

# MCAST PROGRAMMES - PUBLIC INFORMATION TEMPLATE (FULL TIME)

Institute	Institute of Engineering and Transport
Department	Electrical and Electronic Department

Programme Title	ALP+ Extended Diploma in Electrical Installations						
Course Code To be filled in by Admissions Dept.	EE3-A09-25a	If the programme         ialp+         includes a WBL element,         How is it accredited?			eship		
MQF/ EQF Level	Level 3	<b>Type</b> (refer to Apper 1 for Paramete		Qualification Awarding Body of		MCAST – Malta College of Arts, Science and Technology	
Accreditation Status						· · ·	MCAST holds Notice 296/2012)
Mode of Delivery	Face to Face			ode of ttendance	Full-time		
Total Number of Credits	36 credits at MQF Level 2 and 60 credits at MQF Level 3						
Target Audience	Ages 16 - 65	Target Group (the type of learners that the educational institution anticipates joining this programme)Learners who have successfully completed their studies at the Alternative Learning Programme of the Ministry for Education.					
Programme Fees	<ul> <li>There are no fees applicable to Maltese and other EU Nationals (as will be evidenced by their Identity Document)</li> <li>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</li> <li>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</li> </ul>						
Date of Next Student Intake	servizz.gov.mt website here           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.						



	In the case of courses delivered via Online Learning, students will be following the programme from their preferred location/address.
	<b>Gozo Campus</b> J.F. De Chambray Street MCAST, Għajnsielem Gozo
	Institute of Applied Sciences Centre of Agriculture, Aquatics and Animal Sciences, Luqa Road, Qormi
Address where the Programme will be Delivered	<b>Institute for the Creative Arts</b> Mosta Campus Misraħ Għonoq Tarġa Gap, Mosta
	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:
	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).
	<b>MCAST Main Campus</b> Triq Kordin, Paola, Malta
	<u>https://mcast.edu.mt/important-information/</u> MCAST has four campuses as follows:
IMPORTANT note to Non-EU Nationals / TCNs	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:
Non-EU Citizens	<ul> <li>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 <a href="https://mcast.edu.mt/important-information/">https://mcast.edu.mt/important-information/</a></li> <li>In instances where a TCN is applying for an MCAST programme of studies which</li> </ul>
Information for	Non-EU candidates require a study visa in order to travel to Malta and join the course applied for (on a Full Time delivery mode). For further information re study-visa please access <u>https://www.identitymalta.com/unit/central-visa-unit/</u> .
	For more information about how to apply online for a course at MCAST, please visit: <u>https://mcast.edu.mt/how-to-apply-online-2/</u>
	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.



