MQF/EQF Level 3

AE3-A6-21

Diploma in Building Services Installations (Plumbing or Plumbing and Electrical) Course Specification

Course Description

This course comprises theoretical knowledge and extended practical training both off-the-job and on work placement. The practical training is carried out in workshops equipped to industry standards.

Students are expected to participate individually and in teams to install pipe systems/fittings including control systems with the use of actuators and solar panels installations. Practical handling of hand tools, power tools and typical trade tools, such as thread cutting machines, form an integral part of the course.

Programme Learning Outcomes

At the end of the programme the students are able to

1. *Carry out a risk assessment of the surrounding working environment before and after executing an assigned task.*
2. *Identify materials for specific applications in plumbing and/or electrical installation.*
3. *Interpret drawings to carry out plumbing and/or electrical installation tasks.*
4. *Carry out installations, alterations, repair and planned maintenance of existing domestic systems.*

Entry Requirements

MCAST Foundation Certificate or
2 SEC/O-Level/SSC&P (Level 3) passes

Key Information

Awarding Body – MCAST

Accreditation Status – Accredited via MCAST's Self Accreditation Process (MCAST holds Self-Accrediting Status as per 1st schedule of Legal Notice 296/2012)

Type of Programme: Qualification

MQF Level	Examples of Qualifications	'Qualification' Minimum Credits Required	'Award' Credits Required
Level 8	Doctoral Degree Third Cycle Bologna Process	NA	NA
Level 7	Masters Second Cycle Bologna Process	90-120	Less than 30
	Post-Graduate Diploma	60	
	Post-Graduate Certificate	30	
Level 6	Bachelor[23]/Bachelor (Hons.)[24] First Cycle Bologna Process	180-240	Less than 180
Level 5	Short Cycle Qualification	120	Less than 60
	Undergraduate Higher Diploma	90	
	Undergraduate Diploma	60	
	Undergraduate Certificate	30	
	VET Level 5 Programme[25]	60-120	
Level 4	Pre-Tertiary Certificate	30	Less than 120
	VET Level 4 Programme[26]	120	
	MATSEC Certificate	NA	
Level 3	VET Level 3 Programme[27]	60	Less than 60
	General and Subject Certificate	NA	
Level 2	VET Level 2 Programme[28]	60	Less than 60
	General and Subject Certificate	NA	
Level 1	VET Level 1 Programme[29]	40	Less than 40
	General and Subject Certificate	NA	
Introductory Level A	Preparatory Programme	30	Less than 30
Introductory Level B	Pre-entry Basic Skills Course	30	Less than 30

Table 1: Minimum number of credits for 'Qualifications' and parameters for 'Awards'

Fig.1: p56, Ministry for Education and Employment & National Commission for Further and Higher Education Malta (2016). *Referencing Report, 4th Edition*. NCFHE.

Total number of Hours: 1500

Mode of attendance: Fully Face-to-Face Learning

Duration: 1 Year

Target audience for MCAST full-time courses is 16 to 65+

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.

This course will be offered at

MCAST has four campuses as follows:

MCAST Main Campus
Triq Kordin, Paola, Malta

All courses except for the Institute for the Creative Arts, Centre of Agriculture, Aquatics and Animal Sciences are offered here.

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

Teaching, Learning and Assessment

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 referenced below apply. (DOC 003 available at: link https://www.mcast.edu.mt/college-documents/)

Total Learning Hours

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

Credits (ECTS)	**Indicative contact hours**	**Total Student workload (hrs)**	**Self-Learning and Assessment Hours**
1	5 – 10 hrs	25 hrs	20-15 hrs*
2	10 – 20 hrs	50 hrs	40-30 hrs*
3	15 – 30 hrs	75 hrs	60-45 hrs*
4	20 – 40 hrs	100 hrs	80-60 hrs*
6	30 – 60 hrs	150 Hrs	120-90 hrs*
9	45 – 90 hrs	225 hrs	180-135 hrs*
12	60 – 120 hrs	300 hrs	240-180 hrs*

* The 'Self-Learning and Assessment Hours' amount to the difference between the contact hours and total student workload.

