

# The Engineering Undergraduate Curriculum Structure Overview

## Engineering Undergraduate Curriculum Structure (AY2012/2013)

University Level Requirements	Programme Requirements		Unrestricted Elective Modules
<ul style="list-style-type: none"> <li>• 2 General Education Modules (GEMs) = 8 MCs</li> <li>• 1 Singapore Studies (SS) module = 4 MCs</li> <li>• 2 Breadth Modules=8 MCs (outside student's Faculty)</li> </ul>	<p><b>Faculty Requirements:</b></p> <p><b>Common Year 1 Modules:</b></p> <ul style="list-style-type: none"> <li>• Critical Thinking &amp; Writing = 4 MCs</li> </ul> <p><b>Common Non-Year 1 Modules:</b></p> <ul style="list-style-type: none"> <li>• Human Resource Management = 3 MCs</li> <li>• Engineering Professionalism = 3MCs</li> </ul>	<p><b>Major Requirements:</b></p> <p><b>Foundational Requirements (23 MCs):</b></p> <ul style="list-style-type: none"> <li>• Physics I, Mathematics I &amp; II</li> <li>• Programming Methodology</li> <li>• Statics &amp; Mechanics of Materials</li> <li>• Electrical Engineering</li> </ul> <p><b>Discipline Specific Modules (88 MCs)</b> (Mechanical Engineering modules):</p> <ul style="list-style-type: none"> <li>• Core modules = 41 MCs</li> <li>• Design &amp; Project modules = 27 MCs</li> <li>• ME elective modules = 20 MCs</li> </ul>	<ul style="list-style-type: none"> <li>• 20 MCs of Unrestricted Elective Modules (UEMs)</li> <li>- ES2331 Communicating Engineering</li> </ul>
<p><b>Sub-Total MCs = 20</b></p>	<p><b>Sub-Total MCs = 10</b></p>	<p><b>Sub-Total MCs = 111</b></p>	<p><b>Sub-Total MCs = 20</b></p>
<p><b>Minimum MCs required for graduation = 161</b></p>			