ 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: https://www.mcast.edu.mt/college-documents/ (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: career.guidance@mcast.edu.mt
Regulatory Body/ Competent Authority Contact Details *(where applicable - in the case of a programme leading to Regulated Profession)*	Not Applicable

Programme Structure	Unit Code	Unit Title	ECTS	Year	Semester
	ETCNS-305-2301	Building Technology and Setting Out Techniques	5	1	1 & 2
	ETCNS-305-2302	Building Structures	5	1	1 & 2
	ETCNS-305-2303	Building Services in Construction	5	1	1 & 2
	ETCNS-305-2304	Introduction to Building Quantities	5	1	1 & 2
	ETCNS-305-2305	Building Drawing Techniques	5	1	1 & 2
	ETCNS-305-2306	Occupational Health and Safety in the Construction Industry	5	1	1 & 2
	CDKSK-304-2313	English	4	1	1 & 2
	CDKSK-304-2315	Il-Malti	4	1	1 & 2
	CDKSK-304-2314	Mathematics	4	1	1 & 2
	CDKSK-304-2501	Community Social Responsibility	4	1	1 & 2
	CDKSK-304-2316	Information Technology	4	1	1 & 2
	CDKSK-304-	Science and Technology	4	1	1 & 2

	2317				
	ETWBL-306-2306	Work Based Learning	6	1	1 & 2

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
	Note: The 'Self-Learning and Assessment Hours[3]' amount to the difference between the 'Indicative Contact Hours'[1] and the 'Total Student Workload'[2]			

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.

ETCNS-305-2301: Building Technology and Setting Out Techniques

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

This unit aims to develop the learners' practical and calculating skills by applying them to the typical setting out processes required in the construction work. The use of standard modern equipment and techniques is emphasised. Learners will be able to engage in a practical experience by working with contemporary instruments and software used in the setting out processes. This unit will provide learners with the knowledge and skills required to interpret building drawings in different projections (such as orthographic, isometric and oblique). Learners will demonstrate an understanding of space, positioning in an area and be able to compare the built environment with the representation of drawn elements of the structure. Learners will learn to use their own initiative to solve various tasks in different situations connected to the setting out process. Depending on the data used in the drawings, learners will also develop the necessary skills needed to understand the planning process, setting out organisation and safety precautions. Finally, learners are given a chance to demonstrate practical and mathematical skills, information technology knowledge, as well as problem solving and teamwork.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Interpret building drawings in specific situations*
2. *Calculate the data needed for the setting out process*
3. *Produce a required setting out of a building for a specific task in a safe manner*
4. *Establish the contours of an area whilst making adequate measurements in a safe way*
5. *Collaborate with others to complete the setting out of buildings, drainage installations and road formations.*

ETCNS-305-2302: Building Structures

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

Learners will be provided with knowledge about structural elements that are used in building construction. They will gain knowledge and ability to discuss various structural elements used in traditional systems of massive construction, as well as in contemporary skeletal systems, applied in residential houses. Legal principles and processes of making architectural projects will be emphasised to enable learners' understanding of the function and final look of residence building (and its environment). In addition, they will learn how the application of different structural elements connected to the system affects the functional layout and the final look of the building. Learners will be able to apply theoretical knowledge in discussions about pre-construction activities. They will be able to propose appropriate building systems with the necessary elements in all phases of construction (underground, above ground) - foundations, walls, slab structures, stairs, columns and beams. Along with the understanding of architectural planning process, learners will develop their practical skills regarding the final look of the building in correct relation with the basic principles of creating houses.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Apply proper structural elements of construction related to the function of a building.*
2. *Prepare the necessary activities and documents related to building construction*
3. *Apply the methods and techniques used in building construction for residential houses.*
4. *Outline the elements that constitute residential buildings.*

ETCNS-305-2303: Building Services in Construction

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

Learners will acquire the knowledge of the basic design and construction principles for standard services installations in houses. Learners will be provided with practical skills for installation and maintenance of building service installations: plumbing and drainage, electrical installations on low voltage, gas systems, fire alarm systems, heating, ventilation, and air conditioning systems.