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. In case of part time programmes, the student must achieve a minimum of 45% to successfully pass the unit.

All 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 are graded on a Pass/Fail basis only.

Detailed information regarding the grading system may be found in the following document: DOC 003 available at: link https://www.mcast.edu.mt/college-documents/)

Intake Dates

•MCAST opens calls for application once a year between July and August of each year for prospective applicants residing in MALTA.
•Applications to full-time courses from international students not residing in MALTA are accepted between April and Mid-August.
•For exact dates re calls for applications please follow this link https://www.mcast.edu.mt/online-applications-2/

Course Fees

MCAST course are free for Maltese and EU candidates. International candidates coming from outside the EU need to pay fees for the respective course. Course fees are set on a per-level and course duration basis. For access to course fee structure and payment methods please visit https://www.mcast.edu.mt/fee-payments-for-non-eu-candidates/.

Method of Application

Applications to full-time courses are received online via the College Management Information System. Candidates can log in using Maltese Electronic ID (eID) or European eIDAS (electronic identification and trust services) to access the system directly and create an account as the identity is verified electronically via these secure services.

Non-EU candidates need to request account creation though an online form by providing proof of identification and basic data. Once the identity is verified and the account is created the candidate may proceed with the online application according to the same instructions applicable to all other candidates.

Non-EU candidates require a study visa in order to travel to Malta and joint the course applied for. For further information re study-visa please access https://www.identitymalta.com/unit/central-visa-unit/.

For access to instructions on how to apply online please visit https://www.mcast.edu.mt/online-applications-2/

Contact details for requesting further information about future learning opportunities:

MCAST Career Guidance

Tel: 23987135/6
Email: career.guidance@mcast.edu.mt

Current Approved Programme Structure

Unit Code	Unit Title	ECTS	Semester
ETH&S-306-1410	Safety at the Workplace	6	YEAR
ETBSV-306-1407	Building Drawings & Setting Out	6	YEAR
ETPLB-306-1401	Water Supply Technology	6	YEAR
ETPLB-306-1402	Sewerage Technology	6	YEAR
ETPLB-306-1403	Plumbing Practice-Water Supply	6	YEAR
ETPLB-306-1404	Plumbing Practice-Sewerage*	6	YEAR
ETHVA-306-1502	HVACR Electric*	6	YEAR
CDKSK-304-1921	Mathematics	4	YEAR
CDKSK-304-1922	English	4	YEAR
CDKSK-304-1923	Maltese	4	YEAR
CDKSK-304-2108	Information Technology	4	YEAR
CDKSK-304-2103	Community Social Responsibility	4	YEAR
CDKSK-304-1925	Science	4	YEAR
Total ECTS			60

**Students opting for the Plumbing Stream will follow the unit ETPLB-3061404, whilst those opting for the Plumbing and Electrical Stream will follow ETHVA-306-1502*

ETH&S-306-1410: Safety at the Workplace

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

The unit introduces learners to effective and safe work, focusing on learners' wellbeing, on prolonged life of tools and equipment, as well as on economic aspects of work. The primary goal of the unit is to introduce basic working practices in engineering and the potential hazards involved. EU regulation, adapted for engineering activities and for vocational training is a starting point.

This unit provides learners with the knowledge of material and equipment handling, as well as of the use of appropriate personal protective equipment (PPE) and its classifications: protection of respiratory organs, skin, eye and hearing, protective clothing and ensembles. Learners will get to know the hazards and risks associated with different engineering tasks, working environments, use of tools and equipment, use of ladders and scaffolding and working with dangerous materials and substances, hot work, pressurised containers etc. Responding correctly and swiftly in case of an incident is considered equally important as avoiding one, and thus is covered within the unit through both, theory and practice. It is important to emphasize that this represents useful knowledge that could be applied in everyday life.

