Module Descriptor

Title	Managing Quality		
Session	2025/26	**Status**	Published
Code	QUAL11020	**SCQF Level**	11
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	E Viza		

Summary of Module

This module will equip the students with a full understanding of the origins and purposes of quality management and will link with other modules in the programme. It is the foundation module for Quality and covers the Chartered Quality Institution Body of Knowledge.

Included in the module is:

- Management and motivation theories and practices. The influence of theorists and Quality Gurus on the management of organizations.
- Historical development of the quality function and quality organisation structures.
- The concepts and principles of Quality Assurance. Total Quality, Total Quality Management and Excellence.
- Standards and models for Quality and Integrated Systems
- The Audit process.
- Continuous improvement programmes including, Lean, Six Sigma, Lean Six Sigma and Kaizen.
- The role of the customer and supplier. Supplier/vendor rating and assessment systems.
- Quality tools and techniques used in quality improvement and control.
- Development and use of quality-cost programmes for continuous improvement.
- Compliance, Legislation and Quality Management Systems.
- Provide an overview of Quality 4.0 and its linkes with Industry 4.0

The module aims to equip postgraduate students with a number of UWS attributes such as Universal, Work Ready and Successful on Academic, Personal and Professional Level. Learning about Quality Management Systems and how they can be applied in different sectors and geographies enables critical thinking. Quality Infrastructure is influenced by individual needs and settings and this will promote making students aware of culture and emotionally intelligent. This knowledge will improve their communication skills. Applying approaches of certain quality terms encourages to use innovation and being creative by selecting successful solutions

The module is aligned with the updated curriculum framework of UWS:

1. Student centred: the material and case studies are based on different sectors to reflect the experience of the students from different degrees and contextualise their learning. Tutorial time and discussion forums (AULA, MS Teams) allow multi way communication between students themselves as well as student and lectures.

2. Flexible and Hybrid: Teaching material is available on the online learning platform including, slides, recording, practical exercises and additional learning to complement each week's topic. Online lectures are available, and the recorded ones allow for students to watch or Re-watch what they may have missed. The module is designed for full time, part time and Distance learning student.

3. Simple and Coherent: The learning content, which is communicated from the start is set in a linear way to ensure learning is progressing smoothly with designed check in milestones to assess progress (e.g. Online quizzes

4. Authentic: Discussions and Assessment are based on students experience centred around the learning material

5. Inclusive: All material is available in written, audio format with subtitles and transcripts where feasible

6. Sustainable: Material is updated annually and reflects what is happening in the sector and taking into consideration the student's feedback from formal and informal channels

Module Delivery Method	**On-Campus**[1] ☒	**Hybrid**[2] ☐	**Online**[3] ☒	**Work -Based Learning**[4] ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☒ Paisley	☒ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
L1	Demonstrate a critical and extensive knowledge of quality management concepts and models

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

L2	Critically evaluate the approaches to and techniques of quality management and continuous improvement
L3	Critically apply the techniques for quality management and continuous improvement to a range of complex scenarios
L4	N/A
L5	N/A

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 11** Gain a critical understanding of the development and principles of quality management and approaches to continuous improvement. Achieve a detailed knowledge and be able to evaluate the effectiveness of quality tools and techniques
Practice: Applied Knowledge and Understanding	**SCQF 11** Identify informed approaches to establishing and auditing quality management systems in a range of industrial settings. Synthesise information and gain a coherent understanding of theories and practices in continuous improvement
Generic Cognitive skills	**SCQF 11** Develop and demonstrate an ability to communicate effectively in a variety of professional settings. Demonstrate an understanding of an issue and develop a creative and sensible solutions to quality problems
Communication, ICT and Numeracy Skills	**SCQF 11** Gain a full understanding of the process of preparing oral and written reports, using IT
Autonomy, Accountability and Working with Others	**SCQF 11** Work as part of a team to analyse information, formulate a solution and present it back to the group. Work independently to create a solution to a quality problem

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching
In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours. Lectures (on-line and classroom) will introduce and exemplify key theoretical and critical concepts that can be applied to a wide range of areas in the field of quality. The approach is learner-centred with students actively engaged in a range of tasks to promote engagement

with and analyses of different kinds of quality management techniques. Tutorials and workshops will also be given both on-line and in class to further develop students' practical skill set. The Learning & Teaching Strategy for this module is based on the general strategy for the MSc Quality Management.