*3 N 213 5 5"	
	<ul> <li>Programmes delivered via Blended Learning, and which therefore contain both an online and a face to face component shall be delivered as follows:</li> <li>Face to Face components – as per above address instructions</li> <li>Online components – from the student's preferred address.</li> </ul>
Course Description (Refer to Programme Specification)	This course with its various strands is particularly aimed at students who have successfully completed their studies at the Alternative Learning Programme of the Ministry for Education. The ALP+ programme is designed in a way that enables students to focus on a vocational area at MQF Level 3. It will provide the knowledge and skills required by the students for eventual employment at assistant technician level in various labour market sectors related to engineering, agribusiness, community services, creative arts, ICT and business. The programme combines basic skills training at both MQF Level 2 and MQF Level 3 with vocational studies at MQF Level 3, providing theoretical and practical education and training with a combination of classroom based lectures, laboratory and workshop sessions, onsite practices and possibly work based learning opportunities. On successful completion of the two-year course students will be able to access the labour market or else to continue with their studies at MCAST by following an Advanced Diploma at MQF Level 4 in their preferred area of study.
Deskrizzjoni tal- Kors (Refer to Programme Specification)	Dan il-kors huwa mmirat lejn studenti li jkunu temmew b'suċċess l-istudji tagħhom fil- Programm ta' Tagħlim Alternattiv (I-ALP) tal-Ministeru għall-Edukazzjoni, u huma interessati li jkomplu bit-tagħlim vokazzjonali fil-Livell 3 tal-MQF, relatat mas-sistemi elettriċi. Dan il-kors jiffoka fuq l-għarfien u l-ħiliet meħtieġa biex eventwalment iwasslu għal impjieg fil-livell ta' assistent tekniku fis-settur tal-installazzjoni elettrika. L-esperjenza prattika u l-għarfien teoretiku li jakkwistaw l-istudenti li jispiċċaw il-kors, jgħin biex dawn ikollhom l-għarfien u l-ħiliet meħtieġa biex jaħdmu, jew inkella, ikunu eliġibbli biex ikomplu l-istudji tagħhom fil-livell 4 tal-MQF fl-MCAST, billi jagħżlu wieħed mill-bosta korsijiet tal-Advanced Diploma fil-qasam li jippreferu. Dan il-programm huwa l-ewwel stadju għal studenti li huma interessati f'karriera f'sistemi elettriċi, bħal dik ta' electrician fl-industrija tal-kostruzzjoni. Il-kors joffri tagħlim biex l-istudenti jifhmu t-teoriji rilevanti u jiżviluppaw il-ħiliet prattiċi meħtieġa f'dan il-qasam. Dawn il-ħiliet jiġu msaħħa bl-esperjenza tax-xogħol, fl-apprentistat. Il- kors jikkonsisti f'numru ta' suġġetti relatati mal-ħilijiet ewlenin u dawk vokazzjonali, li jiġu mgħallma ġol-workshops u l-laboratorji. Dan il-kors jipprovdi bażi tajba għall- opportunitajiet fl-inġinerija u jista' wkoll iservi bħala progressjoni għall-korsijiet flivell erbgħa tal-inġinerija
Career Opportunities:	Assistant Electrician, Assistant Technician, Machine Operator
Entry Requirements (Refer to Prospectus /	Applicants are expected to have completed the one-year ALP programme and obtained at least an MQF Level 1 in Maltese, English and Mathematics and an MQF Level 2 in TWO vocational subjects forming part of the ALP Programme.
Course Page on MCAST website)	Applicants must present an official document, showing a positive clearance following a Colour Vision Assessment / Test, as approved by REWS as the Regulatory Authority in this area.
Other Notes related to this Programme, and which are to be taken note of	When submitting online application for this course, a scan of the original and official Colour Vision Test result needs to be uplaoded together with all other documentation required.
Programme Learning Outcomes (Refer to Programme	At the end of the programme the learner is able to 1. Identify the basic requirements in terms of knowledge, skills and competences related to the vocational subject area chosen. 2. Perform basic techniques related to the vocational subject of choice under



Specification)	<ul> <li>supervision.</li> <li>3. Apply basic techniques related to the vocational subject of choice in a practical setting, either in a laboratory, in a workshop or in a workplace setting.</li> <li>4. Use standard tools and equipment in line with safety procedures.</li> </ul>
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 <u>https://www.mcast.edu.mt/college-documents/</u>
	The Programme Regulations pertaining to this Programme's MQF/EQF level available at: link <u>https://www.mcast.edu.mt/college-documents/</u> , apply.
Grading System	All MCAST programmes adopt a Learner-centred approach through the focus on Learning Outcomes. The assessment of MCAST programmes is criterion-referenced

