MQF/EQF Level 7

PD7-17-21

Master in Vocational Education Applied Research 4.0

Course Specification

Course Description

The Master in Vocational Education and Training Applied Research 4.0 is intended for professionals who are involved in education within a vocational context. It provides pedagogical training through an experiential approach by bridging the contexts of education and industry, both of which influence and determine the nature and scope of vocational education. Participants are provided with opportunities to extend their knowledge, thinking and behaviours to become more effective professionals within their area of expertise. The Master is a proactive response, shifting from the traditional education programmes to innovative practices, linking teaching and action research based on the Scholarship of Teaching within the context of vocational education in Further and Higher Education.

Programme Learning Outcomes

At the end of the programme the student will be able to:

1. *A systematic understanding of knowledge and a critical awareness of the disciplinary-based perspectives of the field of education in general and Further and Higher Vocational Education;*
2. *A comprehensive understanding of techniques applicable to the teaching profession within the context of Vocational, Further and Higher Education environment;*

3. *An originality in the application of knowledge showing how established, researched and newly discovered techniques can be used to advance their knowledge and understanding as well as further develop their teaching-learning skills to propose new innovative effective high level approaches reflecting the challenges of the 4th Industrial Revolution;*

4. *A conceptual understanding that enables the learner:*
   - *To evaluate critically current education research and advanced studies on the scholarship of teaching and learning with special focus on the requirements of the emerging Vocational Education 4.0;*
   - *To evaluate and critique methodologies through grounded research cycles in vocational contexts;*
   - *To propose new hypothesis / models promoting the scholarship of teaching and learning.*

Entry Requirements

A Bachelor's degree in the relevant subject area;
OR
Be a full-time academic member of staff at the Malta College of Arts, Science and Technology;
OR
Be a full-time academic member of staff in another vocational education institution.

Other Entry Requirements

Applicants must do two practice placements where they lead learning for a total of 13 weeks in an educational institution, as well as an industrial placement of 40 hours where they will fulfil duties in an area relevant to their area of specialization. All eligible candidates shall follow the Post-Graduate Certificate in Vocational Education unless they are already in possession of another teaching qualification recognised by the board towards Recognition of Prior Learning (RPL), in which case such candidates will register for the Award in Vocational Education.

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: 3000 hours

Mode of attendance: Blended Learning

Duration: 3 Years

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 007 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 007 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: 2398 7135/6
 Email: career.guidance@mcast.edu.mt

Current Approved Programme Structure

Unit Code	Weekend Title	Unit Titles	ECTS
Year 1			
CDVET-715-2101	**Contemporary Debates in Education: Educating for the fourth and future industrial revolutions**	Educational Philosophy - The Reflective Professional: Creating Knowledge in Action - 6 ECTS	15
		Teaching, Learning and Assessment in VET 1 (including teaching practice) - 6 ECTS	
		Research tools and Academic writing - 3 ECTS	
CDVET-715-2102	**Social Justice and Education: Robotising Employees vs Empowering Learners**	Educational Sociology – Social Inclusion and Equality in Education for the 4th Industrial Revolution – 6 ECTS	15
		Engaging with Digital Education toward Industry 4.0 - 6 ECTS	
		Pedagogy and Andragogy in Practice in a Work-Based Learning Context - 3 ECTS	
Year 2			
CDVET-715-2103	**Leading Research for Change in Vocational Education 4.0**	Policy and Practices in Education for the 21st Century – 6 ECTS	15
		Fundamentals of Research for Innovation in Vocational Education 4.0 – 6 ECTS	
		Pedagogy and Andragogy in Practice in an Industrial Context – 3 ECTS	
CDVET-715-2104	**Timeliness, Flexibility and Innovation: Responding to the 4th Industrial Revolution**	The Contribution of a Dynamic Vocational Curriculum to the Process of Education – 6 ECTS.	15
		Building Quality Teaching and Learning supported by a Quality Management System - 6 ECTS	
		Area Specialisation I - 3 ECTS	
CDVET-715-2105	**Applying Research to Teaching and Learning Processes in VET**	Applied Research: Group Project in a Work-Place Environment - 6 ECTS	15
		Teaching Employability - 6 ECTS	
		Area Specialisation 2 – 3 ECTS	
CDVET-715-2106	**Getting to the core of the Educational Process: Understanding and Supporting the VET Learner**	Teaching, Learning and Assessment in VET 2 (including teaching practice) - 6 ECTS	15
		Educational Psychology – Harnessing the potential of all - 6 ECTS	
		Mentoring: Emotional and Social Intelligence for Continuous Personal and Professional Growth - 3 ECTS	
Year 3			
CDDIS-730-1803	**Dissertation**		30
		Total ECTS	**120**

These units are delivered during study weekends.

