

**ADVANCED DIPLOMA OF PLANT ENGINEERING**

<b>MODULE DETAILS</b>	<p><b>Module 17: Maintenance Management</b></p> <p>Nominal duration: 3 weeks (24 hours total time commitment)</p> <p>This time commitment includes the preparation reading, attendance at each webinar (1 hour plus 15-30 minutes for discussion), and the time necessary to complete the assignments and further study.</p>	
<b>MODULE PURPOSE</b>	<p>To enable the participants to get a broad perspective of key maintenance management objectives and principles, evaluate maintenance effectiveness using key performance indicators and best organizational practices.</p>	
<b>PRE-REQUISITE MODULE(S)</b>	<p>Module 16: Instrumentation and Control Engineering</p>	
<b>ASSESSMENT STRATEGY / CONDITIONS OF ASSESSMENT</b>	<p>To evaluate the achievement of the learning outcomes; written assignments, group projects and practical exercises are set. The Training and Assessment Matrix (TAM) documents the assessment criteria included in these assessments, based on the learning outcomes. The Training and Assessment Strategy (TAS) documents the overall training strategy for this Advanced Diploma course. The conditions of assessment are outlined in the Assessment Guidelines, TAM and TAS. Written assignments, group projects and practical exercises are required to meet assessment criteria outlined in the Assessment Guidelines, TAM and TAS.</p>	
<b>SUMMARY OF LEARNING OUTCOMES</b>	<ol style="list-style-type: none"> <li>1. Outline the basics of maintenance</li> <li>2. Describe the essentials of maintenance planning and scheduling</li> <li>3. Examine and discuss maintenance practices, strategies, tools and technique</li> </ol>	
<b>Learning Outcome 1</b>	<b>Outline the basics of maintenance</b>	
<b>Assessment Criteria</b>	1.1	Outline maintenance objectives and principles

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	1.2	Discuss the role of maintenance in the upkeep of plant machinery and equipment
	1.3	Examine and discuss asset management
<b>Learning Outcome 2</b>	<b>Describe the essentials of maintenance planning and scheduling</b>	
<b>Assessment Criteria</b>	2.1	Describe maintenance planning
	2.2	Discuss the planning and scheduling of outages

<b>Learning Outcome 3</b>	<b>Examine and discuss maintenance practices, strategies, tools and techniques</b>	
<b>Assessment Criteria</b>	3.1	Examine the various approaches to maintenance
	3.2	Outline the key performance indicators
	3.3	Discuss the concept of Reliability Centred Maintenance
<b>Delivery mode</b>		
A combination of asynchronous and synchronous e-learning delivery comprising a judicious mix of interactive online web conferencing, simulation (virtual labs) software, remote online labs, online videos, PowerPoint slides, notes, reading and study materials (in PDF, HTML and Word format) accessed through the Moodle Learning Management System (LMS).		