MCAST					
	and thus assessors are required to assess learners' evidence against a pre- determined set of Learning Outcomes and Assessment Criteria.				
	For a student to be deemed to have successfully passed a unit, a minimum of 50% (grade D) must be achieved.				
	All full time units are individually graded as follows: A* (90-100) A (80-89) B (70-79) C (60-69) D (50-59) Unsatisfactory work is graded as 'U'.				
	Work-based learning units (where applicable) are graded on a Pass/Fail basis only.				
	Some units which follow industry standards and regulations may also be graded on a Pass/Fail basis as per programme regulations referred below.				
	Detailed information regarding the grading system may be found in the Programme Regulations pertaining to this programme's MQF/EQF Level available at: <u>https://www.mcast.edu.mt/college-documents/</u> (Refer to DOC 003, 004 and 005)				
	Where a student will not make it to the Final Certification achievable				
	from this Programme of Studies (as per Programme Regulations), one				
Exit Point	might wish to look into Exit Point possibilities as may be applicable to				
(where and as applicable)	this programme for studies. Further information, is available at				
	https://www.mcast.edu.mt/college-documents/, kindly refer to DOC 077				
	<i>Procedure for the processing of Claims for Certificates at Interim Exit</i> <i>Points.</i>				
	The MCAST Career Guidance Team, offers the service of qualified and				
	experienced Career Advisers who will be very willing to discuss with				
Contact details	potential applicants the course which best achieves one's career				
for Further	ambitions, as well as exploring one's education route, or similar.				
Learning Opportunities					
opportunities	MCAST Career Guidance Tel: 2398 7135/6 Email: <u>career.guidance@mcast.edu.mt</u>				
Regulatory Body/ Authority Contact (where applicable - in the ca leading to Regulated Profess	t Details se of a programme				

Programme	Unit Code	Unit Title	ECTS	Year	Semester
Structure	ETFRN-305-	Technical Drawings,	5	1	1 & 2
	2301	Calculations & Setting Out			
	ETFRN-305-	Practical Joinery Skills	5	1	1 & 2
	2304				
	ETFRN-305-	Practical Furniture Skills	5	1	1 & 2
	2305				
	CDKSK-206-	English	6	1	1 & 2

DOC 438 REV A MCAST PROGRAMMES PUBLIC INFO TEMPLATE (FULL TIME)



2307				
CDKSK-206-	Mathematics	6	1	1&2
2308				
CDKSK-206-	II-Malti	6	1	1&2
2309				
CDKSK-206-	Community Social	6	1	1&2
2312	Responsibility		4	1.0.0
CDKSK-206-	Science and Technology	6	1	1&2
2311	laferra di su Teslar e le ma	0	4	1.0.0
CDKSK-206- 2310	Information Technology	6	1	1&2
ETHVA-305-	Occupational Safety in the	5	2	1 & 2
2306	construction industry	5	2	ΙαΖ
ETFRN-305-	Woodwork Materials and	5	2	1&2
2302	Technology	5	2	102
ETFRN-305-	Alteration, Repair and	5	2	1&2
2303	Renovation of Joinery	U	-	. ~ 2
	Products and Structures			
ETAPP-306-	Vocational Competences in	6	2	1&2
2306	Joinery and Furniture Making			
CDKSK-304-	English	4	2	1&2
2313				
CDKSK-304-	Mathematics	4	2	1&2
2314				
CDKSK-304-	II-Malti	4	2	1&2
2315				
CDKSK-304-	Community Social	4	2	1&2
2501	Responsibility		-	1.0.0
CDKSK-304-	Science and Technology	4	2	1&2
2317	Information Tasky along	4	2	1 9 0
CDKSK-304- 2316	Information Technology	4	2	1&2
 2310				

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



#### MINIMUM CREDITS FOR QUALIFICATIONS AT DIFFERENT LEVELS

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

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

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



#### **APPENDIX 2**

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

#### EXAMPLES OF QUALIFICATION TYPES AT A SPECIFIC MQF LEVEL

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

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

# ETELE-303-2304: Health and Safety

Unit Level (MQF/EQF): 3 Credits: 3 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 75

### Unit Description

The unit introduces effective and safe work to learners, focusing on their wellbeing, on prolonged life of tools and equipment and on economic aspects of work. The primary goal of the unit is to introduce basic working practices in engineering and potential hazards involved. The learner will be introduced to EU regulations adopted for engineering activities and for vocational training. This unit provides learners with knowledge of material and equipment handling, as well as the use of appropriate personal protective equipment (PPE), and their classification: protection of respiratory organs, skin, eye and hearing, protective clothing and ensembles. Learners will become aware of the hazards and risks associated with different engineering tasks, working environments (for example working with high voltages, and static-sensitive devices), use of tools and equipment (both common and special), and working with dangerous materials and substances. The unit covers ways of avoiding hazards and ways to respond correctly and swiftly in case of an incident both in theory and in 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 successful professional in engineering.