The main topics covered will include:

- Electrical: Single phase domestic installations
- Plumbing:
  - direct and indirect systems
  - hot and cold-water supply
  - house sanitarian systems including drainage
- Gas supply installation

This unit will also provide opportunities for learners to practice design principles and services used for the development of water supply, drainage, electrical and gas installations through technical drawings.

Learners will also be familiarised with the regulations associated with building services.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Develop the distribution of hot and cold-water systems in domestic households in accordance with the associated regulations.*
2. *Develop drainage house systems in accordance with the associated regulations.*
3. *Outline household electrical installation systems and associated regulations.*
4. *Explain gas supply house installations and associated regulations.*

ETCNS-305-2304: Introduction to Building Quantities

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

In this unit, the learner will be introduced to the measurement of quantities for construction works. This involves the transformation of drawn information into categories and quantities. This procedure is used to estimate and control the cost of construction work, as well as enabling effective management of the design and construction method. The learner will understand how to handle a budget and manage contractual relationships of a building project. This unit will introduce the learner to leading international standards which are used to protect consumers and businesses whilst ensuring the highest level of professionalism. The learner will gain an insight on the regulatory functions of the Royal Institution of Chartered Surveyors (RICS), in particular those relating to Standards and Professional Development, and understand that these are led and overseen by the Standards and Regulation Board.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Evaluate the exact building quantities whilst following all the specified procedures and measuring techniques.*
2. *Analyse the costs of all the proposed construction works using general procedures.*
3. *Recognize the importance of the tendering objectives and the tendering documentation of the total material need, including the necessary information to process orders.*
4. *Explain the processes and procedures used to produce measured quantities.*

ETCNS-305-2305: Building Drawing Techniques

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

This unit provides learners with knowledge of technical and architectural drawings, the equipment used for drawings, the symbols and conventions for presenting different materials, objects and dimension lines. Learners will be able to develop the required skills and techniques for producing technical drawings including manual and basic CAD drawings. Learners will gain knowledge of the types of drawings used in the design process in construction, depending on the scale of the drawing and the purpose for which these drawings are used. The role of graphical solutions of architectural problems will be emphasized, in various practical situations and tasks supervised by experts. Skills development for architectural drawings will be acquired through the production and presentation of drawings in accordance with the standards set for their production (using hand tools and various software, related to appropriate scale, symbols, descriptions, line thickness, fill patterns, dimension lines etc.) Learners will carry out the required tasks and demonstrate an understanding of the marketing mix (price, product, promotion, and place). They will be prepared for further studying and technical work in the building industry.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Explain the various types of technical or architectural drawings which are used in the construction and architecture process.*
2. *Select appropriate drawing accessories, equipment and material which will be used for various drawings for a specific situation.*
3. *Apply drawing standards, symbols and conventions to produce building drawings.*
4. *Produce simple geometries and drawings using CAD software.*

ETCNS-305-2306: Occupational Health and Safety in the Construction Industry

Unit Level (MQF/EQF): 3
Credits: 5
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 125

Unit Description

This unit provides learners with knowledge of risk that arise in the construction process. It will enable the learner to evaluate and take the necessary safety precautions to work safely, efficiently and effectively on a building site. Learners should understand the importance of safety procedures at work to ensure their personal health and safety, that of their colleagues, as well as that of third parties in the region and preserve a healthy environment. The learner will demonstrate foresight and protection methods against harmful consequences in various situations by taking the right choice of appropriate personal protective equipment and appropriate safety procedures. Learners will gain necessary skills for their appropriate behaviour related to the presence of dangers at workplace in order to reduce health risks prior to going to work, during work and after work.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Know the importance of occupational safety and health at the construction site and in the environment*
2. *Assess the impact of identifying hazards and risks in the workplace*
3. *Discuss the importance of risk assessment and its application for occupational safety procedures*
4. *Outline the importance of the safe use of equipment.*

CDKSK-304-2313: English

Unit Level (MQF/EQF): 3
Credits: 4
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 100

Unit Description

This unit is targeted at learners proceeding from a Level 2 vocational programme as well as those whose entry level is directly at Level 3. It therefore takes into consideration both learners who have successfully passed their L2 English unit as well as those who have sat for, or are resitting, their SEC English Language (Y11).

