



# PROSPECTUS

FOR

## **B.VOC DEGREE PROGRAMME**

UNDER

## **VIDYASAGAR UNIVERSITY**

In

### ➤ **HEALTH CARE**

### ➤ **MEDICAL LABORATORY TECHNOLOGY**

**COURSES ARE  
(SPONSORED BY UNIVERSITY GRANTS COMMISSION)**

## **SESSION 2026-2029**

## **MAHISHADAL RAJ COLLEGE**

(Govt. Sponsored)

**NAAC accredited 'A' Grade College**

**MAHISHADAL: PURBA MEDINIPUR : PIN – 721628: WEST BENGAL**

**Website : [www.mahishadalrajcollege.com](http://www.mahishadalrajcollege.com)**

**Skill Training Partner: SCHOOL OF MEDICAL TECHNOLOGY**

**24, GIRISH CHANDRA BOSE ROAD, KOLKATA – 700014**

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*Bachelor of Vocation (B.Voc), a Bachelor level degree specified by UGC under section 22(3) of UGC Act, 1956 and notified in official Gazette of India dated 19th January, 2013 be **recognized at par with other Bachelor level degrees for competitive exams conducted by Union/State Public Service Commission, Staff Selection Commission or other such bodies where the eligibility criteria is "Bachelor Degree in any discipline".***

Mahishadal Raj College is among the first 100 **Community Colleges** in India, established by the Govt of India in December 2013 under the supervision of University Grants Commission, to materialise the dream of 'Skilling India' and expand vocational studies at the college level following the guideline of National Skills Qualification Framework (NSQF). However, in order to give further push to vocational education on a even larger scale, MHRD has established 46 'Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood (KAUSHAL). during the XII Plan period spreading all over the country. These Centres would take-up the vocational education to new levels and offer courses beyond B.Voc. Degree and formulate courses at postgraduate level keeping in mind the need of i) Industry in specialized areas; ii) Instructional design, curriculum design and contents in the areas of Skills Development; iii) Pedagogy, assessment for skills development education and training; iv) trained faculty in the areas of skill development; etc. These Centres would also embed and follow the guiding principles of NSQF, QPs, and NOSs of National Skill Development Corporation for their programmes and would not focus on skilling alone but also develop entrepreneurship traits. Mahishadal Raj College, is honoured by the University Grants Commission and Ministry of Human Resource and Development, Govt of India, as the only institution to establish **Deen Dayal Upadhyay KAUSHAL Kendra, A Centre of Excellence in skill development, in the state of West Bengal**. The college is also the registered Vocational Training Provider (VTP) of Paschim Banga Society for Skill Development (Govt of West Bengal) for imparting skill based training in as many as 19 Trades ranging from Agriculture to Health Care. **Mahishadal Raj College, has become the first Govt Sponsored College in the state of West Bengal to become the official Training Partner of National Skill Development Corporation (NSDC) in the month of April ,2020.**



## **A Brief Understanding of B.Voc Programme**

It has been a long felt necessity to align higher education with the emerging needs of the economy so as to ensure that the graduates of higher education system have adequate knowledge and skills for employment and entrepreneurship. The higher education system has to incorporate the requirements of various industries in its curriculum, in an innovative and flexible manner while developing a holistic and well groomed graduate.

Ministry of HRD, Government of India had issued an Executive Order in September 2011 for National Vocational Education Qualification Framework (NVEQF). Subsequently, Ministry of Finance, in pursuance of the decision of Cabinet Committee on Skill Development in its meeting held on 19th December, 2013, has issued a notification for National Skills Qualifications Framework (NSQF) which supersedes NVEQF.

Under the National Skills Development Corporation, many Sector Skill Councils representing respective industries have/are being established. One of the mandates of Sector Skill Councils is to develop National Occupational Standards (NOSs) for various job roles in their respective industries. It is important to embed the competencies required for specific job roles in the higher education system for creating employable graduates.

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF. The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs alongwith broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

### **Objectives**

1. To provide judicious mix of skills relating to a profession and appropriate content of General Education.
2. To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
3. To provide flexibility to the students by means of pre-defined entry and multiple exit points.
4. To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.
5. To provide vertical mobility to students coming out of 10+2 with vocational subjects.