# Learning Outcomes

- 1. Interpret the basics of occupational health and safety
- 2. Identify a safe working environment whilst using Personal Protective Equipment (PPE) appropriately
- 3. Carry out an engineering task according to safety standards.

# ETELE-305-2301: Principles of Electro-Technology

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

## **Unit Description**

This unit covers two areas: fundamentals of electricity and electrical circuit theory. Fundamentals of electricity begin with the simplified electron theory including atomic elements and free electrons, the charge and attraction, Coulomb's law, followed by basic properties of conductors, insulators and semiconductors, and ending with the practical principles of the current, voltage and resistance. Electrical symbols and mathematical prefixes are associated to each of the terms. Based on these fundamentals, a simple electrical circuit theory is defined starting from the Ohm's law. Resistance, voltage and current measurements by digital multi-meter are explained with basic measurement principles.

This is followed by practical workshop including the building of simple electrical circuits calculating the expected value of the current and measuring the actual resistance, voltage and value of the current. DC series and parallel circuits are explained first in theory and then in practice.

Electromagnetism includes explanation of magnetic flux, magnetic characteristics of material, relation between current and magnetic field, Faraday's law and forces in magnetic field. Finally, the basic electronic components (diodes, different types of transistors) are explained. The methods for solving some simple analogue circuits are explained.

## Learning Outcomes

- 1. Explain the fundamental principles of electricity.
- 2. Understand basic methods for the analysis of electrical and electronic circuits.
- 3. Recognise basic characteristics related to magnetism and simple motor and generator theory.
- 4. Take practical measurements and analyse simple circuits.

# ETELE-306-1404: Electrical Principles in Building Service Engineering

Unit Level (MQF/EQF): 3 Credits: 6 Delivery Mode: Face-to-Face Learning Total Learning Hours: 150

# Unit Description

Building services engineering comprises mechanical engineering, electrical engineering and plumbing or public health (MEP) engineering, with electrical practice tightly linking them into a functional area of technology.

The use of electricity is an essential part of life in the modern world. Electricity provides people with the means to energise many devices, systems and processes that are a part of our technological environment. Electricity, combined with these technologies, is used to transfer energy, to provide mechanisms for control and to transmit information in a variety of forms. Basic electrical theories need to be understood and considered by all those involved in the design or installation of plant, equipment, machinery, control systems or the electrical circuitry that is required to power both mechanical and electrical services within buildings.

In this unit learners will gain essential underpinning knowledge through studying the form and function of electrical devices. They will investigate various ways of transfer, modification, transformation, and control of electrical energy. Learners will also be able to distinguish between the requirements for single and three-phase circuits, and will develop the understanding of fundamentals such as the difference between analogue and digital signals, and the relevance of these to control systems.

## Learning Outcomes

- 1. Identify tools and use them safely and carry out simple electrical tasks.
- 2. Carry out preparation and installation of lighting wiring systems for domestic installations.
- 3. Carry out preparation and installation of a power wiring system for a domestic installation.
- 4. Carry out testing procedure.

# CDKSK-206-2307: English

Unit Level (MQF/EQF): 2 Credits: 6 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 150

### Unit description

In this unit, the importance of communicating in our second language is highlighted as both a necessity for life as well as for education and work. The unit is built with the view that communicative competencies are the targets of the teaching process. The unit aims to empower and help students to develop communicative competences through a range of meaningful activities presented in the classroom.

Communicating in English considers all four language skills of listening, speaking, reading and writing in meaningful situations or contexts with different objects to meet one's own communication needs or social communication requirements. Communicative competencies are analysed and practised, closely related to themes and topics in a meaningful, contextualised environment. Emphasis is placed on knowing how to use a language rather than just knowing about a language.