At Level 3, learners are expected to have an intermediate knowledge of English which allows them to independently communicate on topics and scenarios related to everyday situations, these ranging from home, school, and work to social and public settings. For the purposes of bridging linguistic skills with vocational contexts, general emphasis is laid on work and public settings.

English at Level 3 encourages learners to combine their technical knowledge of their vocational subject with their growing knowledge of general English. They will be introduced to specialised vocabulary and information related to their area of vocational interest, to descriptions of materials and their properties, equipment and its usage. They will be exposed to video content and a range of short texts of a technical and non-technical nature, as well as learn how to conduct basic research to produce short but effective work or discipline-specific documents. A fuller understanding of spoken and written English as well as proper association of ideas are also expected at this level.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Retrieve and interpret information obtained from spoken conversation, a presentation, or a media source.*
2. *Communicate information and ideas verbally on a range of topics, ranging from the vocational to the discipline-specific.*
3. *Retrieve and interpret information present in vocational or discipline-specific texts.*
4. *Show how ideas, whether complementary or contrasting, are to be organised and presented.*
5. *Write short work-related texts, observing format, tone, and style.*
6. *Write longer vocation or discipline-specific texts based on researched information.*

CDKSK-304-2315: Il-Malti

Il-Livell tal-Unità: (MQF/EQF): 3
L-Għadd ta' Kreditu: 4
Mod ta' Tagħlim: Preżenti
Total ta' Sigħat ta' Tagħlim: 100

Deskrizzjoni Ġenerali tal-Unità

Il-Malti huwa l-ilsien nazzjonali tal-pajjiż. Huwa l-ilsien nattiv tal-istudenti li se jkunu qed isegwu din l-unità. Għaldaqstant m'hemmx dubju dwar l-importanza li l-istudenti għandhom ikunu profiċjenti fi lsien pajjiżhom, l-ilsien li ġeneralment iridu jikkomunikaw bih, kemm fil-ħajja tagħhom ta' kuljum u b'mod speċjali fuq il-post tax-xogħol.

Din l-unità hija msejsa fuq l-erba' ħiliet prinċipali tal-lingwa: 1) il-Qari; 2) is-Smigħ; 3) il-Kitba u 4) it-Taħdit. L-għan prinċipali ta' din l-unità huwa li l-istudenti jiġu mħarrġa f'dawn l-erba' ħiliet biex jibnu fuq dak li diġà jafu u jkomplu jtejbuh. Fil-fatt, il-livell ta' din l-unità jkompli jittarraġ fuq il-livell miksub fl-unità tat-tieni livell. F'din l-unità, il-materjal kopert ikun aktar kumpless mill-materjal tal-unità preċedenti partikularment fejn jidħol vokabolarju tekniku marbut mal-qasam vokazzjonali. F'din l-unità l-istudenti huma mistennija wkoll jaħdmu b'aktar awtonomija u responsabbiltà u jkunu mħeġġa jieħdu aktar inizjattiva waħedhom.

Il-kuntest tat-tagħlim u t-tgħallim tal-erba' ħiliet huwa ġeneralment marbut mal-qasam vokazzjonali tal-istudenti. Għaldaqstant, f'din l-unità l-istudenti se jkunu preżentati prinċiparjament b'materjal bil-Malti li jinteressahom mill-qrib u li se jkompli jkabbar l-għarfien ġenerali tagħhom dwar il-qasam vokazzjonali magħżul minnhom. Temi kurrenti oħra dwar il-ħajja ta' kuljum jistgħu wkoll jiġu preżentati u mistħarrġa. It-temi mistħarrġa f'dan il-livell jitolbu aktar impenn minn dawk tat-tieni livell u l-kuntesti tat-temi jistgħu ma jkunux dejjem ta' natura familjari mal-istudenti.

