

**PreRequisite:** Introduction to ILS/IPS (recommended)

**Classroom Duration:** 3 days **Virtual Duration:** 6 x 2 hours

RCMA is a core LSA/PSA activity that is used to develop an effective failure management strategy to mitigate and reduce failures by developing preventive and predictive maintenance programs, and influencing equipment design for supportability.

This course will provide systems engineers, ILS/IPS practitioners and supportability engineers with an understanding of the RCMA process and its application to develop an effective preventive maintenance program. Lectures/presentations will be complemented by a series of practical exercises.

Chapter 1	Introduction to Reliability-Centred Maintenance (RCM)
	<ul style="list-style-type: none"> <li>• What is RCM</li> <li>• Why do it</li> <li>• Link to the equipment maintenance program</li> </ul>
Chapter 2	RCMA Application Overview
	<ul style="list-style-type: none"> <li>• RCMA methodologies</li> <li>• Basic RCMA process</li> <li>• ATA MSG-3</li> <li>• RCMA outcomes</li> </ul>
Chapter 3	Perform RCMA - MSG-3
	<ul style="list-style-type: none"> <li>• Choosing Maintenance Significant Items (MSIs)</li> <li>• Performing the Failure Mode and Effect Analysis (FMEA)</li> <li>• Performing RCMA - MSG-3 Systems/Powerplant Logic</li> <li>• Choosing preventive maintenance tasks</li> <li>• Choosing preventive maintenance task intervals</li> <li>• Packaging of a Preventive Maintenance program</li> <li>• Familiarization with MSG-3 Structural, Zonal and Lightning /High Intensity Radiated Fields(L/HIRF) Analysis processes</li> </ul>
Chapter 4	Implementing an Effective Preventive Maintenance Program
	<ul style="list-style-type: none"> <li>• Proactive vs reactive planning</li> <li>• Integrated Logistics Support (ILS) impacts</li> <li>• Total cost of maintenance</li> </ul>
Chapter 5	Monitoring the Preventive Maintenance Program
	<ul style="list-style-type: none"> <li>• In-service monitoring &amp; RCMA</li> <li>• Performance measurement</li> <li>• Assessing impact of in-service changes</li> </ul>