This unit is targeted at learners proceeding from Level 1 (therefore considering successful completion of Level 1 English) as well as those whose entry level is directly at Level 2. It is assumed that no entry qualifications such as SEC English (Ordinary Level) are necessary for learners to undertake this unit. This unit is internally assessed and verified. Assessment is carried out through assignments based on the Learning Outcomes below.

#### Learning Outcomes

- 1. Listen to connected speech on a range of vocational topics.
- 2. Speak effectively using appropriate register and vocabulary during communication scenarios to deliver a clear message.
- 3. Read a level-appropriate given text to identify suitable responses.
- 4. Produce organised level-appropriate text in paragraphs of simple, complete and syntactical sentences.

# CDKSK-206-2308: Mathematics

Unit Level (MQF/EQF): 2 Credits: 6 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 150

### Unit description

Mathematics is a universal language and an important tool in everyday life. From a vocational education and training perspective, mathematics is an important subject due to its direct and indirect uses in various vocational practices. Mathematics helps students improve their problem-solving skills and supports their logical reasoning.

The aim of this unit is to help students reinforce their basic mathematical knowledge and develop their skills to endure and further their studies in vocational education.

In a supportive environment, students will be challenged to understand mathematical problems, reflect on the solutions that can be used, attempt an answer and check the validity of the answer to the problem.

In addition, considering the importance of technology in today's world, technological tools such as 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 will be able to apply simple mathematical techniques in solving problems and to describe the reasons behind the mathematical arguments used.

#### Learning Outcomes

- 1. Use the basics of the number system.
- 2. Carry out numerical calculations.
- 3. Perform basic algebraic manipulations.
- 4. Draw and work with basic shapes and objects.
- 5. Use and convert basic units of measure.
- 6. Collect data and represent it graphically.

# CDKSK-206-2309: Il-Malti

Il-Livell tal-Unità: (MQF/EQF): 2 L-Għadd ta' Kreditu: 6 Mod ta' Tagħlim: Preżenti Total ta' Sigħat ta' Tagħlim: 150

# 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 taxxogħol.

Din l-unità hija msejsa fuq l-erba' ħiliet principali tal-lingwa: 1) il-Qari; 2) is-Smigħ; 3) il-Kitba u 4) it-Taħdit. L-għan ewlieni 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 f'din l-unità jkompli jibni fuq il-ħiliet miksuba fl-unità tal-ewwel livell. F'din l-unità, l-istudenti se jkunu qed ikopru materjal li ma jibqax bażiku imma li javvanza kemm fil-kontenut u anki fit-tul tiegħu. F'dan il-livell, l-istudenti se jkunu mħeġġa u megħjuna jaħdmu b'aktar responsabbiltà u awtonomija.

Il-kuntest tat-tagħlim u t-tgħallim tal-erba' ħiliet jibqa' ġeneralment marbut malqasam vokazzjonali tal-istudenti. Għaldaqstant, f'din l-unità l-istudenti se jkunu preżentati principarjament 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 tal-ewwel livell, għalkemm xorta waħda jibqgħu temi ġeneralment 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 jkomplu jtejbu l-Malti miktub tagħhom, f'din l-unità se tkompli tingħata importanza lill-ortografija, b'enfasi fuq regoli importanti tal-grammatika. L-għan mhuwiex li l-istudenti jsiru familjari ma' listi ta' termini grammatikali jew li l-istudenti jaħdmu eżerċizzji ripetuti tal-grammatika. Lgħan hu li jkunu jafu jħaddmu regoli importanti 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.