## **B.Voc Degree Programme in Health Care**

A graduate of B. Voc. in Healthcare is an all-rounder as far as patient care is concerned. The course envisages building an overall expertise in the student, of managing patients with care, whether it's an in-patient or someone in the OPD or anywhere else in the hospital. This student would be capable of offering a range of services from paediatric care to radiology or X-ray technician to physiotherapy assistant or care of patients at operation theatre.

Besides, skills related to personal care of patients, basic nursing procedures, patient ambulation and handling, store keeping, biomedical waste disposal, etc. in short we can say healthcare student manage entire patient life cycle. The need for such professionals has been expressed by not only the healthcare industry employers, but also the consumers of this industry, i.e., patients. The specialized skill training offered to the students makes them an asset not only to the doctors and nurses but the patients as well.

### **Structure and Components:**

- Bachelor Degree in Health Care has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Health Care Sector Skill Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.
- The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.

# Year wise Health Care Curriculum

## First Year : NSQF Level - 5 (Diploma Standard)

SEMESTER - I	Module No	Vocational Content (Module name)	Credits/ Hours Theoretical & Practical		General Content	Hours/Credits
	1	Anatomy & Physiology	1.4	40	Communication Skill	100/6.0
	2	Pharmacy	1.7	40		
	3	Multipurpose Health Care & Community Medicine	1.00	45		
	4	Cell Biology	2.00	40		
	5	Basic Microbiology	2.7	40	Computer Skill	100/6.0
	6	Hereditary disease	2.2	20		
Terminal Competency : 1. The students get knowledge and skill about the basics physiology and anatomy. 2. Get knowledge on basic structure and function of cell which is the structural and functional unit of our body. 3. They will be familiar with the idea that what the microbes are. . 4. There are many hereditary disease in our surroundings. That will be familiar about the hereditary disease. 5. Will be familiar with composition of various basic drug and ethics of use of common drug. 6. Will get required knowledge and practice about the idea about Multipurpose Health Care & Community Medicine .						
SEMESTER - II	7	Pathology	1.4	40	Physiology	125/6.0
	8	Pharma Sales	2.7	30		
	9	Physiotherapy	1.7	35		
	10	Parasitology	3.0	25		
	11	Immunology	1.7	25	Nutrition	125/6.0
	12	Paediatric Nursing & Growth & Development	2.8	30		
	13	Med.Surg.Nursing - Orthopaedics ,E.N.T., Skin & Communicable diseases , Eye , Gynae General Med.	2.7	40		
	14	Bioinstrumentation and data handling	9	40		
Terminal Competency : 1. Get knowledge about the Differentiate between various types of immunity 2. Prepare immunization schedule chart. 3. Identify the key components of Universal Immunization Programme. 4. Describe the key components of a Universal Immunization Programme. 5. Describe the importance of immunization 6. Describe the side effects of immunization 7. Describe the various aspects of immunization schedule chart 6.8. Explain the meaning of Bioinstrumentation and data handling, 9. . They will be very efficient About medical surgical nursing in different trade Immunity.						
Total Vocational Content			550/36.0		Total General Content	450/24.0
Grand Total			1000 Hrs./60.0 Credits			
<b>Job Role after successful completion of Sem-I &amp; II (Level-5) – Assistant pathologist, Operation Theatre Assistant, Pharmacy Assistant</b>						