Il-qari, is-smigħ, il-kitba u t-taħdit huma l-qofol tal-komunikazzjoni. Kull persuna Maltija għandha tħossha kunfidenti meta tiġi biex tikkomunika bil-Malti, kemm verbalment u kemm bil-kitba. Biex l-istudenti jtejbu l-Malti miktub tagħhom, f'din l-unità se tkun qed tingħata wkoll importanza lill-ortografija, b'enfasi fuq ir-regoli tal-grammatika. L-għan mhuwiex li l-istudenti jsiru familjari ma' listi ta' termini grammatikali jew li l-istudenti jaħdmu eżerċizzji ripetuti tal-grammatika. L-għan hu li jkunu jafu jħaddmu r-regoli tal-grammatika biex jiktbu b'Malti ortografikament tajjeb. Dan se jkun qed isir dejjem f'kuntest, b'mod partikulari f'kuntest marbut mal-qasam vokazzjonali tal-istudenti. F'din l-unità, se tkun ukoll qed tingħata importanza partikulari lid-deċiżjonijiet meħuda mill-Kunsill Nazzjonali tal-Ilsien Malti fl-2008 (Deċiżjonijiet 1) u fl-2018 (Deċiżjonijiet 2).

Il-Kisbiet mit-Tgħallim

Biex l-istudent jikseb din l-unità irid juri li kapaċi:

1. *Jidentifika t-tifsir primarju u sekondarju ta' testi moqrija aktar kumplessi.*
2. *Jagħraf il-messaġġi diretti u indiretti ta' kuntesti ta' smigħ aktar kumplessi.*
3. *Jipproduċi kitbiet b'temi tekniċi u aktar kumplessi.*
4. *Jikkomunika b'Malti tajjeb dwar suġġetti tekniċi u aktar kumplessi permezz tat-taħdit.*
5. *Japplika r-regoli tal-grammatika tajjeb għal tisħiħ fl-ortografija.*

CDKSK-304-2314: Mathematics

Unit Level (MQF/EQF): 3
Credits: 4
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 100

Unit Description

This unit aims to help students understand key mathematical concepts and gain the necessary skills, to be able to use mathematics as a problem-solving and a communication tool in their everyday life and the vocational area they are studying. This unit comprises of three main components: a compulsory component, an elective component and a compulsory final project.

The compulsory component includes one compulsory learning outcome whose mathematical content and respective criteria are key in everyday life and across all vocational areas. On the other hand, the elective component is made up of a set of elective learning outcomes which include mathematical content and respective criteria whose relevance varies across different vocational areas. Consequently, every Institute can select the learning outcomes (50 marks) whose content and criteria will help students in the particular vocational area.

Moreover, this unit will give students the opportunity to use mathematics in a project related to the vocational area they are studying. Consequently, students will experience the relevance of the subject at first-hand and hence engage better in their vocational studies.

Considering the importance of technology in today's world, technological tools, such as scientific calculators and computer software, will be used to assist students in their work and enhance their understanding and confidence in the subject.

By the end of this unit, students should demonstrate readiness and competency to independently apply mathematical techniques in solving problems and be able to communicate findings using appropriate vocabulary and rigor.

Core Learning Outcomes

On completion of this unit the learner will be able to:

1. *Compute numerical calculations involving fractions, decimals, percentages and units of measure.*
2. *Apply Mathematics in a practical way.*

Elective Learning Outcomes

On completion of this unit the learner will be able to:

1. *Apply basic numerical skills in personal, household and business financial contexts.*
2. *Carry out algebraic manipulations.*
3. *Use algebra and graphs to derive information from straight lines and their equation.*
4. *Work with shapes and angles.*
5. *Summarise and interpret statistical data both graphically and numerically.*

CDKSK-304-2501: Community Social Responsibility

Unit Level (MQF/EQF): 3
Credits: 4
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 100

Unit Description

This key skill presents an opportunity for MQF level 3 learners to work upon their analysis and evaluation capabilities, whilst working upon various employability skills. Through the compilation of a write-up, the learners will be drafting a personal biography, which highlights some of their achievements and future aspirations. The write-up will also feature the rationale behind the selection of a specific community work experience. Additional information, descriptions and anecdotes related to the community work will be provided via visual and written means.

As each learner goes through this educational journey, opportunities for social interactions and practical groupwork activities will also be presented. Through these opportunities, students will further grasp the essence of teamwork and its relevance towards becoming more competitive and employable.