Classes are delivered on a weekly basis. Lectures will introduce and exemplify key theoretical and critical concepts. Tutorial sessions will be given to further develop students' understanding. Live in-company or simulated audited scenarios will be used to enhance learning. Students will be given sufficient time and support to work on assignments.

For On-line learning students, full use will be made of the VLE. That is, all teaching material will be made available on-line and students will be guided through the material. Email and video-conferencing will be used extensively to support students. Tutorials will be on-line and synchronous.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning Hours** (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture / Core Content Delivery	24
Tutorial / Synchronous Support Activity	12
Independent Study	164
n/a	0
n/a	0
n/a	0
TOTAL	200

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Dale, B. G., Bamford, D. R., & Wiele, A. van der (Eds.). (2016). Managing quality [electronic book] : an essential guide and resource gateway (Sixth edition.). John Wiley & Sons Inc.

Hoyle, D. (2018). ISO 9000 quality systems handbook : increasing the quality of an organization's outputs (7th ed.). Routledge.

Ibidapo, T.A. (2022) From industry 4.0 to quality 4.0 [electronic book] : an innovative TQM guide for sustainable digital age businesses . Cham : Springer.

Ioppolo, G. (2025). Total quality management and lean thinking 5.0 : theories and methods (C. Ciliberto & K. Szopik-Depczyńska, Eds.). Routledge.

Oakland, J.S., Oakland, R.J. and Turner, M.A. (2021). Total quality management and operational excellence : text with cases. Milton Park, Abingdon, Oxon:Routledge

Oakland, J. S. (2014). Total quality management and operational excellence : text with cases [electronic book] (4th ed.). Routledge.

Materials on Virtual Learning Platform

Publications and resources on the CQI page .

(N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)

Attendance and Engagement Requirements
In line with the Student Attendance and Engagement Procedure, Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time. **For the purposes of this module, academic engagement equates to the following:** The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. Students will scan their attendance, via the attendance scanners, each time they are on-campus, they will have their attendance recorded in class and they will be expected to login to the VLE several times per week. Students who are unable to attend a timetabled session, due to illness or other circumstance, should notify their Programme Leader. Across the School an 80% attendance threshold is set. Students who fall below this, will be referred to the Student Success Team to see how they can be best supported in their studies.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

Supplemental Information

Divisional Programme Board	**Engineering Physical Sciences**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Civil Engineering and Quality Management
Moderator	Dr Michele Cano
External Examiner	Alaa Garad
Accreditation Details	

Module Appears in CPD catalogue	☒ **Yes** ☐ **No**
Changes / Version Number	2.18 Updated Module Descriptor Tempate, module summary and reading resources Updated Attendance and Engagement Requirements and Equality and Diversity section

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Individual Written Assessment
Assessment 2
Open book class test
Assessment 3
N/A
(N.B. (i) Assessment Outcomes Grids for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed. (ii) An indicative schedule listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Individual Written Assessment	☒	☒	☐	☐	☐	50	0

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Open book class test	☒	☒	☒	☐	☐	50	2

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
N/A	☐	☐	☐	☐	☐		
Combined total for all components						100%	2 hours

Change Control

What	**When**	**Who**

Updated module descriptor template	24/03/25	E Viza
Updated module summary	24/03/25	E Viza
Updated reading list	24/03/25	E Viza
Updated Attendance and Engagement Requirements and Equality and Diversity text	24/03/25	E Viza