**Second Year : NSQF Level - 6 ( Advance Diploma Standard)**

SEMESTER - III	Module No	Vocational Content (Module name)	Hours/Credits Theoretical & Practical		General Content	Hours/Credits
	15	First Aid, Emergency & Dresser	2.7	40	Communication Skill	75/5.0
	16	Vaccination & Sterilisation	2.0	30		
	17	Medical Record Keeping	2.7	40		
	18	Basic Bio-chemistry	2.6	60	Computer Skill	75/5.0
	19	Basic Endocrinology	1.7	25		
	20	Basic Medical Nursing and Surgical Nursing	2.3	75		
Terminal Competency: 1. Get knowledge on First Aid, Emergency & Dresser. 2. Get knowledge of the Vaccination & Sterilisation. 3. Will know about the various system of record keeping in the hospital management. 4. Biochemical structure and analytical ability of different basic bio molecule as carbohydrate, protein and fat, enzyme, vitamin and hormone. 5. Come to know the uses and functions of hormone therapy, hormone structure and function.6. Main benefit of this semester is the basic theoretical and applied knowledge of surgical nursing which must help a student to do something independently in their life.						
SEMESTER - IV	21	Radiology & X-Ray Technician	2.7	45	Physiology (Elective-1)	125/7.0
	22	Operation Theatre (Technician)	2.0	40		
	23	Reproductive Biology & Family Planning	2.7	35		
	24	Introduction to Hospital Operations Introduction to Cardiac care technology	3.3	50	Nutrition (Elective-2)	125/7.0
	25	Paramedical training in cardiac care	3.3	50		
	26	Staff safety infection control	1.5	10		
	27	ECG	4.7	60		
	28	Biomedical waste	1.8	30		
Terminal Competency: 1. Will be skilled in understanding importance of Radiology & XRay(Technician). With this knowledge they can establish themselves as efficient X ray and radiation expertise in the market 2. Will be skilled in managing in BIOMEDICAL WASTE.. 3.Will know the different types of ECG technique and they perform ECG by their own hand. 4. Will be skilled in repairing different problems related to STAFF SAFETY INFECTION CONTROL in their working ambience.5. Will be skilled in customer handling. 6. Will be able to work as an assistant in ECHNOLOGY PARAMEDICAL TRAINING IN CARDIOLOGY MEDICINE.						
Total Vocational Content			640/36		Total General Content	400/24
Grand Total			1040 Hrs./60.0 Credits			
<b>Job Role after successful completion of Sem-III &amp; IV (Level-6) – ECG Technician, Radiology Technician, Medical Record Keeper, OT Assistant</b>						

**Third Year : NSQF Level - 7 ( Degree Standard)**

	Module No	Vocational Content (Module name)	Hours/Credits Theoretical & Practical		General Content	Hours/Credits
	15	Social Skill	2.7	40		

SEMESTER - V	16	Business Communication	2.0	30	Communication Skill	75/5.0
	17	Human Resource Management	2.7	40		
	18	Facility Planning in Health care	2.6	60	Computer Skill	75/5.0
	19	Hospital Policies and Procedure	1.7	25		
	20 21	Admission and Discharge policies Hospital Infection control	2.3	75		

Terminal Competency: 1. Get knowledge on First Aid, Emergency & Dresser. 2. Get knowledge of the Vaccination & Sterilisation. 3. Will know about the various system of record keeping in the hospital management. 4. Biochemical structure and analytical ability of different basic bio molecule as carbohydrate, protein and fat, enzyme, vitamin and hormone. 5. Come to know the uses and functions of hormone therapy, hormone structure and function. 6. Main benefit of this semester is the basic theoretical and applied knowledge of surgical nursing which must help a student to do something independently in their life.

SEMESTER - VI		Course			Credit	30
		!500 hrs OJT training				

## General Rules

### Continuous Assessment

The course is based on Choice Based Credit system as per UGC Guidelines. The 60% skill component (18 credits in each semesters) of the course will be assessed and certified by the respective Sector Skill Councils and 40% general education component will be assessed by the university on choice based credit system (12 credits in each semester). One credit will be awarded in terms of NSQF level certification which will have 60% weightage of total credits in the course in the following manner.

Name of the course	NSQF Level Certificate	Cumulative Credits
Diploma	Level - 5	36 Credits
Advance Diploma	Level - 6	72 Credits
B.Voc Degree	Level - 7	108 Credits

**Eligibility Criteria :**

The minimum Educational Qualification for admission to B.Voc Courses in any of the above five stream is Higher Secondary or Equivalent (10 + 2) pass from any recognized board. Those who have successfully cleared NSQF Level – 4 (Vocational) are eligible for Direct Admission to Level 5 of B.Voc Courses.

Maximum age limit for admission to any course is 35

**Reservation Policy:**

The reservation procedure is followed as per norms of Vidyasagar University.