# II-Kisbiet mit-Tgħallim

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

- 1. Jidentifika t-tifsir primarju ta' testi moqrija aktar impenjattivi.
- 2. Jagħraf il-messaġġi ewlenija ta' kuntesti varji ta' smigħ aktar impenjattivi.
- 3. Jipprodući kitbiet aktar impenjattivi dwar suggetti familjari u s-settur vokazzjonali.
- 4. Jikkomunika b'Malti tajjeb u b'mod kunfidenti dwar suġġetti differenti permezz tat-taħdit.
- 5. Japplika regoli importanti tal-grammatika għal aktar tisħiħ fl-ortografija.

# CDKSK-206-2312: Community Social Responsibility

Unit Level (MQF/EQF): 2 Credits: 6 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 150

### Unit description

This key skill presents an opportunity for MQF level 2 learners to work upon their selfawareness, whilst contributing within a contained social environment. Learners will take time in identifying aspects of their personal self which might be seen as advantageous, and others which require attention to promote further growth. This information is to be utilised during the process of community work opportunities identification, as learners will be required to match their skills with a potential preference. The journey of identifying possible opportunities to initiate and conduct a community work experience will be mapped in advance through the development of a plan of action. A particular dedication towards compiling and abiding to classroom ground rules will directly address the need to practice and hone self-management skills and capabilities.

In line with self-regulation, the learners will be given the opportunity to practice upon their public speaking skills and the development of any tools which might boost and increase success in conveying one's message. Apart from the regular contact time, opportunities for public speaking will be presented during most of the assessment.

Learners will also be presented with multiple opportunities to conduct self-evaluation exercises - these will be regularly promoted during assessment periods, starting from an individual interview performance, followed by regular behaviour performance, and finishing with a public speaking performance evaluation. Educators will guide the learners into practicing and understanding the importance of self-evaluation, as apart from increasing one's chances for employability, this brings forth numerous opportunities for growth.

#### Learning Outcomes

- 1. Execute a plan in preparation for a community work initiative.
- 2. Demonstrate self-reflective capabilities.
- 3. Carry out public speaking in front of a concise audience.
- 4. Demonstrate the real-time practice of rules and regulations.

# CDKSK-206-2311: Science and Technology

Unit Level (MQF/EQF): 2 Credits: 6 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 150

## Unit description

In this MQF Level 2 key skill, the learners will be offered three core learning outcomes. Core learning outcomes are compulsory and will be the same for every course followed at this level. The first part of this unit specification enables learners to explore the role of science in fuelling technology. Because of science, we have complex devices like cars, X-ray machines, computers, and phones. But the technologies that science has inspired include more than just hi-tech machines. The notion of technology includes any sort of designed innovation. Whether a flu vaccine, the technique and tools to perform open heart surgery, or a new system of crop rotation, it's all technology. Even simple things that one might easily take for granted are, in fact, science-based technologies: the plastic that makes up a sandwich bag, the genetically-modified canola oil in which your fries were cooked, the ink in your ballpoint pen, a tablet of ibuprofen — it's all here because of science.

Learners will then go on to deal with sustainable energy in the Maltese Islands. The learner will review different sustainable measures both already available like photovoltaic panels and solar heater and also future possibilities like offshore wind farms.

In the third part of this unit, the learner will be taught how to formulate scientific questions and how to use these questions to understand scientific concepts. The scientific concepts to be investigated will be identified according to the learners' personal and/or vocational interests. The learners will ask scientific questions, make predictions about their findings and learn how to present the results obtained from their investigation.

# This unit has five other elective learning outcomes, from which one must be selected by the institute.

Depending on the selection of the elective criteria, the learners may have the opportunity to understand basic chemical formulae. Also, they will understand Investigate the types of science related business in the Maltese islands and their socioeconomic impact. Another elective is concerned with safety at the workplace. The learner will appreciate the availability and use of health and safety practices, safety clothing and other equipment. 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 visit, the learners will be empowered evaluate critically the impacts of the area related to their vocational practice. Finally learners may have the opportunity to explore organs and organ systems in more detail while also seeing the effects of daily practices on such systems.

# Core Learning Outcomes

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

- 1. Apply science to enhance the quality of everyday life (technology).
- 2. Identify the impact of sustainable measures for electricity generation in the Maltese Islands.
- 3. Formulate simple scientific questions to understand scientific concepts.

