

Bridging Exemption Test  
Module Outline

<b>Module: Mathematics</b>	
<b>Overview:</b>	Test questions are based on basic mathematical concepts particularly on algebra, geometry and calculus. Formulas and graph paper will be provided during the exam. Non-graphical, non-programmable scientific calculators are required.
<b>Faculty / Programme Group:</b>	<ul style="list-style-type: none"><li>• Civil</li><li>• Electrical and Biomedical</li><li>• Chemical and Energy</li><li>• Mechanical</li><li>• Science</li><li>• Software Engineering</li><li>• Network and Security</li><li>• Graphic and Multimedia Software</li><li>• Artificial Intelligence</li></ul>
<b>Topics Covered:</b>	<ul style="list-style-type: none"><li>• Algebra and Polynomial</li><li>• Differentiation</li><li>• Integration</li><li>• Vectors</li><li>• Matrix algebra</li><li>• Functions, Curves and Polar coordinate</li><li>• Complex numbers</li></ul>
<b>Module Test Contents:</b>	<p><b>Format:</b></p> <ul style="list-style-type: none"><li>• Subjective Questions (100 marks).</li><li>• Computational – All calculations must be shown clearly.</li></ul> <p><b>Duration:</b> 3 hours</p>
<b>References:</b>	<ol style="list-style-type: none"><li>1. John Bird (2006), Higher Engineering Mathematics, Elsevier.</li><li>2. Glynn James, (2010). Modern Engineering Mathematics, PrenticeHall.</li><li>3. Abd. Wahid etal (2015), Engineering. Mathematics I, UTM (Textbook).</li><li>4. Link: <a href="https://math.libretexts.org/Bookshelves">https://math.libretexts.org/Bookshelves</a></li></ol>