Since completing a job might require team effort, this unit builds team spirit as well by delivering related communication skills. Finally, the unit will introduce some important soft skills in applying knowledge and in continued learning needed for a successful professional engineer.

Learning Outcomes

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

1. *Apply statutory regulation and organisational safety requirements.*
2. *Prepare PPE and working environment according to the task checklist.*
3. *Carry out engineering task according to safety standards.*

ETBSV-306-1407: Building Drawings and Setting Out

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This unit develops learners' knowledge and skills in using manual drawing equipment like drawing board, rulers, pens, etc. They will learn to draw the geometrical elements like lines, angles, parallel and orthogonal line, angle translation, circle, tangent, triangle, rectangle, polygons, ellipse, hyperbola and parabola.

The learners will adopt basic geometrical constructions, orthographic projections and sections of geometrical solids. They will learn three-dimensional presentation of geometrical solids and technical objects. They will also practice the development of surfaces, and drawing the sections and intersection of solids.

The learners will adopt the technical drawing skills by drawing different mechanical elements: welds, rivets, bolts, nuts, springs, wedges, axles, shafts, pulleys, gears etc. They will use drawing scales, specific views, details, rotated views, and specific symbols and dimensioning. They have to master the use of the drawing equipment and media and adopt technical standards and symbols. The learners will be familiar with workshop design, specific elements, tolerances and roughness. They will learn specific symbols for different technical fields with the purpose of making or understanding sketches. This unit will provide learners with knowledge and skills which will enable them to understand the building construction drawings in orthographic projections or working sketches, understand the space dimension and positional settings in the selected area, and compare the built environment with elements of the structure as shown in the drawings. In the construction industry, different drawings are used for presenting the building, crafts-work, installations, details, sections, etc. The learners have to be familiar with these presentations in order to understand and participate in engineering communication.

The use of standard modern equipment and techniques is emphasised. Learners should also gain the basic understanding of computer aided drawing. They will learn how to adjust computer settings, adopt basic commands, draw the basic geometrical elements

and comprehend the modelling principle. The learners will learn to prepare themselves for upgrading the knowledge using literature and Internet.

Learning Outcomes

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

1. *Draw the geometrical structures.*
2. *Recognise and interpret projections, sections and three dimensional drawings.*
3. *Produce simple drawings of mechanical elements.*
4. *Produce workshop drawings and sketches.*

ETPLB-306-1401: Water Supply Technology

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This unit is designed to provide knowledge in the field of water supply. The recognition and knowledge of properties of materials used in water supply installations are necessary to enable the upgrading of knowledge of pipes, pipes sizing, fittings, valves, and sanitary and other equipment used in water supply.

The learners will learn about water properties, potable water, 2nd class water, drinking water production, bacterial, chemical and physical filtration, reverse osmosis desalinisation. In this unit learners will also visit the plant for drinking water production and become familiar with reverse osmosis plants, filters and water softeners.

The learners will learn about reduction of water use and environmental issues. They will learn about rain water collection, gutters, downpipes and storage tanks. They will also learn about water pumps working principles and their application, and they will be taught how to choose the adequate pump.

This unit provides learners with the knowledge of water supply mains, house connection elements, storage tanks, building water supply installation elements, joining elements in the system, fittings recognition and election.

Learners will gain the knowledge of hot water preparation and hot water installation elements. The unit also covers the use of solar heating power for heating buildings, the supply of hot water for buildings and heating of swimming pools. The learners will learn about sanitary facilities rooms and they will adopt the rules of installing sanitary equipment.

Pool devices, disinfection, cleaning, water exchange and heating are also presented in this unit. For the agricultural purposes, learners will learn about plant irrigation devices and cattle drinkers. Finally, the learners will learn the basics of gas installations, and they will adopt basics of drawings, schematics, plans etc.

