



<p><b>Maintainability and Maintenance Analysis</b></p>	
<p><b>Introduction</b></p> <p>Maintainability is the ability of a system to be maintained and is a design characteristic. Maintenance consists of tasks that restore or retain a system in an operational state and is a consequence of design.</p> <p>This course provides relevant knowledge, techniques and skills for maintainability analysis and prediction, design for maintainability and Reliability Centred Maintenance (RCM). It includes processes and tools that can be effectively used to quantify, plan and cost maintenance.</p>	
<p><b>Designed For</b></p> <p>This course has been designed for practicing engineers, analysts and managers and others who need to gain basic knowledge and understanding of analytical tools and techniques that can be applied in Maintainability and Maintenance Analysis.</p>	
<p><b>Objectives</b></p> <p>By the end of this course you will be able to -</p> <ul style="list-style-type: none"> <li>■ Understand the significance of maintainability analysis and engineering</li> <li>■ Determine maintenance tasks, resource demands and costs</li> <li>■ Use quantitative techniques for the execution of maintainability analysis</li> <li>■ Use quantitative techniques for the execution of maintainability prediction</li> <li>■ Implement Design For Maintainability Techniques</li> <li>■ Apply the basics Reliability Centred Maintenance (RCM)</li> </ul>	
<p><b>Content</b></p> <ul style="list-style-type: none"> <li>■ Concepts and Benefits                             <ul style="list-style-type: none"> <li>■ Maintainability and Maintenance – Definition and Explanation</li> <li>■ Maintainability and Maintenance in relation to System Effectiveness and Cost</li> <li>■ Purpose, Scope and Benefits of Quantitative Analyses</li> </ul> </li> <li>■ Maintenance Tasks, Resources and Costs                             <ul style="list-style-type: none"> <li>■ Maintenance Tasks: Corrective, Preventive, Condition-Based</li> <li>■ Duration of Maintenance Task</li> <li>■ Frequency of Maintenance Task: Scheduled and Unscheduled</li> <li>■ Resource Demands and Maintenance Costs</li> </ul> </li> <li>■ Maintainability Statistics                             <ul style="list-style-type: none"> <li>■ Mean Time To Repair, MTTR (Item)</li> <li>■ Maintenance Hours per Operational Hour</li> <li>■ Maintenance Personnel Demand per Restoration Task</li> <li>■ Mean Time to Repair (System)</li> <li>■ Maintenance Personnel Demand per Maintenance Task</li> <li>■ Maintenance Hours per System Operational Hour</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>■ Prediction of Maintainability Statistics                             <ul style="list-style-type: none"> <li>■ Maintenance Activity Block Diagram</li> <li>■ Maintainability Measures for Simultaneous Tasks</li> <li>■ Maintainability Measures for Sequential Tasks</li> <li>■ Maintainability Measures for Combined Tasks</li> <li>■ Analysis of Complex Maintenance Tasks</li> <li>■ Maintainability Function</li> <li>■ Mean Duration of Maintenance Task</li> </ul> </li> <li>■ Maintainability Engineering                             <ul style="list-style-type: none"> <li>■ Design for Maintainability: Tools and Methods</li> <li>■ Reliability, Maintainability and Availability Design</li> <li>■ Testing, Diagnostics, Prognostics</li> <li>■ Case Studies – SAAB Grippen</li> </ul> </li> <li>■ Reliability Centred Maintenance (RCM)                             <ul style="list-style-type: none"> <li>■ Concept and History</li> <li>■ Safety, Structural, Functional and Economic Significant Items</li> <li>■ Decision Logic</li> <li>■ Allocations</li> <li>■ Course Summary, Further Guidance and Close</li> </ul> </li> </ul>
<p><b>Length</b></p> <p>3 days</p>	
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<b>Details</b>	
<b>Dates</b>	07 – 09 Nov 2007 03 – 05 Mar 2008 03 – 05 Nov 2008
<b>Time</b>	0900 – 1700
<b>Venue</b>	Woodbury Park Hotel, Golf and Country Club –approximately eight miles by road from Exeter (the nearest major city).
<b>Cost</b>	GB Pounds £950-00 + UK Value Added Tax (VAT) @ 17.5% <b>Total Payable £1116-25 per person</b>  The cost includes all instruction, course materials, daily lunches and light refreshments.
<b>Accommodation</b>	Accommodation is not included in the fee. Participants are responsible for the arrangement and payment of their accommodation. Reduced rates are available at Woodbury Park Hotel – contact Woodbury Park Hotel Reservations direct requesting the 'Mirce Engineering' rate. Contact details are –  Woodbury Park Hotel, Golf and Country Club, Woodbury, Exeter, EX5 1JJ, United Kingdom  Tel +44 (0) 1395 233 382 Fax +44 (0) 1395 233 384 Email enquiries@woodburypark.co.uk Web www.woodburypark.co.uk  A list of alternative accommodation in other hotels and guesthouses in the area of the course venue is available from Mirce Engineering on request.
<b>Booking</b>	Please complete a Booking Form for each participant and return it to Mirce Engineering.

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