MVEAR 4.0 Theme 1:
Contemporary Debates in Education:
Educating for the fourth and future industrial revolutions

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

Educational Philosophy – The Reflective Professional: Creating Knowledge in Action	Teaching, Learning and Assessment in VET 1 (including teaching practice)	Research tools and Academic writing
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

Education is, at its core, a normative social enterprise driven by fundamental social values together with imperatives of social justice, which shape educational theory, policy and practice. Being intentional, purposeful, and value driven, education involves, for all stakeholders, choices about a way of life. Education is an institutionalized human practice, hence a form of governance with consequential choices influencing educational purposes and goals, curriculum, pedagogy,	This unit provides an introduction to the delivery and assessment of units in a vocational institution for further and higher education. Participants will be introduced to important policy documents related to vocational education and training and they will be expected to critically examine these documents in view of the challenges of the 4th industrial revolution. Diversity has become the norm in the classroom, workshop or place of work and educators need to be equipped with the right knowledge, skills and competences to ensure	This unit is intended at guiding learners to obtain a good standard of academic writing. The unit is intended to provide learners with the opportunity to understand and apply a wide range of existing tools and resources, and engage them into academic writing skills.

The unit will enable learners to administer eLearning resources and platforms. The unit is intended to provide opportunities for learners to become aware and to explore different academic journals and |

organization and governance, and therefore require ethical and political justification.

It is also true that behind every educational institution and every teacher there is a set of beliefs, a philosophy of education, that influences how learners are taught. A philosophy of education represents answers to questions about the purpose of schooling, a teacher's role, what should be taught, how and to whom. On the doorstep of the 4th industrial revolution, and in the context of a Vocational, Further and Higher Educational Institution, such questions are not only pertinent but critical.

Self-determination demands that there should be deep reflection and rational deliberation on social values and imperatives of justice that inform the purposes and practices of education. Taking a philosophical approach constitutes a mode of inquiry and a discipline that enriches the capacity for reflection and rational deliberation in the

that all learners are included and catered for. The unit provides an opportunity to participants to evaluate different approaches to delivery and assessment, both formative and summative, to address this challenging diversity.

The unit emphasizes on the importance of reflection to improve own and peers' practices and to also contribute to the teaching community.

papers which are peer reviewed

The learners will also engage into workshops in collaboration with lecturers and the MCAST Library & Resource Centre. They will have the opportunity to become familiar with the wide range of resources, both on MCAST premises and online which assist in learning how to use other tools that shall assist them in their academic journey. Learners will also be exposed to different software that may assist them in managing data and analysing data.

In this unit the learners will have the opportunity to write a Statement of Intent and a research paper. They will be given the opportunity to follow an appropriate paper submission process, including learning about the appropriate set format and structure of the paper.

While lecturers will be facilitating this academic writing process, they will make sure that the learners are putting

study and practice of education in a 21st century democratic society.		together the different skills obtained through this unit, and hence making sure that the tools explored and mastered shall be used by learners to assist them in the formulation of an academic paper. With this practical, very hands on approach, this unit shall prepare learners to have the necessary skills to develop an academic piece of work and present it in an appropriate manner with the assistance of the necessary tools.

Learning Outcomes

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

LO1. Demonstrate knowledge and understanding of key concepts in philosophy. *LO2. Demonstrate knowledge and understanding of key concepts in the philosophy of education.* *LO3. Demonstrate capacity to critically analyse problems.* *LO4. Develop sophisticated arguments using academic evidence.*	*LO1. Examine policy documents related to education and training.* *LO2. Evaluate different approaches to teaching, learning for supporting diverse learners within own subject area in a vocational educational setting.* *LO3. Develop effective learning experiences through principle of formative and summative assessment.*	*LO1. Recognise the resources available for research and academic writing in education related research.* *LO2. Demonstrate skills of writing in an academic approach.* *LO3. Apply a range of tools necessary in educational research and academic writing.*

MVEAR 4.0 Theme 2:
Social Justice and Education:
Robotising Employees vs Empowering Learners