Learning Outcomes

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

1. *Identify and select materials for specific applications.*
2. *State and describe water supply installations.*
3. *State and describe basic properties of sanitary accessories, fittings and storage tanks.*
4. *Understand water treatment processes.*

ETPLB-306-1402: Sewerage Technology

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This unit provides the learners with knowledge in the field of waste water disposal. The learners learn about environmental issues and the importance of wastewater collection, treatment and disposal. The environmental impact of sewage systems, sources of waste water, physical, chemical and biological pollutants from different sources, and consequences of sewage malfunction are the important issues that learners will deal with. They will be encouraged to act and promote environmental awareness during their professional work. They will also learn about building sewage installation elements, above and below ground, pipes fittings, siphons, and connection to public sewage system or septic tanks. Learners will adopt the elements and working principles of public sewage systems, elements and working principles of local sewage systems, current regulation for connection to public sewage system. They will learn about public mains types, sizes and properties, shafts, objects and equipment, septic tanks and disposal requirements.

Learners will gain theoretical aspect of building sewage installations, working principles, elements of sewage installation in a building, materials used for sewage installation in buildings, measurement and relation to drawings. They will learn to calculate the quantity of waste water and choose sizes of pipes, gradients, shafts, vertical and horizontal lines, fittings, gutters, traps and connections. They will learn the different types of sanitary facilities and methods of installation. They will learn about washing basins, sinks, bath tubs, toilets, urinals, bidets and other sanitary appliances. The learners will adopt the principle of waterproof installation as their contribution to the protection of the environment. This unit provides learners with the knowledge about grey and black water, waste water purification devices and the importance of correct selection of septic tank. Also, the learners will gain knowledge of devices and equipment for public toilets, big kitchens, hospitals and hotels.

Learning Outcomes

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

1. *Understand the importance of proper waste water disposal.*
2. *Interpret the sewage system, public and local and building connection elements.*
3. *Assess, evaluate and interpret all types of building sewage installations, elements and fittings.*

ETPLB-306-1403: Plumbing Practice-Water Supply

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This unit is designed to provide knowledge and skills in plumbing skills through a combination of theory, practical learning and workshop experience. Learners will gain a wide range of practical plumbing skills as well as an understanding of plumbing theory, calculations, quantities, drawing and related studies. This unit includes the study of tools, machines, products and plumbing techniques. Learners will gain practical skills of mounting and joining elements in functional pipework from different pipe materials (cast iron, steel, copper, plastic etc.). They will learn to connect the system to public supply above and below ground, carry out pressure testing of installations, and prepare a report.

They will also be instructed how to mount and dismount certain circuits, work out joining of different pipes materials, and learn all actions in the welding techniques. They will practice mounting sanitary equipment and connect it to supply installation system. Learners will gain knowledge how to protect pipes and install insulation. They will practice installing new systems and alternate and repair existing systems.

In order to execute practical work, learners will work out necessary selection, specification of materials and material order. They will prepare detailed list of working operations for each task, detailed list of materials, list of tools and equipment required for each operation. They will carry out cost calculation using cost of materials and cost of working time. This will enable learners to understand their practical work from the economy aspect.

The learners will use hand and power tools with applied safety measures. They will learn how to use tools for cutting, drilling, bending, joining, grinding, threading etc. All operation will be followed with the working diary.

Learning Outcomes

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

1. *Work out water supply installation and connection to water supply system above and below ground.*
2. *Calculate quantities, cost and resources required for water supply installation.*
3. *Use hand tools and portable power tools to perform plumbing tasks.*

ETPLB-306-1404: Plumbing Practice Sewerage

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This unit is designed to provide knowledge and skills in plumbing skills through a combination of theory, practical learning and workshop experience. Learners will gain a wide range of practical plumbing skills as well as an understanding of plumbing theory, calculations, quantities, drawing and related studies. This unit includes the study of tools, machines, products and plumbing techniques.