**Fees Structure:****Details of Breakup of Fees :**

Sl No.	Fee Head	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
1.	COURSE FEE	10,000	10,000	10,000
2.	ACADEMIC DEVELOPMENT FEE	200	200	200
3.	DEVELOPMENT FEE	200	200	200
3.	BUILDING FEE	200	200	200
4.	ELECTRICITY FEE	100	100	100
5.	NAAC FEE	40	40	40
6.	FEE BOOK	220	220	220
7.	LAB FEE	200	200	200
8.	SEMINER/WORKSHOP FEE	200	200	200
9.	UNIVERSITY REGISTRATION FORM	40	-	-
10.	UNIVERSITY REGISTRATION FEE	100	-	-
11.	INCIDENTAL CHARGES	40	-	-
12.	CAUTION MONEY (REFUNDABLE)	5,000	-	-
13.	PRACTICAL TRAINING FEE	42,000	42,000	42,000
14.	ANNUAL PROGRAM FEE	-	-	1000/-
		<b>Rs-58,540/-</b>	<b>Rs-53,360/-</b>	<b>Rs-54,360/-</b>
	<b>Total</b>		<b>Rs-1,66,260/- Rupees One Lakh Sixty Six Thousand Two Hundred Sixty Only</b>	

**Application Procedure:**

1. Application Forms for Admission to B.Voc Courses can be downloaded from College website on & from 13.05.2025 (Students of Vocational Stream and candidates have secured more than 60% in HS or Equivalent can directly fill up respective Admission Registration Form)
2. Fill up the forms with blue / black pen in capital letters. Keep no points blank
3. As per Notification from Higher Education Dept, Govt of West Bengal, “No Application Processing Fee” is required to pay along with the Application Form
4. Please scan duly filled up Application Form ( Registration Form in case of Vocational Students and candidates have secured more than 60% in HS or Equivalent) in either pdf or jpg format and send to our Email: [mrcbvocadmission2025@gmail.com](mailto:mrcbvocadmission2025@gmail.com) or whatsapp the same to :9733776191
5. After submission of Application form applicant will receive a ‘Submission and verification’ SMS to his/her registered Mobile Number.
6. Selected Candidates will be intimated about their selection and procedure of admission by SMS to their registered mobile number and Email.

Please contact Shri Susim Payra ( Mob: 7908558567 / 9733038150) or Prof. Arnab Patra (9733216242) for any further query.

7. Merit List of the Selected Candidates will also be published in the College Website.

Medical Laboratory Technician (MLT): also referred to as Clinical Laboratory Science professional, Medical Technologist and Medical Laboratory Scientist. The Medical laboratory technicians perform complex tests for diagnosis, treatment, and prevention of disease. These professionals are responsible for supporting and assisting doctors/ scientists in their day to day working in a variety of roles. They function as the main support to biomedical scientists in pathology laboratories. The objective of the course is to develop a pool of trained workforce which can be employed by diagnostic service providers to assist pathologists & microbiologists. This course is geared to prepare 10+2 children with science background and who desire to be employed as a technician in a diagnostic care facility on completion of the course. This program focuses on the acquisition of skills necessary to assume an auxiliary role in the diagnosis of medical conditions under the direct supervision.

Upon completion of the course, trainees will be able to :

- \* Demonstrate knowledge about the healthcare sector and diagnostic services
- \* Demonstrate the ability to perform clinical skills essential in providing basic diagnostic services such as Correctly collect, transport, receive, accept or reject and store blood /urine/stool and tissue samples, etc.;
- \* Conduct analysis of body fluids/ samples; Maintain, operate and clean laboratory equipment; Provide technical information about test results; Prepare and document medical tests and clinical results; etc.
- \* Demonstrate quality assurance in Laboratory works
- \* Practice infection control measures
- \* Demonstrate readily availability of medical and diagnostic supplies
- \* Demonstrate techniques to maintain the personal hygiene needs
- \* Demonstrate actions in the event of medical and facility emergencies
- \* Demonstrate professional behavior, personal qualities and characteristics of a Medical laboratory Technician
- \* Demonstrate good communication, communicate accurately and appropriately in the role of Medical laboratory Technician

### **Structure and Components:**

- Bachelor Degree in Medical Laboratory Technology has been framed following the guidelines of National Skill Qualification Framework (NSQF) and the B. Sc. programme of Vidyasagar University (VU).
- The B. Voc. Programme comprises of both vocational and academic components.
- Vocational or skill component of the curriculum shall be examined at the end of each semester by the Health Care Sector Skill Council (National Skill Development Corporation, Govt of India).
- Mahishadal Raj College is the only Govt sponsored college in West Bengal to become the NSDC Training Partner.
- The assessment for the General education component shall be done as per the schedule and guidelines of Vidyasagar University.