## Elective Learning Outcomes

- 1. Recognise basic chemical formulae.
- 2. Investigate the application of science in the agriculture and food business sector in the Maltese Islands.
- 3. Investigate health and safety at the work place.
- 4. Carry out a fieldwork session.
- 5. Identify the link between the living world and everyday life situations.

# CDKSK-206-2310: Information Technology

Unit Level (MQF/EQF): 2 Credits: 6 Delivery Mode: Fully Face-to-Face Learning Total Learning Hours: 150

#### Unit description

This unit is made up of a number of competences including the competence to use personal computers; the competence to manage efficiently a personal computer; the competence to operate effectively within the operating system and the competence to make productive, creative, and efficient use of the main office application software packages: word processing software, spreadsheet software, presentation software, web-browsing software & e-mail management software.

Learners will also be able to demonstrate basic knowledge skills and values of artificial intelligence, its uses, advantages and disadvantages with special attention to machine learning and computer vision in the real-world.

This unit is designed to ensure that learners are not only taught the knowledge and skills associated with productive, creative, and effective use of personal computers but should be given sufficient opportunities to find, exchange and share information. This should also ensure that learners develop the proper and correct attitudes associated with the use of information and ICT.

This unit should guide the learners to have a broad understanding of how ICT can help their learning, their work, and their social life. Learners will start to develop the ability to decide when and how to use ICT and be aware of the limitations associated with this use.

## Learning Outcomes

#### Only 5 electives from 6 learning outcomes need to selected

- 1. Manage computer essentials and file management.
- 2. Recognise online essentials and tools for students.
- 3. Use a word processing application to accomplish basic everyday tasks.
- 4. Use a spreadsheet application to input, format data and prepare charts.
- 5. Create basic presentations using presentation software.
- 6. Use Artificial Intelligence and realize its applications in everyday and industry use.

# ETELE-305-2303: Installations (Buildings and Structures)

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

## Unit Description

In this unit, learners will revise practical sides of Unit 1: Working Effectively and Safely in The Electro Technical Environment within buildings and structures, with the legal responsibilities, followed by gaining skills in using related sources of technical information and communications. The basic principles of electro - technology are reviewed by applying common technology concepts related to the circuits and cables, used in different tools and equipment for electro - technical applications in construction engineering. It is followed by health and safety consideration at the workplace. Additionally, learners will be introduced to electrical principles with an emphasis on poly-phase or three-phase electrical systems and over current, short circuit and earth fault protection. The main focus is on the installation in buildings and structures, with statutory regulations and codes of practice on electrical installations and wiring systems. Here, the supply systems, electrical installation, components and functions are defined leading to different types of wiring enclosure and the factors that determine the choice of wiring systems. In particular, grounding in apartments and complete buildings, planning and laying electrical installations by using wires and cables, basics of communication and signal installations are going to be demonstrated and guided with supervision in laboratory. Special arrangements required for baths or showers, construction, special installation sites, and agricultural and horticultural premises will be elaborated in detail. A set of practical activities, guided as well as unguided, are going to ensure the knowledge on protection from electric current, such as short circuit protection, over-current protection, hazardous voltages, wiring safety codes, basic protection and fault detection, and additional protection by using Residual-Current Device. These pave the ground for further education towards certification in electrical installations.

## Learning Outcomes

- 1. Understand the requirements for commissioning electrical systems.
- 2. Understand different types of wiring enclosure and the factors that determine the choice of wiring systems.
- 3. Apply wiring and grounding arrangements for domestic applications.
- 4. Apply the requirements for inspection and testing of electrical installations.

# ETELE-306-1405: Electrical Installation Standards and Components in Building Services Engineering

Unit Level (MQF/EQF): 3 Credits: 6 Delivery Mode: Face-to-Face Learning Total Learning Hours: 150

## **Unit Description**

Nowadays, we understand electricity and how it works, transforming it into a tool that has allowed our world to become a comfortable and civilized place. Television, communications, the Internet, lighting, control technologies and many other things would be impossible without electricity. Yet, it is still dangerous, causing fires or even death by electrocution.

