

BS Biomedical Technology (AHS)

SEMESTER I			
S.N.	COURSE	CREDIT HOURS	CATEGORY
MLT-501	<u>Human Anatomy</u>	2	I.D
MLT-501-L	<u>Human Anatomy Lab</u>	1	I.D
MLT-502	<u>Human Physiology</u>	2	I.D
MLT-502-L	<u>Human Physiology Lab</u>	1	I.D
MLT-503	<u>Introduction to Medical Biochemistry</u>	1	I.D
MLT-503-L	<u>Introduction to Medical Biochemistry Lab</u>	1	I.D
ENG-501	Functional English	3	General Education
ICT-501	Applications of Information and Communication Technologies (ICT)	2	General Education
ICT-501-L	Applications of Information and Communication Technologies (ICT) Lab	1	General Education
BIO-501	Fundamental of Biology	2	General Education
BIO-501-L	Fundamental of Biology Lab	1	General Education
Total Credit Hours = 17			

SEMESTER II			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-501	Introduction to biomedical Engineering	3	Major
BMT502	Applied physics	2	Major
BMT-502-L	Applied physics Lab	1	Major
BMT-503	Biofluid mechanics & Bioheat transfer	3	Major
BMT-504	Clinical equipment	2	Major
BMT-504-L	Clinical equipment Lab	1	Major
SOC-500	Introduction to Sociology	2	General Education
ISL-501	Islamic Studies (Religious Edu / Ethics for non-Muslim students)	2	General Education

ENG-502	Expository Writing	3	General Education
Total Credit Hours = 18			

SEMESTER III			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-505	Computer aided engineering drawing	2	Major
BMT-505-L	Computer aided engineering drawing Lab	1	Major
BMT-506	<u>Biomedical electronics</u>	2	Major
BMT-506-L	Biomedical electronics Lab	1	Major
QRE-501	Quantitative Reasoning – I	3	General Education
ARB-500	Arabic language	2	General Education
CCE-501	Civics and Community Engagement	2	General Education
ICP-501	Ideology and Constitution of Pakistan	2	General Education
UHQ-501	Understanding of Holy Quran - I	1 (0-1)	General Education
Total Credit Hours = 16			

SEMESTER IV			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-507	Biomedical instrumentation -I	2	Major
BMT-507-L	Biomedical instrumentation -I <u>Lab</u>	1	Major
UHQ-502	Understanding of Holy Quran - II	1 (0-1)	General Education
QRE-502	Quantitative Reasoning – II	3	General Education
BMT-508	Signals & systems	2	Major
BMT-508-L	Signals & systems Lab	1	Major
BMT-509	Biomaterials	2	Major
BMT-509-1	Biomaterials Lab	1	Major
ENT-501	Entrepreneurship	2 (2-0)	General Education
PKS-	Pakistan Studies	2 (2-0)	General Education

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Total Credit Hours = 17			

SEMESTER V			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-601	Modelling & simulation	2	Major
BMT-601-L	Modelling & simulation Lab	1	Major
BMT-602	Medical image processing	2	Major
BMT-602-L	Medical image processing Lab	1	Major
BMT-603	Engineering management	3	Major
BMT-604	Biomedical instrumentation -II	2	Major
BMT-604-L	Biomedical instrumentation -II Lab	1	Major
BMT-605	Microprocessor & interfacing	2	Major
BMT-605-L	Microprocessor & interfacing Lab	1	Major
Total Credit Hours (15)			

SEMESTER VI			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-606	Biomedical signal processing	2	Major
BMT-606-L	Biomedical signal processing Lab	1	Major
BMT-607	Rehabilitation engineering	2	Major
BMT-607-L	Rehabilitation engineering Lab	1	Major
BMT-608	Medical device quality system and standards	3	Major
BMT-609	Drug delivery systems	2	Major
BMT-609-L	Drug delivery systems Lab	1	Major
BMT-610	Medical robotics-I	2	Major
BMT-610-L	Medical robotics-I Lab	1	Major

Total Credit Hours (15)			

SEMESTER VII			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-611	Biophysics	2	Major
BMT-611-L	Biophysics Lab	1	Major
BMT-612	Medical data system	2	Major
BMT-612-L	Medical data system Lab	1	Major
BMT-613	Biomedical Control Systems I	2	Major
BMT-613-L	Biomedical Control Systems I Lab	1	Major
BMT-614	Internship	3	Major
BMT-615	Medical robotics-II	2	Major
BMT-615-L	Medical robotics-II Lab	1	Major
Total Credit Hours (15)			

SEMESTER VIII			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BMT-616	Artificial Intelligence in Health Care	2	Interdisciplinary
BMT-616-L	Artificial Intelligence in Health Care Lab	1	Interdisciplinary
BMT-617	Biosafety and biosecurity	3	Interdisciplinary
BMT-618	Biomechanics	2	Major
BMT-618-L	Biomechanics Lab	1	Major
BMT-619	Capstone Project	3	Capstone
BMT-620	Clinical equipment-II	2	Major

BMT-620-L	Clinical equipment-II Lab	1	Major
Total Credit Hours (15)			