## **Year wise Curriculum of B.Voc in Medical Laboratory Technology**

### **First Year : NSQF Level - 5 (Diploma Standard)**

**Semester I**

Course Code	Component	Unit	Topic	Credits	L / Week
<b>BMLT101</b> (General & Human Anatomy , Physiology -I)	Skill	I	Basics of Human Anatomy-I	04	01
	Skill	II	Basics of Physiology-I		01
	Skill	III	Basic English		01
	Skill	IV	Human Values and Professional Ethics		01
<b>BMLT102</b> (Routine Laboratory Techniques-I)	Skill	I	Human Healthcare and Safety Regulations	04	01
	Skill	II	Introduction to Haematology and Routine tests		01
	Skill	III	Specimen Collection		01
	Skill	IV	Laboratory Preparation in Hematology		01
<b>BMLT103</b> (Special Laboratory Techniques-I)	Skill	I	Biochemical Test Profile -I	04	01
	Skill	II	Biochemical Test Profile - II		01
	Skill	III	Elementary Knowledge of Chemistry- I		01
	Skill	IV	Elementary Knowledge of Chemistry- II		01
<b>BMLT104</b> (Cell Biology and Biodiversity-I)	General	I	Microscopy and Organization of Cell -I	03	01
	General	II	Microscopy and Organization of Cell -II		01
	General	III	Systematic study of Animals - I		01
	General	IV	Systematic study of Animals - II		01
<b>BMLT105</b> (Biomolecules)	General	I	Structure, Functions and Classification of Amino Acids and Proteins	03	01
	General	II	Structure, Functions and Classification of Carbohydrates		01
	General	III	Structure, Functions and Classification of Lipids		01
	General	IV	Physical and Chemical Properties of Nucleic Acids		01
<b>BMLT106</b> (Fundamentals of Microbiology)	General	I	Introductory Microbiology-1	03	01
	General	II	Morphology and Structure of Microorganisms		01
	General	III	Recombinant DNA Technology		01
	General	IV	Microbial Ecology and Biotic Interactions		01
<b>BMLTP101</b>			Practicals of Course BMLT101	02	06
<b>BMLTP102</b>			Practicals of Course BMLT102	02	06
<b>BMLTP103</b>			Practicals of Course BMLT103	02	06
<b>BMLTP104</b>			Practicals of Course BMLT104	01	06
<b>BMLTP105</b>			Practicals of Course BMLT105	01	06
<b>BMLTP106</b>			Practicals of Course BMLT106	01	06
<b>Total Credits</b>				<b>30</b>	



**Semester II**

Course Code	Component	Unit	Topic	Credits	L / Week
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<b>BMLT107</b> (General & Human Anatomy , Physiology - II)	Skill	I	Basics of Human Anatomy-II	<b>04</b>	<b>01</b>
	Skill	II	Basics of Physiology-II		<b>01</b>
	Skill	III	Basics of Computer Skills		<b>01</b>
	Skill	IV	Communication Skills		<b>01</b>
<b>BMLT108</b> (Routine Laboratory Techniques-II)					
	Skill	I	Routine Haematological Tests	<b>04</b>	<b>01</b>
	Skill	II	Urine Examination		<b>01</b>
	Skill	III	Stool Examination		<b>01</b>
	Skill	IV	Sputum and Semen Examination		<b>01</b>
<b>BMLT109</b> (Special Laboratory Techniques-II)					
	Skill	I	Basic Microbiology	<b>04</b>	<b>01</b>
	Skill	II	Introduction to serology		<b>01</b>
	Skill	III	Serological Tests		<b>01</b>
	Skill	IV	Staining Techniques		<b>01</b>
<b>BMLT110</b> (Ecology and Biodiversity-II)					
	General	I	Systematic study of Animals - III	<b>03</b>	<b>01</b>
	General	II	Systematic study of Animals - IV		<b>01</b>
	General	III	Ecosystem-I		<b>01</b>
	General	IV	Ecosystem-II		<b>01</b>
<b>BMLT111</b> (Enzymology and Bioenergetics)					
	General	I	Enzymes	<b>03</b>	<b>01</b>
	General	II	Enzyme Purification and Chromatography Techniques		<b>01</b>
	General	III	Enzyme Kinetics		<b>01</b>
	General	IV	Bioenergetics		<b>01</b>
<b>BMLT112</b> Microbial Physiology - Metabolism					
	General	I	Microbial Nutrition, Cultivation, Isolation and Preservation	<b>03</b>	<b>01</b>
	General	II	Enzyme Regulation		<b>01</b>
	General	III	Microbial Metabolism -I		<b>01</b>
	General	IV	Microbial Metabolism -II		<b>01</b>
<b>BMLTP107</b>					
			Practicals of Course BMLT107	<b>02</b>	<b>06</b>
<b>BMLTP108</b>					
			Practicals of Course BMLT108	<b>02</b>	<b>06</b>
<b>BMLTP109</b>					
			Practicals of Course BMLT109	<b>02</b>	<b>06</b>
<b>BMLTP110</b>					
			Practicals of Course BMLT110	<b>01</b>	<b>06</b>
<b>BMLTP111</b>					
			Practicals of Course BMLT111	<b>01</b>	<b>06</b>
<b>BMLTP112</b>					
			Practicals of Course BMLT112	<b>01</b>	<b>06</b>
<b>Total Credits</b>				<b>30</b>	
<b>On Job Training</b>					

