

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Syllabus of B.Sc. in Critical Care Technology
Effective from academic session 2024-25

Graduate Attributes

By the end of the program the students will be able to:

- To help healthcare professionals comprehend issues related to providing critical care to patients requiring the same along with having a full proof knowledge on maintenance of various biomedical instruments required for conducting medical tests and other related ailments.
- The course also aims to comprehend Healthcare organizations.
- The students can work in conjunction with other healthcare organizations.
- Work in hospitals (both private and public sectors) as a healthcare professional.
- A BSc in Critical Care Technology can easily get placed in hospitals.
- He/she can work in hospitals in ICUs, emergency rooms, trauma centers, and similar healthcare settings requiring emergency and critical care.
- Hospitals working in both the private and public sectors will be in need of the services.
- After successful completion of a B.Sc. in Critical Care Technology, students are eligible to work in the Critical Care Unit, Cardiac Unit, Operation Theatre, etc in hospitals and other health care units.
- The students would be able to learn about setting up medical equipment, monitoring the equipment, recording the data, and providing the data to the physicians.
- students will have a basic understanding of the scientific principles on which medical instruments and devices are designed for healthcare applications.

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Syllabus of B.Sc. in Critical Care Technology
Effective from academic session 2024-25

Curriculum Structure

Semester 1

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 101 & 191	BASICS OF HUMAN ANATOMY	3	0	2	5
2.		BMICCT 102 & 192	BASICS OF HUMAN PHYSIOLOGY	3	0	2	5
3.	DSE	MIM101	PRINCIPLES OF MANAGEMENT	2	1	0	3
4.	GE		ANYONE FROM GE BASKET A/D	3	0	0	3
5.	AECC	AECC101	ENGLISH & PROFESSIONAL COMMUNICATION	2	0	0	2
6.	SEC	SEC181	LIFE SKILLS & PERSONALITY DEVELOPMENT	2	0	0	2
7.	VAC	VAC181A/B/C	YOGA/HEALTH & WELLNESS/SPORTS	2	0	0	2
Total Credit							22

Semester 2

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 201	BASIC CRITICAL CARE MANAGEMENT [BASICS OF NURSING, ANAESTHESIA, SURGERY]	3	2	0	5
2.		BMICCT 202 & 292	FUNDAMENTALS OF BIOCHEMISTRY	3	0	2	5
3.	DSE	MIM201A/B	ORGANIZATION BEHAVIOUR /BUSINESS ETHICS & CORPORATE GOVERNANCE	2	1	0	3
4.	GE		ANYONE FROM GE BASKET B/E	3	0	0	3
5.	AECC	AECC201	Modern Indian Languages & Literature	2	0	0	2
6.	SEC	SEC281	IT Skills	2	0	0	2
7.	VAC	VAC281A/B/C/D	CRITICAL THINKING/NSS /MENTAL HEALTH/ENVIRONMENTAL STUDIES	2	0	0	2
Total Credit							22

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Syllabus of B.Sc. in Critical Care Technology
Effective from academic session 2024-25

Semester 3

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 301 & 391	BASICS OF PATHOLOGY, MICROBIOLOGY, PHARMACOLOGY	3	-	2	5
2.		BMICCT 302	FUNDAMENTALS OF BIO-PHYSICS	3	2	0	5
3.	DSE	MIM301A	Principles of Marketing	3	1	0	4
4.	GE		GE- Anyone from the GE Basket	3	-	0	3
5.	AECC	AECC 301	The Constitution, Human Rights & Law	2		0	2
6.	SEC	SEC 381	Understanding basics of Cyber Security	2		0	2
Total Credit							21

Semester 4

Subject Type	Code	Subject Name	Credits			Total Credits
			L	T	P	
DSC	BMICCT 401	ICU THERAPY	3	1	0	4
	BMICCT 402	CSSD PROCEDURE	3	1	0	4
	BMICCT 403 & 493	LABORATORY SCIENCE [HAEMATOLOGY & PARASITOLOGY]	3	0	2	5
DSE	MIM401	Human Resource Management	4	-	0	4
	MIM402	E-Commerce	4	-	0	4
AECC	AECC 401	Society, Culture & Human Behaviour	2	-	0	2
Total Credit						23

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Syllabus of B.Sc. in Critical Care Technology
Effective from academic session 2024-25

Semester 5

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 501	EQUIPMENT MAINTENANCE & TROUBLE SHOOTING	3	-	2	5
2.		BMICCT 502	LAW & MEDICAL ETHICS	3	-	2	5
3.	DSE	MIM501	Financial Management	4	-	0	4
		MIM502	Entrepreneurship	4	-	0	4
5.	SEC	SEC581	Internship	4	-	0	4
Total Credit							22

Semester 6

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 601	RESEARCH METHODOLOGY - I	3	1	0	4
2.		BMICCT 602	CELLULAR BIOPHYSICS	3	2	0	5
3.		BMICCT 603 & 693	BIOCHEMICAL TECHNIQUE	3	0	2	5
4.	DSE	MIM601	Customer relationship management	4	-	0	4
5.		MIM602	Career planning and management	4	-	0	4
Total Credit							22

Maulana Abul Kalam Azad University of Technology, WB
(Formerly known as West Bengal University of Technology)
Syllabus of B.Sc. in Critical Care Technology
Effective from academic session 2024-25

Semester 7

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 701	OPHTHALMOLOGY & ENT	3	2	0	5
2.		BMICCT 702	COMMUNITY HEALTH & EVS	3	2	0	5
3.		BMICCT 703	RESEARCH METHODOLOGY - II	3	1		4
4.	DSE	MIM701	Consumer Behavior	4	-	0	4
5.		MIM702	Strategic Management	4	-	0	4
Total Credit							22

Semester 8

Sl.	Subject Type	Code	Subject Name	Credits			Total Credits
				L	T	P	
1.	DSC	BMICCT 801	GYNAECOLOGY & OBSTETRICS	3	2	0	5
2.		BMICCT 802	CLINICAL MANIFESTATION OF PEDIATRICS	3	2	0	5
3.	SEC	SEC881	Research Project	12	-	-	12
Total Credit							22