MSc Total Quality Management & Performance Excellence – E543 (Under Review)

1. Context and Objectives

Total Quality Management is recognised as an important concept which cuts across all sectors of the economy, be it in, public, parastatal and private sectors. The current trend is to move towards a culture of excellence in all activities undertaken by any organisation in order to minimise/eradicate wastes and non-value added activities to improve product quality, customer satisfaction and organization performance.

The programme has been designed to meet the requirements of a wide range of applicants including those:

- involved in quality improvement programmes requiring new tools, methods, and techniques for day to day problem solving such as waste minimisation.
- in charge of quality management projects such as ISO certification.
- responsible for the setting up of TQM initiatives such as Quality Circles.

This programme covers the complete range of topics, from quality concepts, basic and advanced quality tools & techniques, quality management systems, quality excellence methodologies, continuous improvement methodologies, to the human development and motivation of people across an organisation.

The programme is very practical in nature, and aims at providing strong personal quality management skills to students.

The aim of the Programme is to enable those employed in a specific quality management role or other technical discipline to make a more effective contribution to their organisation, particularly in the field of continuous improvement of processes and to move up from day-to-day problem-solving to strategic management of quality.

The main objective of the Programme is to upgrade the students' understanding of excellence and TQM philosophy and the vitality of excellence towards long-term competitiveness and growth. It provides students with quality / process improvement, organisational and people management skills and techniques to enable them to understand the long-term quality needs of their organizations, develop the capacity to persuade their management to adopt Total Quality Management (TQM) for developing excellence in their operations, human resource management, administrative processes, relationships with the different stakeholders and product/service delivery, and implement TQM with a structured approach.

2. Learning Outcomes

On successful completion of the programme, the students should be able to:

- understand the linkage between total quality management / excellence, quality chains and long-term competitiveness for both public bodies and private sector organisations involved in both product and service delivery;

- understand the fundamental role of leadership on the performance of a department or organization, while considering business challenges and potential strategic directions;

- understand the complementary role of hard structures and soft aspects in the implementation of total quality management;

- understand the complementarity of other concepts such as occupational safety and health, corporate ethics, sustainability, supply chain management and total quality management;

- conduct a preliminary diagnosis of the management and operational practices in order to identify TQM intervention areas;

- apply a structured approach to quality-related problems through the use of quality (product / service) and process improvement tools;

- implement a TQM project within an organization taking into account the internal realities (product / service, operations, supply chain, occupational safety and health, sustainability issues, management practices) , business challenges / opportunities and needs for compliance with regulations and international standards and discuss the findings to the organisation management to evaluate the appreciation and test feasibility of findings.

3. Teaching and Learning Methods

The teaching methods include formal lectures, tutorials and case study discussions. Lecture and tutorial materials will be made available to the students in advance for them to prepare for the lecture sessions.

For each module, the learners are expected to conduct self-study twice the number of lecture hours and use this time to study the materials provided and prepare for the tutorials and case studies.

Under the other learning methods, guest lectures by resource persons (international and industry) and field visits would be organised, which will be mandatory for students. Students are expected to use this time to dedicate to the assignments or mini-projects provided by the respective resource persons and prepare for tests and examinations.

4. Entry Requirements

4.1 General

Successful completion of an undergraduate degree with at least a Second Class or 50 % which ever applicable or a GPA not less than 2.50, or equivalent, from a recognized higher education institution Or alternative qualification acceptable to the UoM.

Preference will be given to candidates with relevant work experience.

4.2 Specific requirements

The following may be deemed to have satisfied the General and Programme requirements for admission:

(i) Applicants who do not satisfy any of the requirements as per Section 4.1 above but who submit satisfactory evidence of having passed examinations which are deemed by the Senate to be equivalent to any of those listed.

(ii) Applicants who do not satisfy any of the requirements as per Section 4.1 above but who in the opinion of Senate submit satisfactory evidence of the capacity and attainments requisite to enable them to pursue the programme proposed.

(iii) Applicants who hold a full practising professional qualification obtained by examination.

5. Programme Duration

The Programme will be offered on a part-time basis. The duration of the Graduate Programme should normally not exceed 4 years (8 semesters).

	Normal	**Maximum**
Master's Degree:	4 Semesters	8 Semesters
Postgraduate Diploma:	4 Semesters	8 Semesters
Postgraduate Certificate:	2 Semesters	8 Semesters

6. Minimum LCCS Credits Required:

Minimum No. of credits per year: 12
Maximum No. of credits per year: 48

- *For Degree Award*

	LCCS credits
Master's Degree:	78
Postgraduate Diploma:	48
Postgraduate Certificate:	24

- *For each Award*

	Core Taught Modules (Min)	**Project**	**Electives/ Optional Modules**
	LCCS Credits	**LCCS Credits**	**LCCS Credits**
Master's Degree:	48	18	12
Postgraduate Diploma:	42		6
Postgraduate Certificate:	24		

7. Assessment and Deadlines

- *Assessment*

  - Continuous Assessment: 40%
  - Examinations: 60%

Students are required to register for modules which they intend to follow in a given semester on date(s) specified by the Faculty.