Course Code	Component	Unit	Topic	Credits	L / Week
BMLT201 (Hematology and Blood Banking-I)	Skill	I	Special Hematological Tests	04	01
	Skill	II	Haemostasis & Bleeding Disorders		01
	Skill	III	Immunohaematology & Blood Transfusion		01
	Skill	IV	Routine Lab Procedures in Blood Bank		01
BMLT202 (Microbiology and Serology)	Skill	I	Laboratory Diagnosis of Mycotic and Emerging Infections	04	01
	Skill	II	Diagnostic Microbiology		01
	Skill	III	Serology		01
	Skill	IV	Bacteriology		01
BMLT203 (Clinical Pathology and Biochemistry)	Skill	I	Miscellaneous Body Fluids	04	01
	Skill	II	Biochemical Test Profile		01
	Skill	III	Analytical Techniques		01
	Skill	IV	Biochemical Processes		01
BMLT204 (Metabolism)	General	I	Carbohydrate Metabolism	04	01
	General	II	Lipid Metabolism		01
	General	III	Protein Metabolism		01
	General	IV	Nucleic Acids		01
BMLT205 (Pathogenic Microbiology)	General	I	Infectious Diseases	04	01
	General	II	Microbes of Medical Importance		01
	General	III	Mode of Microbial Infections		01
	General	IV	Antimicrobial Drugs		01
BMLTP201			Practicals of Course BMLT201	02	06
BMLTP202			Practicals of Course BMLT202	02	06
BMLTP203			Practicals of Course BMLT203	02	06
BMLTP204			Practicals of Course BMLT204	02	06
BMLTP205			Practicals of Course BMLT205	02	06
<b>Total Credits</b>				<b>30</b>	



