

# Department of Biomedical Engineering & Technology

## Curriculum of BS Biomedical Engineering Technology Program

### 2K17 onwards

<b>First Semester</b>					
<b>Code #</b>	<b>Subject</b>	<b>Nature</b>	<b>Theory</b>	<b>Practical</b>	<b>Credit Hours</b>
BMS-110	Basic Biology (for Pre-Engineering Students)	Natural Science	2*	1*	0*
BMS-120	Basic Mathematics (for Pre-Medical Students)	Natural Science	3*	0	
BMS-133	Applied Physics	Natural Science	2	1	3
BMS-143	Applied Chemistry	Natural Science	2	1	3
BMT-113	Computer Applications	Computing	1	2	3
BMT-122	Technical Drawing	Foundation	0	2	2
BMH-152	Functional English	Humanities	2	0	2

<b>Second Semester</b>					
<b>Code #</b>	<b>Subject</b>	<b>Nature</b>	<b>Theory</b>	<b>Practical</b>	<b>Credit Hours</b>
BMS-163	Applied Mathematics – I	Natural Science	3	0	3
BMT-123	Biochemistry	Foundation	2	1	3
BMT-133	Physiology – I	Foundation	2	1	3
BMT-143	Human Anatomy	Foundation	2	1	3
BMT-154	Electrical Technology Fundamentals	Foundation	2	2	4
BMT-164	Workshop Practice – I	Foundation	0	2	2

<b>Third Semester</b>					
<b>Code #</b>	<b>Subject</b>	<b>Nature</b>	<b>Theory</b>	<b>Practical</b>	<b>Credit Hours</b>
BMS-213	Applied Mathematics-II	Natural Science	3	0	3
BMT-213	Biophysics	Foundation	2	1	3
BMT-223	Circuit Analysis	Foundation	2	1	3
BMT-233	Physiology – II	Breadth	2	1	3
BMH-223	Communication Skills & Technical Report Writing	Humanities	2	1	3
BMH-232	Pakistan Studies	Humanities	2	0	2

<b>Fourth Semester</b>					
<b>Code #</b>	<b>Subject</b>	<b>Nature</b>	<b>Theory</b>	<b>Practical</b>	<b>Credit Hours</b>
BMT-242	Workshop Practice – II	Foundation	0	2	2
BMT-254	Basic Electronics	Foundation	2	2	4
BMT-264	Digital Logic Technology	Breadth	2	2	4
BMT-274	Biomedical Instrumentation – I	Breadth	2	2	4
BMT-283	Biomechanics	IDEE	2	1	3

Fifth Semester					
Code #	Subject	Nature	Theory	Practical	Credit Hours
BMT-314	Biomedical Electronics	Breadth	2	2	4
BMT-322	Economics and Healthcare Management	Breadth	2	0	2
BMT-334	Microprocessors & Microcontrollers	Depth	2	2	4
BMT-344	Biomedical Instrumentation – II	Depth	2	2	4
BMM-312	Professional Practices & Medical Ethics	Management Sciences	2	0	2
BMM-322	Entrepreneurship	Management Sciences	2	0	2

Sixth Semester					
Code #	Subject	Nature	Theory	Practical	Credit Hours
BMT-353	Telemedicine	Depth	2	1	3
BMT-364	Medical Imaging	Depth	2	2	4
BMT-374	Biomedical Control System	Depth	2	2	4
BMT-384	Rehabilitation Techniques	Depth	2	2	4
BMH-332	Human Psychology	Humanities	2	0	2
BMH-342	Islamic Studies/Ethics	Humanities	2	0	2

Seventh Semester					
Code #	Duration	Subject	Theory	Practical	Credit Hours
BMT-411	16 Weeks	Supervised Industrial Training (continued)	0	15	15
BMT-412	16 Weeks	Technical Project (Continued)	0	3	3
BMM-413	16 Weeks	Social Entrepreneurship	0	0	0*

Eighth Semester					
Code #	Duration	Subject	Theory	Practical	Credit Hours
BMT-411	16 Weeks	Supervised Industrial Training	0	15	15
BMT-412	16 Weeks	Technical Project	0	3	3