

## BS Blood Banking Technology (AHS)

<b>SEMESTER I</b>			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BBT-501	<u>Human Anatomy -I</u>	2	Major: AHS Common Core
BBT-501-L	<u>Human Anatomy –I- Lab</u>	1	Major: AHS Common Core
BBT-502	<u>Human Physiology- I</u>	2	Major: AHS Common Core
BBT-502-L	<u>Human Physiology- I- Lab</u>	1	Major: AHS Common Core
BBT-503	Introduction to blood transfusion services	3	Major: AHS Common Core
BIO-501	Fundamental of Biology	2	General Education
BIO-501-L	Fundamental of Biology- Lab	1	General Education
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
<b>Total Credit Hours = 18</b>			

<b>SEMESTER II</b>			
S.N.	COURSE	CREDIT HOURS	CATEGORY
BBT-504	<u>Biochemistry I</u>	2	Major: AHS Common Core
BBT-504-L	<u>Biochemistry I- Lab</u>	1	Major: AHS Common Core
BBT-505	<u>Human PhysiologyII</u>	2	Major: AHS Common Core
BBT-505-L	<u>Human PhysiologyII- Lab</u>	1	Major: AHS Common Core
BBT-506	Human anatomy II	2	Major: AHS Common Core
BBT-506-L	Human anatomy II- Lab	1	Major: AHS Common Core
ENG-502	Expository Writing	3	General Education
SOC-500	Introduction to Sociology	2	General Education
ISL-501	Islamic Studies (Religious Edu / Ethics for non-Muslim students)	2	General Education

**Total Credit Hours = 16**

<b>SEMESTER III</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
BBT-507	Biosafety & risk and waste management	2	Major: AHS Common Core
BBT-507-L	Biosafety & risk and waste management- Lab	1	Major: AHS Common Core
BBT-508	The Concept of Blood Safety	2	Major: AHS Common Core
BBT-508-L	The Concept of Blood Safety- Lab	1	Major: AHS Common Core
BBT-509	<u>Biochemistry-II</u>	2	Major: AHS Common Core
BBT-509-L	<u>Biochemistry-II Lab</u>	1	Major: AHS Common Core
QRE-501	Quantitative Reasoning – I	3	General Education
BBT-510	Microbiology	2	Major: AHS Common Core
BBT-510-L	Microbiology- Lab	1	Major: AHS Common Core
CCE-501	Civics and Community Engagement	2	General Education
UHQ-501	Understanding of Holy Quran - I	1 (0-1)	General Education
<b>Total Credit Hours = 18</b>			

<b>SEMESTER IV</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
BBT-511	Immunoematology I	2	Major: AHS Common Core
BBT-511-L	Immunoematology I- Lab	1	Major: AHS Common Core
UHQ-502	Understanding of Holy Quran - II	1 (0-1)	General Education
QRE-502	Quantitative Reasoning – II	3	General Education
BBT-512	Blood Processing and Storage	2	Major: AHS Common Core
BBT-512-L	Blood Processing and Strage- Lab	1	Major: AHS Common Core
ICP-501	Ideology and Constitution of Pakistan	2	General Education
ARB-500	Arabic language	2	General Education
ENT-	Entrepreneurship	2	General Education

501			
PKS-501	Pakistan Studies	2	General Education
<b>Total Credit Hours = 18</b>			

<b>SEMESTER V</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
BBT-601	Immunoematology II	2	Major: Domain Core
BBT-601-L	Immunoematology II- Lab	1	Major: Domain Core
BBT-602	<u>Blood Donor Management</u>	2	Major: Domain Core
BBT-602-L	<u>Blood Donor Management- Lab</u>	1	Major: Domain Core
BBT-603	<u>General Pathology</u>	2	Major: Domain Core
BBT-603-L	<u>General Pathology- Lab</u>	1	Major: Domain Core
BBT-604	<u>Transfusion Transmissible Infections</u>	3	Major: Domain Core
BBT-605	<u>Molecular Biology</u>	2	Major: Domain Core
BBT-605-L	<u>Molecular Biology- Lab</u>	1	Major: Domain Core
BBT-606	<u>HLA System</u>	3 (0-3)	Major: Domain Core
<b>Total Credit Hours (18)</b>			

<b>SEMESTER VI</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
BBT-607	Benefits and risks of blood Transfusion	2	Major: Domain Core
BBT-607-L	Benefits and risks of blood Transfusion- Lab	1	Major: Domain Core
BBT-608	Clotting factor disorders	3	Major: Domain Core
BBT-609	Principles of Hemostasis	2	Major: Domain Core
BBT-609-L	Principles of Hemostasis- Lab	1	Major: Domain Core
BST-601	Biostatistics	2	Interdisciplinary
BST-601-L	Biostatistics- Lab	1	Interdisciplinary
BBT-610	Minor Blood groups	3	Major: Domain Core
BBT-611	Immunology & Serology	2	Major: Domain Core
BBT-611-L	Immunology & Serology- Lab	1	Major: Domain Core
<b>Total Credit Hours (18)</b>			

<b>SEMESTER VII</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
BBT-612	Fundamental of infection control	2	Major: Domain Core
BBT-612-L	Fundamental of infection control- Lab	1	Major: Domain Core
BIF-601	Bioinformatics	2	Interdisciplinary
BIF-601-L	Bioinformatics- Lab	1	Interdisciplinary
BBT-613	Apheresis (Component preparation and Therapeutics)	2	Major: Domain Core
BBT-614	Bioethics	2	Major: Domain Core
BBT-615	Internship	3 (0-3)	Internship
BBT-616	Platelet refractoriness	2	Major
BBT-617	Quality Management Systems in blood transfusion services	2	Major
BBT-617-L	Quality Management Systems in blood transfusion services- Lab	1	Major
<b>Total Credit Hours (18)</b>			

<b>SEMESTER VIII</b>			
<b>S.N.</b>	<b>COURSE</b>	<b>CREDIT HOURS</b>	<b>CATEGORY</b>
AIH-601	Artificial Intelligence in Health Care	2	Interdisciplinary
AIH-601-L	Artificial Intelligence in Health Care- Lab	1	Interdisciplinary
BBT-618	Automation in blood banking	2	Major: Domain Core
BBT-619	Bed side Transfusion	2	Major: Domain Core
BBT-619-L	Bed side Transfusion- Lab	1	Major: Domain Core
BBT-620	Organization and Management of blood transfusion services	2	Major: Domain Core
BBT-620-L	Organization and Management of blood transfusion services- Lab	1	Major: Domain Core
BBT-622	Basic epidemiology	3 (0-3)	Major: Domain Core
BBT-623	Capstone Project	3	Capstone
<b>Total Credit Hours (17)</b>			