



**Level 5 Diploma in Project Management (888)**  
**145 Credits**






<b>Unit:</b> Project Quality Management	<b>Total Qualification Time:</b> 280
<b>Exam Paper No.:</b> 4	<b>Number of Credits:</b> 28
<b>Prerequisites:</b> Computing knowledge and management experience.	<b>Corequisites:</b> A pass or better at Level 5 Diploma level.
<p><b>Aim:</b> The unit enhances learner ability to monitor projects so they meet their intended goals. Examine the critical components of project quality: planning, control, assurance and improvement. Learners learn about the business and technical aspects of project quality management, including determining what assets and resources needed to launch a new program or revitalise existing ones. Learners will explore quality management processes such as identifying customer requirements, cost-benefit analysis, benchmarking, cause and effect diagrams, flowcharting, control charts, Pareto diagrams and quality audits. The unit considers what quality is in context of project management: its components and intent. Learners will understand the benefits of using a quality management plan and will develop an ability to recognize when quality has been achieved.</p>	
<b>Required Materials:</b> Recommended Learning Resources.	<b>Supplementary Materials:</b> Lecture notes and tutor extra reading recommendations.
<p><b>Special Requirements:</b> The unit requires a combination of lectures, demonstrations and class discussions.</p>	
<p><b>Intended Learning Outcomes:</b></p> <p>1 Quality approaches; tools and analysing how organisations must make an investment to develop or employ the expertise of a quality professional.</p> <p>2 The policies and procedures required to implement quality management throughout an organization.</p> <p>3 The set of processes required to run business effectively, including training, product purchasing, design, development, production, service and customer relationship management activities.</p> <p>4 The process of improving the quality of customer service and identify the cost and challenges.</p> <p>5 Analysing key quality concepts, principles of quality management, key concepts and principles of internal quality assurance and the cost of quality.</p>	<p><b>Assessment Criteria:</b></p> <p>1.1 Describe the facets of quality 1.2 Describe the aspects of quality 1.3 Define standardisation and regulations 1.4 Describe the human experiences of quality</p> <p>2.1 Describe the development of quality management 2.2 Describe the different quality management methods 2.3 Describe the functions of R&amp;D and Operations Research</p> <p>3.1 Define the process of quality management 3.2 Define the product or service that will add value 3.3 Describe the process of finding out what customers want</p> <p>4.1 Describe customer quality 4.2 Describe quality in customer service 4.3 Describe-Customer-Driven-Quality 4.4 Describe Customer Relationship Management</p> <p>5.1 Define requirements, specifications, standards and errors 5.2 Describe the process of checking 5.3 Describe how to prevent and remove errors 5.4 Describe the cost of quality 5.5 Compare the costs of quality project</p>

	<p>against the benefits</p> <p>5.6 Describe Crosby’s Hassle-free management and zero defect quality</p>
<p>6 Understand the procedures and systems of planning, controlling, assuring and delivering quality.</p>	<p>6.1 Describe quality control</p> <p>6.2 Describe quality assurance</p> <p>6.3 Describe quality planning</p> <p>6.4 Describe quality delivery</p>
<p>7 Understand how quality can be achieved by working as a team, objectivities and enhancing team cohesiveness.</p>	<p>7.1 Describe the qualities of leadership</p> <p>7.2 Describe the elements of developing a quality team</p>
	<p>7.3 Describe quality leadership and teamwork</p> <p>7.4 Explain how to promote good quality through teamwork and effectiveness</p> <p>7.5 Explain factors of team effectiveness</p>
<p>8 Understand how quality engineering is used to improve the quality of the production process and of its output.</p>	<p>8.1 Define quality engineering</p> <p>8.2 Define the term “designing in quality”</p> <p>8.3 Describe the tools used to eliminate errors and design in quality</p>
<p>9 Understand how quality audit measures the effectiveness of an organization's quality management system.</p>	<p>9.1 Define the process of auditing quality</p> <p>9.2 Describe how audit adds value and reduces risk</p>
	<p>9.3 Describe auditing standards and methods</p> <p>9.4 Describe how management can monitor and measure the system's effectiveness and efficiency.</p>
<p>10 Understand the value of statistics to quality management and categories of Statistical Quality Control (SQC).</p>	<p>10.1 Describe a statistical solution</p> <p>10.2 Define the key statistical concepts</p> <p>10.3 Be able to use the ishikawa diagram</p> <p>10.4 Be able to use the quality control chart</p>
<p>11 Understand how TQM implements the premise that the quality of products and processes are the responsibilities of everyone who is involved with the creation or consumption of the products or services offered by an organisation.</p>	<p>11.1 Define Total Quality Management (TQM)</p> <p>11.2 Describe the history of TQM</p> <p>11.3 Describe the framework for quality management</p>
	<p>11.4 Compare and contrast (i) TQM (ii) Six Sigma</p> <p>11.5 Analyse the history of six sigma</p> <p>11.6 Describe the principles of six sigma</p> <p>11.7 Describe the components of six sigma</p>
<p>12 Quality standards; the importance of project quality management for products and services.</p>	<p>12.1 Describe the ISO 9000</p> <p>12.2 Analyse the elements of ISO 9000</p> <p>12.3 Describe the advantages and disadvantages of ISO 9000</p>
	<p>12.4 Investigate other awards, standards and associations, including Project Management Institute (PMI), ANSI, IEEE.</p> <p>12.5 Define project quality management and understand how quality relates to various aspects of information technology projects</p>

<p>13 Understand implementation of Capability Maturity Model (CMM) and Capability Maturity Model Integration (CMMI).</p>	<p>12.6 Describe quality planning and its relationship to project scope management</p> <p>12.7 Describe the importance of quality assurance</p> <p>12.8 Describe the outputs of the quality control process</p> <p>12.9 Define the tools and techniques for quality control</p> <p>12.10 Describe important concepts related to Six Sigma and how it helps organisations improve quality and reduce costs</p> <p>12.11 Describe how the Malcolm Baldrige Award and ISO 9000 standard promote quality in project management</p> <p>12.12 Describe how leadership, cost, organisational influences, and maturity models relate to improving quality in information technology projects</p> <p>12.13 Explain how software can assist in project quality management</p> <p>13.1 Describe a software development methodology</p> <p>13.2 Describe the CMM levels of capability</p> <p>13.3 Describe the Capability Maturity Model</p> <p>13.4 Describe the implementation of Capability Maturity Model (CMM) in IT Governance</p>
<p><b>Methods of Evaluation:</b> A 2½-hour written examination paper with five essay questions, each carrying 20 marks. Candidates are required to answer all questions. Candidates also undertake project/coursework in Project Quality Management with a weighting of 100%.</p>	

### Recommended Learning Resources: Project Quality Management

<p><b>Text Books</b></p>	<ul style="list-style-type: none"> <li>• Project Quality Management: Why, What and How (Paperback) by Ken Rose. ISBN-10: 1932159487</li> <li>• Right First and Every Time: Managing Quality in Projects and Programmes (Paperback) by John Bartlett. ISBN-10: 1900391139</li> <li>• Managing Project Quality (Project Management Essential Library) (Paperback) by Timothy J. Kloppenborg (Author), Joseph A. Petrick. ISBN-10: 1567261418</li> <li>• Quality Management for Projects and Programs (Perspectives in Project and Program Management) (Paperback) by Lewis R. Ireland. ISBN-10: 1880410117</li> </ul>
<p><b>Study Manuals</b></p> 	<p>BCE produced study packs</p>
<p><b>CD ROM</b></p> 	<p>Power-point slides</p>
<p><b>Software</b></p> 	<p>None</p>