The presence of water can make it more dangerous. At high voltages, it can leap several feet through the air and kill anyone unfortunate enough to be in the vicinity. In this unit, learners will be introduced to installation standards and components. Installation standards exist to keep electricity safe and prevent harm. In this unit learners will become aware that the installation industry has to comply with a vast number of regulations and standards. Anyone wishing to become competent in this industry must become familiar with the complete range of regulations.

In fact, the industry has a defined title for anyone practicing in this field -a competent person. In these units, learners will cover the range of regulations and practices. This will set them on the path to be competent in using electrical energy safely. In particular, learners will learn about definitions and applications of home, industrial and construction engineering components, such as fuses, switches, circuit breakers, contactors, relays, timers, up to the rules and practice of installing, wiring and engaging PLCs, and UPSs and terminals.

## Learning Outcomes

- 1. Work safely in an electrical installation environment.
- 2. Carry our preparation and installation of industrial extra low voltage systems.
- 3. Carry out preparation and installation of metallic wiring systems.
- 4. Carry out preparation and installation of low current single / three phase circuits and basic electric motor maintenance.

# **ETELE-305-2302:** Principles of Electrical Science

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

## Unit Description

This unit covers three main areas and project work.

The first topic covers the principles of waveforms. It shows different waveforms and refers to the different points. It moves to explain the behaviour of ac voltage and current when loads of different nature are connected across ac supply. The topic gives a brief idea of the behaviour of current and voltage when a circuit is connected in series and in parallel. It also deals with ac power and its different behaviour. At this level it is not the intention of this topic to investigate ac theory in detail, but the intention is to give a person working in the electrical field an idea of the performance of ac supply.

This second topic in this unit is three phase systems. Here as well, it is not the intention of this topic to deeply understand the theory behind the issue but to give a learner who is on the field information to operate safely in such environment.

The third topic in this unit deals with motors and gives the basic requirements to a person on the field enough information to skilfully handle motors. In this part, the learner is exposed to different types of motors. The learner is encouraged to recognize the motor as well as to connect different types and configurations of motors.

The last topic in this unit, students are required to produce a small project. The intention is to expose the learners to electronic devices and their applications. It also gives the learner basic experience in the field of electronics.

#### Learning Outcomes

- 1. Indicate differences across loads when connected across ac supply.
- 2. Identify basic properties of a three phase supply system.
- 3. Identify and connect different types of electrical machines.
- 4. Use simple electronic devices to produce a project.

# 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

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

# 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

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

## **Elective Learning Outcomes**

- 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-304-2315: 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 taxxogħol.

Din l-unità hija msejsa fuq l-erba' ħiliet principali tal-lingwa: 1) il-Qari; 2) is-Smigħ; 3) il-Kitba u 4) it-Taħdit. L-għan principali 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 precedenti 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 principarjament 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. Jipprodući kitbiet b'temi teknići u aktar kumplessi.
- 4. Jikkomunika b'Malti tajjeb dwar suġġetti teknići u aktar kumplessi permezz tattaħdit.
- 5. Japplika r-regoli tal-grammatika tajjeb għal tisħiħ fl-ortografija.

# CDKSK-304-2318: 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 journal, the learners will be drafting a personal biography, which highlights some of their achievements and aspirations. Journal inputting will also feature the rationale and planning phases prior to the initiation of a community work experience. Additional information and descriptions 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 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 PowerPoint.

Additionally, learners will also be presented with multiple opportunities to conduct self-reviews and evaluations during assessment periods, starting from the journal, followed by the teamwork activity, and finishing with 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 chances for employability, this brings forth numerous opportunities for growth.

## Learning Outcomes

- 1. Organise selections of information within a journal.
- 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-304-2317: 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**

- 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.

# 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:

- 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.