The learners will learn how to make parts of the pipeline, the mounting elements and sub-assemblies. They will work out sewage pipework by mounting and joining elements in functional pipework connected to public sewage system in line with working out drawing both above and below the ground.

Learners will gain the knowledge of sewage installation working principle. They will install traps to avoid foul smell, examine installation for leaking, and produce the testing report.

The learners will be able to select materials, tools and define working procedures. They will prepare detailed list of working operations for each task. It will be followed by detailed list of materials, tools and equipment required for each operation. Specification of materials and material order will be worked out, and the cost will be calculated from the use of materials and working time.

Learners will practice the selection and the use of necessary tools. They will be able to practice safe and efficient use of selected tools to complete practical task. The learners will practice using tools to cut, bend and join the pipes and fittings. They will learn how to use tools for cutting, drilling, bending, joining, grinding, etc. Learners will learn how to protect pipes and install insulation.

Learning Outcomes

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

1. *Work out sewage installation and connection to sewage system both above and below ground.*
2. *Calculate quantities, cost and resources required for sewage installation.*
3. *Use hand tools and portable power tools used to perform sewage plumbing tasks.*

ETHVA-306-1502: HVACR Electric

Unit level (MQF/EQF): 3

Credits: 6

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 150

Unit Description

This programme is designed to provide knowledge in the field of electrical installations that is required to complement and support HVACR systems.

Learners will learn about all electrical principles that will include all definitions, formulae, laws and regulations that are related to domestic HVACR systems.

Learners will adopt the theoretical knowledge of electrical installations and an understanding of basic computations for working safely on circuits. They will use Ohm's law and other equations for series circuits, parallel circuits, resistivity, and power.

Learners will learn about the different types of electrical circuits and different types of instruments. Practical concepts will be carried out such as measuring electrical voltage, current and resistance of various components including temperature sensors.

The program also includes technology sessions such as power distribution, cable selection, protection devices, earthing and the importance of health and safety practices

Learners will learn the basic principles of magnetic field in relationship with motors, solenoid valves and transformers. During this course, learners will gain knowledge about electrical terminations and simple circuits.

Learning Outcomes

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

1. *Solve theoretical problems related to DC and simple single-phase AC circuits.*
2. *Know the safety precautions one should undertake when dealing with electrical installations.*

3. *Practice different wiring techniques and testing procedures used in the distribution of electrical supply to domestic HVACR equipment.*

CDKSK-304-1921: 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 develop the mathematical knowledge and skills required to apply mathematics in real-life situations. The student should be given the opportunity to engage in problem solving by: (i) exploring different approaches to solve a given problem; (ii) using appropriate strategies and language to arrive to a solution; and (iii) checking the validity and accuracy of the solution. The interconnectivity between different areas of mathematics should be pointed out to the student, even though some areas might require different techniques and tools (including ICT tools). The use of (scientific) calculators and ICT can be integrated in the delivery of the topics listed hereunder. The student should also be helped to develop and appreciate mathematical reasoning and deductive skills by being exposed to short proofs.

By the end of this unit, the student should demonstrate readiness and competency to independently apply mathematical techniques in solving problems, and be able to communicate findings using appropriate mathematical vocabulary and rigour. These problems will involve:

(a) numerical calculations,
(b) algebraic manipulation,
(c) geometrical properties,
(d) basic statistical analysis and
(e) probabilistic techniques.

Learning Outcomes

Upon completion of this unit the student will be able to:

1. *Compute further numerical calculations.*
2. *Construct and manipulate formulae and algebraic expressions.*
3. *Construct linear equations using graphical techniques.*
4. *Apply geometrical properties of lines, shapes and solids to find lengths, angles, areas and volumes.*
5. *Summarise statistical data both graphically and numerically.*
6. *Determine the probability of single events and of the combination of independent events.*

CDKSK-304-1922: 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 (therefore taking into account completion of Level 2 Key Skills English) as well as those whose entry level is directly at Level 3.

