

WM903-15 Quality Management & Techniques

20/21

Department

WMG

Level

Taught Postgraduate Level

Module leader

Paul Roberts

Credit value

15

Assessment

Multiple

Study location

University of Warwick main campus, Coventry

Description

Introductory description

This module demonstrates how quality is an integral part of all functions in a business, for both manufacturing and service organisations. It shows how the philosophies, systems, processes and people aspects of quality management contribute to improvements in quality in organisations, increased customer satisfaction and reduced costs.

This module demonstrates how quality is an integral part of all functions in a business, for both manufacturing and service organisations. It shows how the philosophies, systems, processes and people aspects of quality management contribute to improvements in quality in organisations, increased customer satisfaction and reduced costs.

Module aims

This module demonstrates how quality is an integral part of all functions in a business, for both manufacturing and service organisations. It shows how the philosophies, systems, processes and people aspects of quality management contribute to improvements in quality in organisations, increased customer satisfaction and reduced costs.

This module demonstrates how quality is an integral part of all functions in a business, for both manufacturing and service organisations. It shows how the philosophies, systems, processes and

people aspects of quality management contribute to improvements in quality in organisations, increased customer satisfaction and reduced costs.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Management for Quality

Economics of Quality

Variation in Processes and SPC

Product Safety, Reliability and Implications

Quality Standards and Frameworks

Quality Improvement Philosophies and Approaches including Lean & Six Sigma

Design for Quality

Quality Function Deployment (QFD)

Quality Culture and Behaviours

Learning outcomes

By the end of the module, students should be able to:

- Demonstrate appreciation of a wider perspective on quality and quality management in an organisation.
- Discuss the implications of philosophies such as zero defects and continuous improvement.
- Outline the company-wide accountabilities and systems necessary to achieve the required quality.
- Critique the philosophies and practicalities of designing for quality versus improving quality.
- Discuss the importance of safety, reliability and product liability matters relating to quality.
- Assess and apply quality improvement tools, techniques and frameworks to various business situations.

Indicative reading list

- ASQ, Seven Basic Quality Tools, ASQ Quality Press, 2008
- Brue, G., Six Sigma for Managers: 24 Lessons to Understand and Apply Six Sigma Principles in Any Organization, McGraw-Hill Professional Education Series, 2005
- Brue, G. and R. Launsby, Design for Six Sigma, 2003
- Crosby, P., Quality is Free: The Art of Making Quality Certain, 1993
- Deming, J.E., Out of the Crisis, 2000
- Deming, J.E and M. Walton, The Deming Management Method, 1986
- Goetsch, D.L. & S. Davies, Quality Management for Organizational Excellence: Introduction to Total Quality: International Edition, 2009
- Hakes, C., and J. Wilkinson, The EFQM Excellence model to assess organizational performance: a management guide, 2007
- Hoyle, D., ISO 9000 Quality Systems Handbook - updated for the ISO 9001:2008 standard: Using the standards as a framework for business improvement, 6th edition, 2009

- Hutchins, D., Hoshin Kanri: The Strategic Approach to Continuous Improvement , 2008
- Juran, J.M and A. B. Godfrey, Juran's Quality Handbook, 2000
- Kemp, S., Quality Management Demystified, McGraw Hill, 2006
- Knowles, G, Six Sigma, Bookboon.com, 2011
- Liker, J., and M. Hoseus, Toyota Culture: The Heart and Soul of the Toyota Way, 2008
- O'Mara, P.: TQM - Introduction to and Overview of Total Quality Management, ASQ Quality Press, 2013
- Oakland, J.S., Statistical Process Control, 2007
- Oakland, J.S., Total Quality Management and Operational Excellence: Text with Cases, Routledge 2014
- Sower, V.E., Essentials of Quality with Cases and Experiential Exercises, 2011
- Turner, S., The Little Black Book of Management: Essential Tools for Getting Results NOW, 2010
- Womack, J. P. and D. T. Jones Lean Thinking: Banish Waste and Create Wealth in Your Corporation, 2003
- Womack, J.P., D.T. Jones and D.Roos, The Machine That Changed the World: The Story of Lean Production, 1991

[View reading list on Talis Aspire](#)

Subject specific skills

Understand how non-prescriptive management models help organizations to measure and sustainably improve the quality of products and services, Understand the concepts that underpin the achievement of quality, Understand the potential impact of poor quality performance, Understand the application of various quality tools and techniques.

Transferable skills

Communication, critical thinking, working with others, problem solving, information literacy, numeracy, digital literacy, ethical values, intercultural awareness, professionalism, organizational awareness, critical reflection.

Study

Study time

Type	Required
Lectures	29 sessions of 1 hour (39%)
Practical classes	8 sessions of 1 hour (11%)
Other activity	38 hours (51%)
Total	75 hours

Private study description

No private study requirements defined for this module.

Other activity description

30 hours maintaining a self-reflective log-book

8 hours pre-reading

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Assessment group A1

	Weighting	Study time	Eligible for self-certification
--	------------------	-------------------	--

Assessed work as specified by department	100%	75 hours	Yes (extension)
6000 words assessment			

Assessment group R

	Weighting	Study time	Eligible for self-certification
--	------------------	-------------------	--

Assessed work as specified by department	100%		Yes (extension)
100% Post Module Assignment			

Feedback on assessment

Immediate oral feedback will be provided after case studies / practical workshops, which will be focussed upon the learning targets of each session. Feedback will also be provided to any questions which arise from students with the lecture session.

Written feedback of approximately 150-250 words will be provided for the Post-Module Assignment within a four week period after the date of submission. This feedback will be focussed upon the strengths and weaknesses of the work with regard to the module learning objectives and the post-module assignment marking guidelines. Suggestions for improvement will also be provided.

Availability

Courses

This module is Optional for:

- Year 1 of TESS-N1PX Postgraduate Award in Business Leadership
- Year 1 of TESS-H1P1 Postgraduate Taught Engineering Business Management