Each module will carry 100 marks and will be assessed as follows (unless otherwise specified):

- Written examination of 2-hour duration and continuous assessment of 40% of total marks.
- Continuous assessment may be based on laboratory work, and/or assignments and should include at least two (2) class tests/assignments per semester per module.

An overall total of 40% for combined assessment and written examination components would be required to pass the module, without minimum thresholds within the individual continuous assessment and written examination. All modules carry equal weight. The Project carries 18 LCCS credits.

- *Submission Deadlines for Dissertation*

• First Draft: End of July of Final Year.

• Final Copy: Last working day of August of Final Year.

- *Plan of Study*

Students are required to submit at the end of Semester 1 a Plan of Study for their whole Programme of Studies, indicating the list of elective modules and in which semester each of them will be taken.

The University reserves the right not to offer a given elective module if the critical number of students is not attained and/or for reasons of resource constraints.

8. List of Modules

Code	Module Name	Contact hours	Self Study		Other learning hrs	LCCS credits
CORE MODULES						
ENGG 6001	Foundation Statistics	30	60		90	6
MECH 6251	Total Quality Management	30	60		90	6
MECH 5203	Research Methods	30	60		90	6
MECH 6201	Quality Systems & Auditing	30	60		90	6
MECH 6252	Quality Engineering	30	60		90	6
MECH 6301	Quality Costing	30	60		90	6
MGT 6286	Performance Evaluation	30	60		90	6
MGT 5212	Human Resources and Quality Management	30	60		90	6
PROJECT						
ENGG 6000	Project					18
ELECTIVES						
ENGG 6410	Asset Management	30	60		90	6
MECH 6204	Occupational Health and Safety	30	60		90	6
ACT 5112	Project Economics and Finance	30	60		90	6
MECH 5103	Business Strategy and Operations	30	60		90	6
ENGG 6305	Procurement Management	30	60		90	6
CSE 6005	Management Information Systems	30	60		90	6
CIVE 6102	Environmental Management I	30	60		90	6
MGT 6002	Corporate Ethics &Governance	30	60		90	6
MECH 5205	Supply Chain Management	30	60		90	6

NOTE:

1. Students have to complete ALL core taught modules, the project work and ANY two (2) electives.

2. Each module will consist of 30 contact hours (this includes lectures and tutorials). The total contact (taught) hours of the Programme therefore will be 300 hours. Students are expected to spend 600 hours in self-study and 900 hours in other learning activities.

   Other Learning Activities may comprise of the following:

   - *Working on assignments;*
   - *Sitting for Class Tests and preparation time for same;*
   - *Sitting for Examinations and preparation time for same;*
   - *Group work;*
   - *Attending Workshops/Conferences recommended by the /Faculty;*
   - *Fieldwork;*
   - *Site Visits/Trips;*
   - *Presentations among peers;*
   - *Experiential Learning;*
   - *Placements/Internships;*
   - *Guest lectures.*

3. The Project will involve an equivalent of 540 working hours including direct supervision by a member of academic staff and/or an external supervisor.

4. A minimum of 6 contact hours is scheduled per week (3 hours on weekdays and 3 hours on Saturday). However, candidates are expected to attend daily normally after 4.00 p.m., for intensive modules taught in a period of two/three weeks by visiting lecturers.

9. Programme Plan - MSc Total Quality Management and Performance Excellence

Level 1					
Semester 1			**Semester 2**		
Module	**Contact hours**	**LCCS Credits**	**Module**	**Contact hours**	**LCCS Credits**
Foundation Statistics - ENGG 6001	30	6	Research Methods - MECH 5203	30	6
Human Resources & Quality Management - MGT 5212	30	6	Quality Costing - MECH 6301	30	6
Performance Evaluation - MGT 6286	30	6	Elective 1	30	6
Sub-Total	**18**		**Sub-Total**	**18**	
					Total = 36

Level 2					
Semester 1			**Semester 2**		
Module	**Contact hours**	**LCCS Credits**	**Module**	**Contact hours**	**LCCS Credits**
Quality Engineering - MECH 6252	30	6	Quality Systems & Auditing - MECH 6201	30	6
Total Quality Management - MECH 6251	30	6			
Elective 2	30	6			
Sub-Total	**18**		**Sub-Total**	**6**	
					Total = 24

Level 2 – Yearly Module		
Module		**LCCS**
MSc Project - ENGG 6000		18

Grand Total number of LCCS Credits = 78