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

Educational Sociology – Social Inclusion and Equality in Education for the 4th Industrial Revolution	Engaging with Digital Education toward Industry 4.0	Pedagogy and Andragogy in Practice in a Work-Based Learning Context
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

| Social Inclusion and Equity in Education for the 4th Industrial Revolution concerns studies the relations between education and society at local and global levels. It is concerned with educational aims, methods, institutions, administration and curricula in relation to the economic, political, religious, social and cultural forces of the society in which they function. As far as the education of the individual is concerned, social inclusion and equity in | Learners learn in many ways. With the proliferation of technology, today's learners have become more tech-savvy and are able to use technology more effectively than previous generations. Inevitably teaching and learning skills and techniques are also changing with the proliferation of such new technologies and new learning environments | Andragogy in practice forms an integral part of the programme and is mandatory.

This module primarily focuses on the teaching performance using basic andragogical skills and techniques addressing a work-based learning environment. Thus, this module goes beyond the application of basic teaching skills and techniques. It focuses on the use of andragogical skills to train learners in |

education highlights the influence of formal and informal social life and social relationships on the development of personality putting emphasis on the need for empowering learners with a more critical and socially impactful approach.

This module offers a critical perspective on the organization of education and how it is delivered; the values and power relationships that underpin it; and the outcomes it produces. Learners will be introduced to a variety of sociology of education theories, which will give learners that critical edge necessary to evaluate education systems, processes and practices. Learners will explore issues and debates relating to the (re)production of inequalities (in relation to educational attainment, access and progression; issues of social class, gender, race and disability) and the factors that shape them.

The module examines the processes and structures in different sectors, such as general, vocational, and

such as eLearning and mobile learning.

This module has been developed to help participants understand and evaluate the benefits and challenges that the use of modern technology as a pedagogical tool may present.

The application of new technologies aims to cultivate motivation and independence in the learner while at the same time developing his/her creativity and critical thinking. The module investigates how new technology can be used to facilitate and enhance teaching and learning while taking into account different learning styles.

In a world constantly changing at exponential speed, lifelong learning has become fundamental to ensure employability and professional growth. Studying while in employment is becoming the norm, hence embracing technology can take learning to a new level by providing universal access to knowledge while challenging learners

collaborative practice, problem-solving and development of an entrepreneurial mind-set. At the same time it also offers an opportunity to the participant to apply what was learnt, planned and prepared to be delivered in class, workshops, laboratories and other work-based learning contexts.

Andragogy in Practice shall take a critical friend approach and is intended to continuously improve one's practice through the guidance of an assigned mentor. Thus the Teaching Observation Visits are intended primarily to give support to the participants, while at the same time providing them with an opportunity to reflect and self-evaluate their overall performance and practices. Moreover, these visits should help the participants identify both areas of competence and areas that need improvement.

One basic focus aims to assist learners to develop an assessment methodology as an

higher education, and in relation to lifelong learning, and the impact these have on learners from different social groups. Policy initiatives, such as those in relation to inclusion and education for all shall be explored from a macro-perspective (including the political and economic conditions that have shaped policy), the 'meso level' (the level of educational institutions) and at the 'micro level' (the level of the classroom and individual learners.

through collaborative learning and discussion. This however requires teachers to have a wider skills-set than in the past. While pedagogy remains a critically important part of teacher training, this module aims to equip candidates with the competences required in today's world as we migrate more towards self-directed learning being more open, flexible and individual while the teacher takes more the role of an enabler or facilitator of learning rather than a source of knowledge and instruction.

Whether digital content and technology are used to enhance classroom activity or whether these are used for blended or online course delivery, teachers need to learn how to manage content, online discussions and social interaction as well as identifying, using and at times even developing online learning tools to address the different learner needs in today's fast-changing educational sphere.

integral part of the teaching methodology. Thus, the teacher-participant is expected to explore different methods and approaches which include the active learning, collaborative learning and inductive teaching and learning, these being implemented in different learning environments. At the same time using diverse assessment modes and methods the teacher-learner evaluates the effectiveness of chosen teaching methods and skills on the learning of own learners. Interaction with learners and class management are two other areas which are crucial during the assessment of the performance of the teacher-learner.

This Module also provides an experiential learning experience where the participant builds own Portfolio documenting, an on-going professional growth within the field of Vocational Education 4.0. It also aims to invite peers and mentors to share comments and teaching experiences, providing

	Technology however presents its own challenges and modern teachers need to be able to discern the implications of using technology while critically evaluating literature, tools and systems available in order to harness the advantages, minimise disadvantages while becoming themselves contributors to knowledge to create a community of practice.	space where peers can build on the contributions of others. This is considered a step towards a more public and professional view of teaching as a scholarly activity.

