

**Maulana Abul Kalam Azad University of Technology, WB**  
**(Formerly known as West Bengal University of Technology)**  
**Syllabus of B.Sc. in Medical Instrumentation & Critical Care Technology**  
**Effective from academic session 2023-24**

**Model curriculum structure for 4 year UG programs for B.Sc. in Medical Instrumentation & Critical Care Technology**

SEM	MAJOR (Offline)	Credit	Minor (Blended Mode)	Inter Disciplinary (Offline)	Ability Enhancement (Offline)	Skill Enhancement (Online /Sessional)	Common Value added Course (SESSIONAL)	TOTAL CREDITS																																	
<b>I</b>	BASICS OF HUMAN ANATOMY	5	(1 sub x 3 credits)	Any one from GE baskets Basket A or D (3 CREDITS)	ENGLISH & PROFESSIONAL COMMUNICATION (2 CREDITS)	LIFE SKILLS & PERSONALITY DEVELOPMENT (2 CREDITS)	YOGA/ HEALTH & WELLNESS/ SPORTS (2 CREDITS)	22																																	
	BASICS OF HUMAN PHYSIOLOGY	5	Principles Of Management															<b>II</b>	BASIC CRITICAL CARE MANAGEMENT [BASICS OF NURSING, ANAESTHESIA, SURGERY]	5	(1 sub x 3 credits)	Any one from GE baskets Basket B or E (3 CREDITS)	Modern Indian Languages and Literature (2 CREDITS)	IT TOOLS FOR BUSINESS (2 CREDITS)	CRITICAL THINKING/ NSS MENTAL HEALTH (2 CREDITS)	22	FUNDAMENTALS OF BIOCHEMISTRY	5	Organization Behaviour/Business Ethics & Corporate Governance										<b>III</b>	BASICS OF PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY	5
<b>II</b>	BASIC CRITICAL CARE MANAGEMENT [BASICS OF NURSING, ANAESTHESIA, SURGERY]	5	(1 sub x 3 credits)	Any one from GE baskets Basket B or E (3 CREDITS)	Modern Indian Languages and Literature (2 CREDITS)	IT TOOLS FOR BUSINESS (2 CREDITS)	CRITICAL THINKING/ NSS MENTAL HEALTH (2 CREDITS)	22																																	
	FUNDAMENTALS OF BIOCHEMISTRY	5	Organization Behaviour/Business Ethics & Corporate Governance															<b>III</b>	BASICS OF PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY	5	(1 sub x 4 credits)	Any one from GE baskets Basket C or	THE CONSTITUTION, HUMAN RIGHTS & LAW (2 CREDITS)	Understanding basics of Cyber Security (2 CREDITS)		21															
<b>III</b>	BASICS OF PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY	5	(1 sub x 4 credits)	Any one from GE baskets Basket C or	THE CONSTITUTION, HUMAN RIGHTS & LAW (2 CREDITS)	Understanding basics of Cyber Security (2 CREDITS)		21																																	

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	FUNDAMENTALS OF BIO-PHYSICS	5	Sustainability	F (3 CREDITS)				
<b>IV</b>	ICU THERAPY	4	Human resource management		SOCIETY, CULTURE & HUMAN BEHAVIOUR (2 CREDITS)			23
	CSSD PROCEDURE	4	/Corporate Social Responsibility (CSR) (4 credits)					
	LABORATORY SCIENCE [HAEMATOLOGY & PARASITOLOGY]	5	Sales and distribution management /E-Commerce (4 credits)					
<b>V</b>	EQUIPMENT MAINTENANCE & TROUBLE SHOOTING	5	Financial management (4 credits)			INTERNSHIP (4 CREDITS)		22
	LAW & MEDICAL ETHICS	5	Entrepreneurship (4 credits)					
<b>VI</b>	RESEARCH METHODOLOGY - I	4	Customer relationship management (4 credits)					22

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	CELLULAR BIOPHYSICS	5	Career planning and management/Managing Workplace Diversity (4 credits)					
	BIOCHEMICAL TECHNIQUE	5						
<b>VII</b>	OPHTHALMOLOGY & ENT	5	Consumer behaviour (4 credits)/ Exploring Business Opportunity					22
	COMMUNITY HEALTH & EVS	5	Strategic management/Intellectual Property Rights (4 credits)					
	RESEARCH METHODOLOGY - II	4						
<b>VIII</b>	GYNAECOLOGY & OBSTETRICS	5				RESEARCH PROJECT (12 CREDITS)		22
	CLINICAL MANIFESTATION OF PEDIATRICS	5						
	91 CREDITS	91	<b>42 CREDITS</b>	<b>9 CREDITS</b>	<b>8 CREDITS</b>	<b>22 CREDITS</b>	<b>4 CREDITS</b>	<b>176</b>