In line with the Malta Qualifications Framework for Level Descriptors, English for Diploma Programmes takes into account the learning of English in terms of knowledge, skills and competences. Knowledge seeks to assess recognition of facts, principles and general concepts in a field of work or study, while skills assess the application of that knowledge in the accomplishment of tasks by employing basic methods, materials and information. In turn, competences empower the learner by giving him/her full responsibility for their accomplishment.

At Level 3, learners are expected to have sufficient knowledge of English in order to deal with everyday situations in scenarios ranging from home, work, social and public settings. General emphasis is laid on work and public settings. In their application of this knowledge, learners are required to listen to or read a range of short texts of a technical and non-technical nature, as well as information broadcast through the popular media. General understanding as well as association of ideas and inference of

meaning are expected at this level. Learners should be capable of communicating in English by discussing familiar topics or vocational topics previously exposed to.

This unit encourages learners to combine their technical knowledge with their growing knowledge of general English. They will be introduced to specialised vocabulary related to their area of vocational interest: to materials and their properties, equipment and its usage, processes, tools, devices, customer service and item servicing and general workshop/laboratory practice. In addition, learners are expected to be able to write and produce short but effective work-related memoranda, personal letters, letters of application and curriculum vitae. Writing practice will be contextualised according to the various exigencies of the various institutes.

Learning Outcomes

Upon completion of this unit the student will be able to:

1. *Listen to and understand information obtained from a media source.*
2. *Identify and comprehend information presented textually in vocational and technical contexts.*
3. *Identify, comprehend, and interpret information presented visually.*
4. *Speak and communicate ideas effectively on a range of topics ranging from the personal to the technical/vocational.*
5. *Write short, work-related correspondence in the form of memoranda, letter of application and curriculum vitae.*
6. *Research and organise information for extended technical/vocational writing.*

CDKSK-304-1923: Maltese

Unit level (MQF/EQF): 3

Credits: 4

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 100

Daħla

L-ilsien huwa essenzjali fl-iżvilupp intellettwali, emozzjonali u soċjali ta' kull individwu. Il- Malti mhux biss jiġbor fih identità lingwistika u kulturali iżda huwa għodda ta' komunikazzjoni u interazzjoni. Permezz ta' l-Ilsien Malti l-individwu jista' jesprimi dak kollu li jħoss u jkun kreattiv fil-messaġġ li jrid iwassal filwaqt li jkun espost għal oqsma oħra ta' tagħlim. Il-Malti huwa lsien ħaj li ssawwar mill-poplu Malti u għadu qiegħed jissawwar biex jibqa' għodda ta' kreattività għal kull min jużah.

L-Għanijiet

Biex l-istudenti jiksbu din l-unità jridu juru li kapaci:

1. *Jifhmu diskors standard li wieħed juża u jiltaqa' miegħu fil-ħajja ta' kuljum, kif ukoll jifhmu suġġetti marbuta ma' ġrajjiet kurrenti u suġġetti personali u ta' interess professjonali u vokazzjonali*
2. *Jifhmu testi li jikkonsistu f'diskors użat fil-ħajja ta' kuljum u fid-dinja tax-xogħol filwaqt li jifhmu deskrizzjoni ta' avvenimenti, fehmiet u opinjonijiet permezz tal-qari.*
3. *Jaffrontaw sitwazzjonijiet f'kuntest ta' konverżazzjoni u jitkellmu fuq suġġetti li huma familjari jew ta' interess personali kif ukoll marbuta mad-dinja ta' kuljum u l-qasam tax- xogħol.*
4. *Jifformolaw testi fuq suġġetti li huma familjari għalih u ta' interess personali u vokazzjonali b'mod preċiż u relevanti f'dak li għandu x'jaqsam mal-lingwa Maltija.*
5. *Jħaddmu ħiliet varji għal skop ta' tagħlim, li jmorru lil hinn mil-lingwa.*

CDKSK-304-2108: 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 be competent in using word processing, spreadsheet, and presentation software to create, format and finish documents, workbooks and slide shows that contains various elements. Finally, this unit also introduces the use of online communities and online tools to build and maintain an online presence.