Following the delivery of a selected number of educational topics, some of which targeting 'The 2030 Agenda for Sustainable Development', the learners are to select a topic of preference and deliver relating information through a public speech. The main essence of the contents of the speech are to be acquired through referenced research. The learners are to increase the success rate of their speech delivery through the proper structuring and compilation of a visual medium compiled via software, such as PowerPoint / Canva.

Additionally, learners will also be presented with multiple opportunities to conduct self-reviews and evaluations during assessment periods. This practice is embedded within all of the assessments, these being the write-up, the teamwork activity, and the presentation. Educators will guide the learners into practicing and understanding the importance of analysing and evaluating information and oneself, as, apart from increasing one's employability skills, this brings forth numerous opportunities for growth.

Learning Outcomes

On completion of this unit the learner will be able to:

1. *Organise selections of information within a write-up.*
2. *Shows the ability to work in teams.*
3. *Elaborate upon a topic and/or issue in front of an audience.*
4. *Appraise the quality of one's own effort and contributions within assigned tasks.*

CDKSK-304-2316: Information Technology

Unit Level (MQF/EQF): 3
Credits: 4
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 100

Unit Description

This unit aims to develop basic computer knowledge and skills needed in real-life situations. In a supportive environment, the learner will be challenged to understand how to use various real-life applications belonging to a productivity suite with the aim of providing to our learners the necessary skills required to use common computer applications necessary during their studies. By the time learners complete this unit they will be increasingly independent users of personal computers and will have a broad understanding of how ICT can help their learning, their work, and their social life. They will have a well-developed ability to decide when and how to use ICT and will be aware of the limitations associated with this use.

Through this unit the learners will achieve a broad knowledge of ICT and will be able to use ICT to carry out several increasingly complex tasks. They will become competent in using word processing, spreadsheet, and presentation software to create, format and finish documents, workbooks and slide shows that contain various elements. This unit also introduces terms related to artificial intelligence and how it is being used in real life situations, information literacy and the use of online communities and online tools to build and maintain an online presence.

Learning Outcomes

To choose 4 Learning Outcomes out of 5:

On completion of this unit the learner will be able to:

1. *Use Office Productivity Essentials to create documents and presentations.*
2. *Identify concepts related to Artificial Intelligence.*
3. *Use Online Essentials Tools.*
4. *Identify concepts related to Information Literacy.*
5. *Use a spreadsheet to produce accurate work outputs.*

CDKSK-304-2317: Science and Technology

Unit Level (MQF/EQF): 3
Credits: 4
Delivery Mode: Fully Face-to-Face Learning
Total Learning Hours: 100

Unit Description

This unit enables learners to explore the role of science in a wider context. **This unit has eight elective learning outcomes, from which four must be selected by the institute.** Depending on the selection of the elective criteria, this unit enables learners to explore the role of science in a wider context. The learning outcomes will focus on the ethical issues in science and health literacy. Learners will understand the meaning of ethics and the importance of ethics in scientific research and development. They will also learn about the importance of health literacy and to understand and use information to make decisions about their health. The learners may also more familiar with the physical and chemical principles related to their individual vocational area. Also, they will understand the connection between climate change and human health. This learning outcome will help the learner understand how our vocational area and everyday life contribute to climate change. Furthermore, the impact of climate change on own personal life will be assessed. Learners may also enhance their investigative skills through a site visit applicable to vocational areas, for example to include option to visit – quarry, scrap yard, waste disposal area, amongst other. During this session, the learners will be empowered to take action to develop a project that addresses, for example, an environmental issue.

Elective Learning Outcomes

On completion of this unit the learner will be able to:

1. *Investigate ethical issues in science and scientific developments.*
2. *Use information and services to make informed health-related decisions.*
3. *Investigate processing of materials relevant to individual vocational area.*
4. *Apply chemistry principles to vocational area of practice.*
5. *Identify basic chemical reactions.*
6. *Identify the connection between climate change and human health.*
7. *Carry out a fieldwork session related to scientific research and development.*
8. *Identify the link between the physical world and everyday day life situations.*