Learning Outcomes

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

LO1. Demonstrate knowledge and understanding of the theoretical underpinning between educational processes and systemic inequalities.	*LO1. Design digital learning resources to facilitate an effective and inclusive learning experience empowering the learner towards own learning.*	*LO1. Demonstrate a professional and effective teaching performance in the implementation of contrasting teaching approaches in different learning environments applicable to the sector context of the subject area.*
LO2. Demonstrate capacity to critically evaluate a range of sociology of education perspectives and apply them to processes and practices in education.	*LO2. Moderate peer discussions through the use of technology and effective time management in a virtual environment.*	*LO2. Demonstrate a professional ability in using a teaching approach, addressing the training of learners in developing transversal skills required in employment.*
LO3. Process empirical and theoretical data, to develop sophisticated arguments having drawn on relevant theoretical perspectives.	*LO3. Critically investigate the impact of using technology-based tools and resources in teaching towards the development of self-directed learning.*	*LO3. Demonstrate an improvement in teaching performance responding to personal reflection and feedback from learners, peers and tutors.*
LO4. Contribute to the development of social equity and inclusive practices within a College environment.	*LO4. Contribute to the wider community through the use of technology in team collaboration.*	

MVEAR 4.0 Theme 3:
Leading Research for Change in Vocational Education 4.0

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

Policy and Practices in Education for the 21st Century	Fundamentals of Research for Innovation in Vocational Education 4.0	Pedagogy and Andragogy in Practice in an Industrial Context
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

"…policy is much more than a specific document or text. Rather, policy is both process and product. In such a conceptualization, policy involves the production of the text, the text itself, ongoing modifications to the text	In research, methodology aims to recommend methods and procedures that should be used in the generation of valid knowledge. Methodology is often defined as a discipline whose function is to examine the rationale, the philosophy to justify the selection of the methodology, and methods of data collection used in the production of valid knowledge. This unit aims to provide learners with the opportunity to experience	Professional development practice in industry allows teachers to spend a period of time with an employer, thus creating favourable circumstances for teachers to augment their professional knowledge, competences and expertise to their teaching work. Placement in industry offers an opportunity for the teachers to acquaint themselves with the industry's work processes, ethos, methods, tools and materials specified in the qualification requirements

and processes of implementation into practice."

Taylor *et.al. 1997, p.24-25*

Policy is what is intended and what is put, or not, into practice. This is because policies always encounter organizational arrangements and already set practices. Hence, unless policy and practice are taken together policies remain incomplete, in so far that they have to be implemented within already rooted existing practices.

Educational practices are often driven by a framework laid out by public policies. This in turn is determined not only by political decisions at national level but also at a global level. By implication, globalization is not fixed in time and space but is fluid and changes with major world events. In fact, transnational organisations such as EU, OECD, PISA, UNESCO etc., are a constant influence in educational policy at the

research in action, as they collaborate together to frame their research questions within the most adequate methodology; and then to select the appropriate methods of data collection for their research study. It explores and examines methodological principles helping them make their methodological preconceptions more explicit and open to critical reflection. It aims to enable research learners to develop a more reflective and critical approach to their research, engaging them in a continuous enabling reflective process leading to a solid justification of their chosen research methodology and methods.

This unit addresses the task of planning and conducting a master research thesis. It aims to help the research learner develop a clear sense of direction early on in the development of research, supporting them in organising, planning, monitoring and reporting their research findings.

The supervisory approach is that of mentoring and

of own vocational field. It provides an opportunity for the participant to engage in the practical application of content material of the course one teaches. Work placement empowers the teacher-participant's confidence in providing concrete examples of real situations in the working life, thus boosting the teacher's capabilities and enhancing his/her teaching competences.

The period at work placement aims to provide an opportunity to the teacher-participant to examine their role as vocational teachers and to view the education community from the outside stimulating their reflections on their own teaching performance.

In turn, the learner benefits indirectly from the teacher's work placement. The teacher at the workplace provides on-the-job learning outcomes for the learner. Teachers having gone through the workplace experience can utilise their updated knowledge to address the established

level of national systems as they hold countries accountable against set international indicators and benchmarks. This is even more so in the context of Vocational, Further and Higher Education, a strand often equated with the readdressing or reintegration of prospective human capital into employment, hence the economy.