#### Semester IV

Course Code	Component	Unit	Topic	Credits	L / Week
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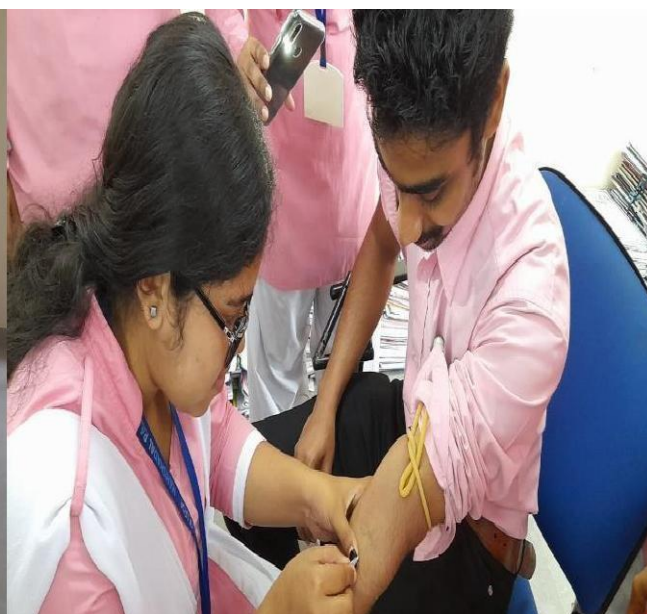
<b>BMLT206</b> (Clinical Biochemistry and Microbiology- I)	Skill	I	Metabolic Disorders & Deficiency	04	01
	Skill	II	Clinical Endocrinology		01
	Skill	III	Body Fluid Specimen Processing		01
	Skill	IV	Blood Banking		01
<b>BMLT207</b> (Histology- Cytology -I)	Skill	I	Introduction to Histology	04	01
	Skill	II	Tissue Processing		01
	Skill	III	Staining Procedures		01
	Skill	IV	Instrumentation in Histocytotechnology		01
<b>BMLT208</b> (Parasitology and Blood Cell Disirders-I)	Skill	I	Medical Parasitology	04	01
	Skill	II	Common Intestinal worms		01
	Skill	III	Malarial parasites, Filarial parasites		01
	Skill	IV	Lab. diagnosis of Parasitic infections		01
<b>BMLT209</b> (Biochemical Techniques)	General	I	Spectroscopic Techniques	04	01
	General	II	Electrophoretic Techniques		01
	General	III	Chromatographic Techniques		01
	General	IV	Radio Isotopic Techniques		01
<b>BMLT210</b> (Immunology)	General	I	Introduction to Immunology	04	01
	General	II	Humoral Immunity		01
	General	III	Cell Mediated Immunity		01
	General	IV	Antigen-Antibody Interactions		01
<b>BMLTP206</b>			Practicals of Course BMLT206	02	06
<b>BMLTP207</b>			Practicals of Course BMLT207	02	
<b>BMLTP208</b>			Practicals of Course BMLT208	02	
<b>BMLTP209</b>			Practicals of Course BMLT209	02	
<b>BMLTP210</b>			Practicals of Course BMLT210	02	
<b>Total Credits</b>				<b>30</b>	

### On Job Training



**Third Year : NSQF Level - 7 ( B.Voc Standard) Semester V**

Course Code	Component	Unit	Topic	Credits	L / Week
<b>BMLT301 (Medical Genetics and Microbiology-II)</b>	Skill	I	Genetics	<b>04</b>	<b>01</b>
	Skill	II	CLIA techniques		<b>01</b>
	Skill	III	Immunology and Virology		<b>01</b>
	Skill	IV	Toxicology		<b>01</b>
<b>BMLT302 (Histology-Cytology -II)</b>	Skill	I	Exfoliative Cytology-Specimen Preparation	<b>04</b>	<b>01</b>
	Skill	II	Exfoliative Cytology- Staining Techniques		<b>01</b>
	Skill	III	Exfoliative Cytology- Benign and Malignant Cells		<b>01</b>
	Skill	IV	Advanced Instrumentation		<b>01</b>
<b>BMLT303 (Parasitology and Blood Cell Disorders-II)</b>	Skill	I	Descriptive study of RBC abnormalities	<b>04</b>	<b>01</b>
	Skill	II	Disorders related to RBC		<b>01</b>
	Skill	III	Normal White Cell Count & Physiological variation		<b>01</b>
	Skill	IV	Disorders related to WBC		<b>01</b>
<b>BMLT304 (Pathogenic Microbiology)</b>	General	I	Pathogenic Microbes, Diagnosis, Prevention and Control	<b>10</b>	<b>01</b>
	General	II	Prevention and Control of Viral Diseases		<b>01</b>
	General	III	Human Mycotic Infections		<b>01</b>
	General	IV	Mechanisms and Control of Parasitic Infections		<b>01</b>
<b>BMLTP301</b>			<b>Practicals of Course BMLT301</b>	<b>02</b>	<b>06</b>
<b>BMLTP302</b>			<b>Practicals of Course BMLT302</b>	<b>02</b>	<b>06</b>
<b>BMLTP303</b>			<b>Practicals of Course BMLT303</b>	<b>02</b>	<b>06</b>
<b>BMLTP304</b>			<b>Practicals of Course BMLT304</b>	<b>02</b>	<b>06</b>
<b>Total Credits</b>				<b>30</b>	



