

Bachelor of Technology in Health Sciences and Technology

School of Healthcare Science and Engineering

Programme Credit Structure		Credits				BAHST103	Diagnotics, Therapeutic and Surgical Equipments	3	0	2	4
University Core Courses		60				BAHST201	Bio-Medical Imaging and Image Processing	3	0	2	4
Professional Courses		60				BAHST202	Materials in Healthcare	3	0	2	4
Professional Core		40				BAHST203	Molecular and Cellular Biology for Health Sciences	3	0	2	4
Concentration		20				BAHST204	Biofluid Mechanics	3	1	0	4
Open Elective Courses		40				BAHST205	Signal Processing and Analysis for Healthcare Application	3	0	2	4
Total Graded Credit Requirement		160				BAHST206	Biomechanics	3	1	0	4
University Core Courses		60				BAHST301	Biofabrication Technologies	3	0	2	4
		L	T	P	C	Concentrations					
BAPHY102	Physics for Biologist	3	0	2	4	Medical Device Engineering and Intelligent Systems 20					
BACHY102	Organic Chemistry for Biotechnologists	3	0	2	4	BAHST302	Engineering Design of Medical Devices and Systems	3	0	2	4
BAMAT101	Multivariable Calculus and Differential Equations	3	0	2	4	BAHST303	Image Processing and Data Analysis	3	0	2	4
BAMAT204	Applied Linear Algebra	3	1	0	4	BAHST304	Biosensors, Wearable Devices, and Internet of Medical Things	3	1	0	4
BABME101	Basic Engineering	3	0	2	4	BAHST305	Bio-MEMS and Bio-NEMS	3	1	0	4
BACSE101	Problem Solving Using Python	0	0	4	2	BAHST306	Preclinical and Clinical Trial Design for Medical Devices	3	1	0	4
BACSE102	Problem Solving Using Java	0	0	4	2	Regenerative Medicine and Biotherapeutics 20					
BAENG101	Technical English Communication	3	0	2	4	BAHST307	Advanced Cell and Gene Therapy	3	1	0	4
BASTS101	Qualitative and Quantitative Skills Practice I	3	0	0	1	BAHST308	Tissue Engineering and Regenerative Medicine	3	0	2	4
BASTS102	Qualitative and Quantitative Skills Practice II	3	0	0	1	BAHST309	Microbiology, Immunology, and Pathology	3	0	2	4
BAFLC100	Foreign Language	1	0	2	2	BAHST310	Bioinspired Engineering and Biomimetic Technologies	3	1	0	4
BAHSM100	Humanities, Social Science and Management	3	0	0	3	BAHST311	Biochemistry and Molecular Pharmacology	3	0	2	4
BAHUM101	India Studies and Environmental Sciences	3	0	0	3	Digital Health, Neurotechnology, and Immersive Systems 20					
BAHUM103	Ethics and Values	2	0	0	2	BAHST312	Digital Health and Telemedicine	3	1	0	4
BAMGT101	Entrepreneurship	3	0	0	3	BAHST313	Virtual Reality and Immersive Technologies in Healthcare	3	0	2	4
BAHST191	Basic Multidisciplinary Project	0	0	4	2	BAHST314	Brain-Computer Interfaces and Assistive Neurotechnologies	3	0	2	4
BAHST291	Innovative Design Project	0	0	4	2	BAHST315	Precision/Personalized Medicine	3	1	0	4
BAHST391	Research / Design Project	0	0	6	3	BAHST316	Medical Robotics and Intelligent Surgical Systems	3	1	0	4
BAHST491	Technical Answers for Real World Problems	1	0	4	3	Open Elective Courses 40					
BAHST399	Internship I	0	0	2	1	Engineering Sciences Humanities Social Sciences Liberal Arts Economics Finance Management					
BAHST499	Internship II / Capstone Project	0	0	12	6						
BAENG100	Effective English Communication (NCC)	0	0	4	2						
BAEXC100	Extracurricular Activities (NCCM)	0	0	4	2						
BABIT100	Biology (NCC)	3	0	0	3						
BAMAT100	Foundations of Mathematics (NCC)	3	0	0	3						
Professional Core Courses		40									
BAHST101	Applied Human Anatomy and Physiology	3	0	2	4						
BAHST102	Fundamentals of Artificial Intelligence for Healthcare	3	1	0	4						