Therefore, while national governments continue to own the authority to develop their own policies, this authority is affected by imperatives of the global economy, shifts in global political relations and changing patterns of global communication that are transforming people's sense of identity and belonging.

In the past two decades, global considerations have transformed the balance between economic efficiency and the social equity goals of education. The economistic reframing of education policy has placed a bigger emphasis on policies of education as the production of human

facilitating the development of the learner as researcher. The supervisor is available to help the learner at every stage, from formulation of the research questions through establishing methodologies, choosing appropriate methods of data collection, analysis of findings, discussing results, writing research report to presentation and possible publication of thesis.

While the supervisors help to improve the quality of the thesis and the educational experiences, they must also ensure that their learners' work meets the College established standards and the corresponding academic discipline.

The unit also provides a learning opportunity to delve deeper on ethical issues and political complexities as key aspects in educational research.

One key area of this unit is that through an experiential approach, the participants will, in turn, develop competences that empower them in assisting their own learners in their research process.

assessment criteria of the qualification with stronger relevance, through application of competences in working life.

The professional development practice provides the necessary tools, strengthening the teacher's ability to build learner proficiencies not only in content knowledge matter but also in the industry 4.0 skills with an emphasis on today's real-world industrial applications of creative thinking, problem solving and social interactions.

Andragogy in practice forms an integral part of the programme and is mandatory.

This Unit primarily focuses on the teaching performance using basic andragogical skills and techniques addressing a work-based learning environment. Thus, this Unit goes beyond the application of basic teaching skills and techniques. It focuses on the use of andragogical skills to train learners in collaborative practice, problem-solving and

capital to ensure the competitiveness of the national economy in the global context.

In this module learners will be accompanied through debates revolving around the education 4.0 related to the conceptions of education policy; the globalization of education, the economy and marketization of education; the regime of performativity; accountability vs enterprise; automation vs humanisation; 'fabrications' in education; policy analysis; the role of teachers in policy design and policy implementation. Learners will be invited to *read* policy (text, decisions, debates and silences) in education with a critical *eye* and to draw their informed conclusions before making new proposals.

development of an entrepreneurial mind-set. At the same time it also offers an opportunity to the participant to apply what was learnt, planned and prepared to be delivered in class, workshops, laboratories and other work-based learning contexts.

Andragogy in Practice shall take a critical friend approach and is intended to continuously improve one's practice through the guidance of an assigned mentor. Thus the Teaching Observation Visits are intended primarily to give support to the participants, while at the same time providing them with an opportunity to reflect and self-evaluate their overall performance and practices. Moreover, these visits should help the participants identify both areas of competence and areas that need improvement.

One basic focus aims to assist learners to develop an assessment methodology as an integral part of the teaching methodology. Thus, the teacher-

		participant is expected to explore different methods and approaches which include the active learning, collaborative learning and inductive teaching and learning, these being implemented in different learning environments. At the same time using diverse assessment modes and methods the teacher-learner evaluates the effectiveness of chosen teaching methods and skills on the learning of own learners. Interaction with learners and class management are two other areas which are crucial during the assessment of the performance of the teacher-learner.
		This Unit also provides an experiential learning experience where the participant builds own Portfolio documenting, an on-going professional growth within the field of Vocational Education 4.0. It also aims to invite peers and mentors to share comments and teaching experiences, providing space where peers can build on the contributions of others. This is considered a step towards a more public and

		professional view of teaching as a scholarly activity.

Learning Outcomes

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

LO1. Demonstrate knowledge and understanding of education policy;	*LO1. Engage with literature to evaluate research methodologies and methods ensuring appropriate choices for research question in context.*	*LO 1. Analyse the professional development achievements of own knowledge and competences.*
LO2. Demonstrate knowledge and understanding of contemporary debates in education policy;	*LO2. Design a workable plan for the thesis.*	*LO 2. Present own experiences and development ideas to colleagues and learners.*
LO3. Demonstrate capacity to critically analyse 'texts' within the education debate;	*LO3. Demonstrate an understanding of ethical issues and political complexities in the production of knowledge through research.*	*LO 3. Develop content and methods of teaching relevant for the present and future generations of learners toward employment.*
LO4. Develop sophisticated arguments using academic evidence related to education policy and practice;	*LO4. Assist in critiquing the research process of learners.*	
L05. Contribute to the development of innovative policies and practices within vocational, and further and higher education		