Learning Outcomes

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

1. *Use a word processing application to create everyday letters and documents.*
2. *Use a spreadsheet to produce accurate work outputs.*
3. *Use presentation software.*
4. *Utilise online collaboration tools.*
5. *Use internet presence management tools.*

CDKSK-304-2103: 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 the opportunity for MQF level 3 learners to explore their individual self through the analysis of their core values and behavioural tendencies. This will bestow insight upon the learners, which will assist them in setting and/or recalibrating their future goals. Through the acquisition of different life skills, learners will be empowered to explore their surroundings and become more responsible towards the environment which hosts them. Delving into what constitutes responsibility towards others, the learners will be presented with the opportunity to recognise the significance of developing an adequate personal conduct. The learners will also be presented with opportunities to develop and/or hone their management and organisational skills, which in return will assist them in becoming more employable and independent. Through the completion of a compulsory community work experience, learners will recognise the benefits of self-management skills towards the acquisition of balance within one's lifestyle. The completion of the compulsory community work project will also present the ideal opportunity for the students to analyse their experience, evaluate their own performance and also generate suggestions and recommendations for future good practices.

Learning Outcomes

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

1. *Examine the relation between personal core values and goal setting.*
2. *Practice organisational skills to establish further independence.*
3. *Identify the practice of proper personal conduct and communication within different communities.*
4. *Evaluate the engagement in a community work experience.*

CDKSK-304-1925: Science

Unit level (MQF/EQF): 3

Credits: 4

Delivery Mode: Fully Face-to-Face Learning

Total Learning hours: 100

Unit Description

In this Level 3 key skill, learners will increase their awareness about the importance of science in our everyday life. The focus will be on natural sciences, mainly the three different areas; the living world, the physical world and the world of technology.

The focus of the living world will be on interactions between living organisms in a given environment, the dependence of animals on plants for their survival via food chains and food webs, and human life. Topics related with human life will include the position of the main body organs, anatomy and physiology of at least two organ systems, and physical health (importance of healthy food, clean water and unpolluted air; importance of balanced diet and regular exercise for physical and emotional well-being; adverse effects of drugs, alcohol and smoking; ways to avoid contamination of bacteria and viruses; role of white blood cells and misuse of antibiotics).

As part of the physical world, the learner will be more familiar with physical properties of materials, classifying objects and materials based on their physical properties, and linking the uses of objects and materials with their physical properties. Furthermore, they will enhance their knowledge on renewable and non-renewable sources of energy, using sources of energy in the immediate environment safely and economically, and energy-saving measures that can be applied at home and at work.

Related with the world of technology, the learners will discuss health and safety issues at home and in the workplace including recognising situations of risk and ways how one can avoid accidents. Also, the learners will familiarise themselves with issues related to costs and efficiency of everyday life processes by carrying out an analysis of a particular process or task in terms of energy and efficiency.

Learners will enhance their investigative skills via a project (which includes a site visit designed specifically for different institutes) in collaboration with BirdLife Malta. During a training session, lecturers will be given teaching resources and suggestions for sites to deliver the field teaching aspect and project themes. Via this learning outcome, the learner will be empowered to take action to develop a project that addresses an environmental issue. S/he will have to analyse the data, interpret and evaluate findings and then communicate them to their colleagues. The learner should realise that everyone can do something which will make a difference and that action can take place not only at the personal level but also at other levels such as community, national and international levels. Learners should understand ecosystem services and recognise that they can be used in all careers to save time, money, resources etc. but that they need to be respected for this to be possible.

Learning Outcomes

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

1. *Observe and classify objects in the immediate environment*
2. *Link scientific knowledge with everyday life situations*
3. *Research local environmental issues and use problem solving skills to investigate sustainable solutions*
4. *Use scientific knowledge to improve everyday life*