

<b>Module Title:</b>	<b>DISCRETE MATHEMATICS 1</b>
<b>Academic year:</b>	2009 – 2010
<b>Credit Value:</b>	5
<b>Pre- requisites:</b>	None
<b>Assessment:</b>	CA – 40%, Exam – 60%
<b>Aims</b>	This module introduces key mathematical concepts that underpin computer technologies such as number bases, Boolean algebra and sets. The student learns how these concepts relate to much of the functioning of modern digital technology.
<b>Module Content</b>	<ul style="list-style-type: none"> <li>• Number Bases</li> <li>• Logic and Boolean Algebra</li> <li>• Sets, Relations and Functions</li> </ul>
<b>Intended Learning Outcomes:</b>	<p>On successful completion of this subject, students will be able to:</p> <ul style="list-style-type: none"> <li>• Explain how information is represented and manipulated in a computer</li> <li>• Perform computations using Boolean algebra</li> <li>• Apply Boolean algebra in Digital Systems and Propositional Logic</li> <li>• Draw &amp; interpret graphs of functions (including piecewise linear) given in maths and computing notation.</li> <li>• Identify the domain and range of functions. Apply the algebra of functions.</li> </ul>