MVEAR 4.0 Theme 4:
Timeliness, Flexibility and Innovation: Responding to the 4th Industrial Revolution

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

The Contribution of a Dynamic Vocational Curriculum to the Process of Education	Building Quality Teaching and Learning supported by a Quality Management System	Area Specialisation I
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

As society evolves, curricula in all their guises must be responsive to arising changes. This unit explores debates around the purposes, nature and scope of the curriculum in contemporary society and equips all those with an interest in the field of vocational education, further and higher education with the knowledge, skills and competences necessary to accommodate the challenges and opportunities that arise in the 21st century education.	Concepts such as quality control, quality assurance and quality management are often perceived as technocratic top-down approaches which frequently fail in higher education (Sursock, 2004). Ongoing research shows that over the years, initiatives have focused on the quality assuring of organizational processes. The emphasis should however be on change rather than on control, on development	This unit aims to focus on the application of andragogical skills and techniques in diverse sector areas of study which though not limited, include the following: Area 1: Applied Sciences; Area 2: Business Management and Commerce; Area 3: People Focus: Hair and Beauty, Care, Sports; Area 4: Creative Arts; Area 5: Engineering and Transport; Area 6: Information Technology and Communication;

Learners will be encouraged to relate the unit to their own field of interest, in particular post-16 vocational, further and higher education and training and community and work-based learning environments. Learners will be expected to critically engage in the active synthesis of theory and practice in contemporary education and analyse how the way in which the curriculum is led and managed, influences the processes of learning and teaching as well as educational outcomes learners' employability prospects. Learners will engage with a wide body of literature to explore the questions: What is a curriculum? What are the purposes of the curriculum? How are different curriculum models linked with these purposes? How does policy and leadership shape the way the curriculum is constructed and delivered? What influence does curriculum leadership have on learning?

This unit will help learners understand, analyse,

rather than on assurance, and on innovation rather than on compliance.

This unit takes into account the need for the teacher-learner to have a comprehensive knowledge of the various aspects of quality. This unit will help the participants move from debating regulations to a more holistic debate on organisational culture.

Another aspect of quality is the need for top-down and bottom-up interaction as the key to the development of quality culture.

It is recognised that in order to build trust, academic staff need to be better informed on the various aspects of quality and how quality management systems directly or indirectly impact on the input and output of their teaching and assessment processes.

For an organisation to function effectively, it has to determine, apply and manage numerous linked processes in order

Area 7: Key Skills.
The unit considers the need for the teacher-learner to have a comprehensive knowledge of the industrial context applicable to the vocational study programme of the learners. In Year 1, this unit provides an opportunity for the teacher-learners to apply the pedagogical knowledge content in the planning and preparation of the learning activities. Keeping in mind this course is aimed for teachers teaching in a vocational context, further and higher learning environment, this study unit allows space for design and development of lessons at different physical learning spaces such as on-campus e.g. classes and workshops and off-campus work-based learning settings as encountered during work-placements, apprenticeships and internships.
Assessment is a crucial aspect of a learning process. Understanding the curriculum framework and how to choose

debate and evaluate viewpoints, improving their research skills, as well as helping them to contribute ideas on what young people need to learn in 4.0 era, and most importantly, why.	to produce the desired outcome. Building trust through Quality Assurance facilitates the development of integration of these processes.	effective assessment methods and tools to reflect study areas within the industrial context, is vital in vocational education for the 21st century. During the implementation of this specialized unit, the teacher-learners are given an experiential learning opportunity to devise tools and techniques of planning for both formative and summative assessment within one's own specialisation area. The unit offers an opportunity to the learners to develop a self-reflective approach to own teaching practice.

Learning Outcomes

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

LO 1. Critically review the rationale of a Curriculum within the context of a Vocational Education and Training Provider.	*LO1. Engage with literature, legislation and policy documents on quality assurance.*	*LO1. Demonstrate a comprehensive understanding of the real-world industrial context applicable to the vocational educational study area.*
LO 2. Evaluate the use of labour market intelligence to support the development of an academic plan for curriculum development.	*LO2. Explore the dimensions of quality in education within a vocational learning environment.*	*LO2. Demonstrate a systematic approach in planning and preparing inclusive effective teaching-learning activities based on researched pedagogical and andragogical techniques.*
LO 3. Critically review curriculum models which help designers map out the rationale of a curriculum.	*LO3. Develop a systematic approach towards developing and enhancing Quality in own teaching-learning environment.*	
LO 4. Assess the process of curriculum development and implementation to further improve the current curriculum framework.	*LO4. Contribute to the wider scholarly community on the subject of quality teaching and learning.*	*LO3. Prepare systematically to conduct formative and summative assessment of learning as an integral approach to teaching.*
LO 5. Contribute to the development and disseminate of innovative curricula within College environment.		*LO4. Develop a self-reflective approach to own teaching practice.*

