

**COHORT 2019/2020**

**Bachelor of Engineering (Biomedical Engineering)**

**Recommended Semester Schedule for Biomedical Engineering Students (Poly Students)**

Semester 1	MC	Semester 2	MC
CM1417 Fundamentals of Chemistry (UEM 1)	4	MA1511 Engineering Calculus	2
MA1301 Introductory Mathematics (UEM 2)	4	MA1512 Differential Equations for Engineering	2
UEM 3	4	GER1000 Quantitative Reasoning (GE 2)	4
GE 1	4	Free Elective 1 to replace IA	4
MLE1010 Materials Engineering Principles and Practice OR EG1311 Design and Make	4	PC1432 Physics IIE	4
		ES1531 Critical Thinking & Writing	4
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>20</b>
Semester 3	MC	Semester 4	MC
BN2201 Quantitative Physiology for Bioengineers	4	BN2102 Bioengineering Data Analysis	4
BN2403 Fundamentals of Biosignals Processing and Bioinstrumentation	4	BN2204 Fundamentals of Biomechanics	4
CM1501 Organic Chemistry for Engineers	4	BN2301 Fundamental Biochemistry and Biomaterials for Bioengineers	4
EE2211 Introduction to Machine Learning	4	EG2401A Engineering Professionalism	2
MA1513 Linear Algebra with Differential Equations	2	IE2141 Systems Thinking and Dynamics	4
GEQ1000 (GE 3)	4	GE 4	4
<b>Sub-total</b>	<b>22</b>	<b>Sub-total</b>	<b>22</b>
Semester 5	MC	Semester 6	MC
BN3101 Biomedical Engineering Design	6	BN4101 B.Eng. Dissertation	4
Free Elective 2 (to replace IA)	4	Free Elective 3 (to replace IA)	2
GE 5	4	Technical Elective 2	4
Technical Elective 1	4	Pathway Elective 1	4
<b>Sub-total</b>	<b>18</b>	<b>Sub-total</b>	<b>14</b>
Semester 7	MC	<u>Exemptions</u>  CS1010E (4MCs) BN1111 (4MCs) BN2111 (4MCs) MLE1010 (4MCs) or EG1311 (4MCs) UEM (20MCs)  Total: 36MCs	
BN4101 B.Eng. Dissertation	4		
Pathway Elective 2	4		
<b>Sub-total</b>	<b>8</b>		

**Notes:**

- 1) Students with a Diploma in Nanotechnology & Materials Science (NYP) or Diploma in Materials Science (RP) are exempted from MLE1010, but MUST read EG1311.
- 2) Students with Diplomas other than Nanotechnology & Materials Science (NYP) or Diploma in Materials Science (RP) are exempted from EG1311, but MUST read MLE1010.
- 3) Please take non level-1000 modules for your UEMs and free electives.