

1. Title	Analysis of data collected from engine indication systems in piston engines for troubleshooting engine defects
2. Code	EMAMWS470A
3. Range	Troubleshooting engine defects in piston engines in an aircraft hangar or workshop during the aircraft grounded time.
4. Level	4
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirement</u></p> <p>6.1 General mathematical calculation</p> <ul style="list-style-type: none"> ◆ Understand the theories and principles in basic mathematics for solving engineering problems, covering : <ul style="list-style-type: none"> • Arithmetic • Algebra • Geometry <p>6.2 Data analysis</p> <ul style="list-style-type: none"> ◆ Able to use mathematical solving skills and ability of analysis of engine data to troubleshoot engine defects in accordance with the procedures <ul style="list-style-type: none"> • examples of engine data : exhaust gas temperature, engine speed and oil pressure and temperature <p>6.3 Professional approach</p> <ul style="list-style-type: none"> ◆ Able to use objective judgment to troubleshoot the problems in engines in accordance with the procedures. ◆ Able to complete the task within the stipulated duration.
7. Assessment Criteria	<p>The integral outcome requirements of this UoC are:</p> <p>(i) Able to apply mathematical calculation to assist in analysis of data collected from engine indicating systems.</p> <p>(ii) Able to clearly explain analyzed engine data and describe the working conditions of the engines.</p>

8. Remarks	(Ref: HKAR-66 Module 1, 14.2 & 16.10) The Credit in this UoC is on the assumption of the person already possessed basic knowledge in the significance of engine parameters.
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