MVEAR 4.0 Theme 5:
Applying Research to Teaching and Learning Processes in VET

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

Applied Research: Group Project in a Work-Place Environment	Teaching Employability	Area Specialisation 2
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

The group project creates a 'virtual' operational environment bringing together teacher-participants from various sectors and disciplines into one integrated working team. The purpose of this exercise is to develop the participant's ability to self-reflect on own skills and performance in a team learning setting. The benefits of this exercise are the personal development of the participant and the	Employability is a term which is used in different contexts and settings. Yorke (2004) defines employability as "a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy". Given the pace of change, individuals, communities and societies are increasingly recognising that they cannot count on	This unit aims to focus on the application of andragogical skills and techniques in diverse sector areas of study which though not limited, include the following: Area 1: Applied Sciences Area 2: Business Management and Commerce Area 3: People Focus: Hair and Beauty, Care, Sports Area 4: Creative Arts Area 5: Engineering and Transport

group's overall performance which is enhanced through the input of each participant to the team.

Each team member is given responsibility for the detailed design or improvement of a significant aspect of the institution operational environment (for example: developments in the curriculum and quality procedures). The team is required to run project meetings, produce proposals and detailed analysis of the proposal. Problem solving, and project coordination must be undertaken on a team and individual basis. At the end of the project, groups are required to report and present findings to a Board.

This element of the course is both realistic and engaging, and places the teacher-participant in a professional role as a VET teacher moving towards the 4th Industrial Revolution. The role of the VET teacher is no longer to work autonomously but rather to cooperate with other teachers to plan, coordinate and carry out teaching together.

The Institution may provide a list of possible Titles of

the current patterns of employment and labour market needs to address the future needs of the 4th industrial revolution. The rationale for transferrable employability skills is based on the essential requirement for individuals to think critically, communicate effectively, solve problems creatively, work in a team (Teamwork), and develop adaptability and learning to learn. Within this context, the aim of this unit is to develop essential competences for VET teachers in order to think critically and apply effective teaching strategies in the field of employability for the 21st century.

Area 6: Information Technology and Communication

Area 7: Key Skills

The unit takes into account the need for the teacher-learner to have a comprehensive knowledge of the industrial context applicable to the vocational study programme of the learners. The unit provides an opportunity for the teacher-learners to apply the pedagogical knowledge content in the planning and preparation of the learning activities. Keeping in mind this course is aimed for teachers teaching in a vocational, further and higher learning environment, this study unit allows space for design and development of lessons around different physical learning environments such as on-campus e.g. classes and workshops, and off-campus work-based learning settings, as encountered during work-placement, apprenticeships and internship.

This teacher education programme addresses training learners for employment focusing on subject area specialization

Group Projects. However, each Group may submit own proposal.		of a specific industrial sector. This means that facilitating learning through the development of transversal skills of communication, team work, entrepreneurial mind-set and problem solving is given utmost importance in this study unit.
		Assessment is a crucial aspect of a learning process. Understanding the curriculum framework and how to choose effective assessment methods and tools to reflect industrial competences is vital in vocational education for the 21st century. During the implementation of this specialized unit, the teacher-learners are given an experiential learning opportunity to devise tools and techniques of planning for both formative and summative assessment within own specialisation area.
		This unit goes beyond providing an opportunity for the teacher-learner to develop excellent teaching skills and abilities. The teacher-learner is required to undergo a scientific investigative study on the impact the learning

		activities have on the learners' learning, which study is peer-reviewed and shared with the community of learners: colleagues, non-academics and learners.

