



# Engineering Undergraduate Curriculum Structure (Cohort AY2019/2020)

University Level Requirements	Programme Requirements		Unrestricted Elective Modules
<p><b>General Education (GE):</b></p> <ul style="list-style-type: none"> <li>• 1 Human Cultures (GEH)</li> <li>• 1 Asking Questions (GEQ1000)</li> <li>• 1 Quantitative Reasoning (GER1000)</li> <li>• 1 Thinking and Expression (GET)</li> <li>• 1 Singapore Studies (GES)</li> </ul>	<p><b>Faculty Requirements:</b></p> <p><b>Common Year 1 Modules:</b></p> <ul style="list-style-type: none"> <li>• ES1531 Critical Thinking &amp; Writing = 4 MCs</li> </ul> <p><b>Common Non-Year 1 Modules:</b></p> <ul style="list-style-type: none"> <li>• EG2401A Engineering Professionalism = 2 MCs</li> </ul>	<p><b>Major Requirements:</b></p> <p><b>Foundational Requirements (36 MCs):</b></p> <ul style="list-style-type: none"> <li>• Mathematics I &amp; II - 8 MCs</li> <li>• Programming Methodology - 4 MCs</li> <li>• Engineering Principles &amp; Practice I/II - 8 MCs</li> <li>• Design and Make - 4 MCs</li> <li>• Systems Thinking and Dynamics - 4 MCs</li> <li>• Introduction to Machine Learning - 4 MCs</li> <li>• Materials Engineering Principles &amp; Practice - 4 MCs</li> </ul> <p><b>Internship (10 MCs)</b></p> <p><b>ME Discipline Specific Mods (56MCs):</b> (Mechanical Engineering modules):</p> <ul style="list-style-type: none"> <li>• Core modules = 28 MCs</li> <li>• Design Project <i>or</i> FYP = 8 MCs</li> <li>• ME elective modules = 12 MCs</li> <li>• Pathway Requirements = 8 MCs</li> </ul>	<ul style="list-style-type: none"> <li>• 32 MCs of Unrestricted Elective Modules (UEMs)</li> </ul>
<b>Sub-Total MCs = 20</b>	<b>Sub-Total MCs = 6</b>	<b>Sub-Total MCs = 102</b>	<b>Sub-Total MCs = 32</b>
<p><b>Minimum MCs required for graduation = 160</b></p>			