Learning Outcomes

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

LO1. Contribute to the scholarly community of the teaching profession in a real-life team project. *LO2. Demonstrate independent learning through management of own project as required for continuing professional development.* *LO3. Apply transferrable skills required in team operations and working relationships.*	*LO 1. Demonstrate a comprehensive understanding of the industrial sector in context.* *LO 2. Critique current developments in VET towards improving the relation between college-based learning and work-based learning.* *LO 3. Develop tools and techniques to promote an entrepreneurial teaching approach in fostering generic skills among learners.* *LO 4. Investigate the impact of work experience on the learning of the learner.*	*LO1. Demonstrate a systematic approach in planning and preparing effective teaching-learning activities addressing work-related skills.* *LO2.Develop a critical and systematic approach to inquire into the impact of the teaching activities on the learning of the learner.* *LO3. Create a personal development plan to enhance own learning and quality teaching performance.* *LO4. Contribute towards the scholarly vocational teaching practices.*

MVEAR 4.0 Theme 6:
Getting to the core of the Educational Process: Understanding and Supporting the VET Learner

Unit Level (MQF/EQF): 7

Credits: 15

Delivery Mode: Fully Face-to-Face Learning

Teaching, Learning and Assessment in VET 2 (including teaching practice)	Educational Psychology – Harnessing the potential of all	Mentoring: Emotional and Social Intelligence for Continuous Personal and Professional Growth
Credits: 6	Credits: 6	Credits: 3
Total Learning Hours: 150	Total Learning Hours: 150	Total Learning Hours: 75

Unit Description

This unit focuses on teaching, learning and assessment in further and higher vocational education. This unit builds on the first part of the unit where participants were introduced to important policy documents related to vocational education and training. They were expected to critically examine these documents in view of the challenges of the 4th industrial revolution.

The unit emphasizes on the importance of reflection to | Various are the satisfactions that accompany the teaching profession today - witnessing and supporting the growth of young people; the challenge of designing effective teaching for a diversity of learners; and lifelong learning. However, how these satisfactions are perceived by teachers is determined by four main trends: increased diversity of learners from multiculturalism to a multiplicity of learners' abilities and needs; the | This unit is provides an opportunity for participants to understand the importance of mentoring. Academic progress of learners is affected by the general well-being of the learner, hence it is crucial for education institutions to take a holistic approach so that learners develop both on a personal and an academic level.

The unit addresses the need to understand the different intelligences and characteristics in an educational context. This |

improve own and peers' practices and to also contribute to the teaching community. The unit provides an opportunity to participants to evaluate and to critically reflect on the different approaches to delivery and assessment, both formative and summative, to address this challenging diversity.	spread of instructional tools and technological resources present in educational institutions; an expected professionalism among teachers; and increased demands for accountability in education. Each of the mentioned trends can provide new opportunities for learners and teachers. However constant changes and new demands often raise new issues. An understanding of Psychology in Education can help teachers in making constructive use of new trends, to draw benefits while dealing with the uncertainties that accompany them. Psychology in education is for educators a source of information, advice, and useful perspectives concerning learners; instruction and assessment; and the psychological and social awareness of teachers in the 21st century. Hence, through this module the learners will delve into the areas of teaching and teachers' challenges and perspectives on learning in contemporary society; major theories of learning;	unit focuses on enabling participants to develop mentoring skills to facilitate learners' ability to optimize their educational experience and socialization into their chosen field of study. Participants will then explore how to evaluate learners' social and emotional situations to facilitate personal growth and self-efficacy through a pastoral care approach.

	understanding learners and learner diversity in a post-16 vocational context; inclusion; learner motivation and empowerment; classroom management and the classroom environment; facilitating complex thinking; learner-driven models of learning; assessment strategies; Action research to study self and learners.	

Learning Outcomes

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

LO1. Evaluate different approaches to teaching, and learning for supporting diverse learners within own subject area. LO2. Develop effective learning experiences through the principle of formative and summative assessment. LO3. Evaluate different approaches to teaching, learning and assessment strategies by self and peers that are used in a vocational educational setting.	LO1. Demonstrate knowledge and understanding of key concepts in psychology of education. LO2. Demonstrate knowledge and understanding of key issues in Special Education. LO3. Demonstrate capacity to critically analyse problems observed in own educational institution from a psychological perspective. LO4. Develop sophisticated arguments using academic evidence from the area of educational psychology; L05. Contribute to the development of innovative and inclusive teaching and learning practices within vocational, further and higher education.	LO1. Identify multiple intelligences and characteristics in an educational context. LO2. Nurture different mentoring strategies to attend to learners' social and emotional situations to facilitate personal growth and self-efficacy, through a pastoral care approach. LO3. Develop mentoring skills focusing on facilitation of learners' ability to optimize their educational experiences and their socialization in chosen fields of study.