**Semester VI**

Course Code	Component	Unit	Topic	Credits	L / Week
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<b>BMLT305 (Clinical Laboratory Operations and Management)</b>	<b>Skill</b>	<b>I</b>	<b>Clinical Laboratory Operations and Management</b>	<b>04</b>	<b>04</b>
<b>BMLT306 (Professional Training)</b>	<b>Skill</b>	<b>I</b>	<b>Professional Training for three (3) months at reputed hospital, diagnostic centre, pathology laboratory, research institute, pharmaceutical industry, etc.</b>	<b>04</b>	<b>—</b>
<b>BMLT307 (Project Work)</b>	<b>Skill</b>	<b>I</b>	<b>Student shall carry out the project work in consultation with faculty and industrial partner organizations.</b>	<b>04</b>	<b>—</b>
<b>BMLT308 (Food and Industrial Microbiology)</b>	<b>General</b>	<b>I</b>	<b>Food Microbiology</b>	<b>10</b>	<b>01</b>
	<b>General</b>	<b>II</b>	<b>Contamination, Preservation and Spoilage of Food</b>		<b>01</b>
	<b>General</b>	<b>III</b>	<b>Production Strains Isolation and Screening Techniques</b>		<b>01</b>
	<b>General</b>	<b>IV</b>	<b>Fermentation Products</b>		<b>01</b>
<b>BMLTP305</b>			<b>Practicals of Course BMLT305</b>	<b>02</b>	<b>06</b>
<b>BMLTP306</b>			<b>Practicals of Course BMLT306</b>	<b>02</b>	<b>06</b>
<b>BMLTP307</b>			<b>Practicals of Course BMLT307</b>	<b>02</b>	<b>06</b>
<b>BMLTP308</b>			<b>Practicals of Course BMLT308</b>	<b>02</b>	<b>06</b>
<b>Total Credits</b>				<b>30</b>	



## General Rules

### Continuous Assessment

The course is based on Choice Based Credit system as per UGC Guidelines. The 60% skill component (18 credits in each semesters) of the course will be assessed and certified by the respective Sector Skill Councils and 40% general education component will be assessed by the university on choice based credit system (12 credits in each semester). One credit will be awarded in terms of NSQF level certification which will have 60% weightage of total credits in the course in the following manner.

Name of the course	NSQF Level Certificate	Cumulative Credits
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<b>Diploma</b>	<b>Level - 5</b>	<b>36 Credits</b>
<b>Advance Diploma</b>	<b>Level - 6</b>	<b>72 Credits</b>
<b>B.Voc Degree</b>	<b>Level - 7</b>	<b>108 Credits</b>

**Eligibility Criteria :**

The minimum Educational Qualification for admission to B.Voc Courses in any of the above five stream is Higher Secondary or Equivalent (10 + 2) pass from any recognized board. Those who have successfully cleared NSQF Level – 4 (Vocational) are eligible for Direct Admission to Level 5 of B.Voc Courses.

Maximum age limit for admission to any course is 35

**Reservation Policy:**

The reservation procedure is followed as per norms of Vidyasagar University.

**Fees Structure:**

**Details of Breakup of Fees:**

Sl No.	Fee Head	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year
1.	COURSE FEE	10,000	10,000	10,000
2.	ACADEMIC DEVELOPMENT FEE	200	200	200
3.	DEVELOPMENT FEE	200	200	200
3.	BUILDING FEE	200	200	200
4.	ELECTRICITY FEE	100	100	100
5.	NAAC FEE	40	40	40
6.	FEE BOOK	220	220	220
7.	LAB FEE	200	200	200
8.	SEMINER/WORKSHOP FEE	200	200	200
9.	UNIVERSITY REGISTRATION FORM	40	-	-
10.	UNIVERSITY REGISTRATION FEE	100	-	-
11.	INCIDENTAL CHARGES	40	-	-
12.	CAUTION MONEY (REFUNDABLE)	5,000	-	-
13.	PRACTICAL TRAINING FEE	42,000	42,000	42,000
14.	ANNUAL PROGRAM FEE	-	-	1000/-
		<b>Rs-53,540/-</b>	<b>Rs-53,360/-</b>	<b>Rs-54,360/-</b>
<b>Total</b>			<b>Rs-1,61,260/- Rupees One Lakh Sixty One Thousand Two Hundred Sixty Only</b>	

**Application Procedure:**

15. Application Forms for Admission to B.Voc Courses can be downloaded from College website on & from 13.05.2025 (Students of Vocational Stream and candidates have secured more than 60% in HS or Equivalent can directly fill up respective Admission Registration Form)
16. Fill up the forms with blue / black pen in capital letters. Keep no points blank
17. As per Notification from Higher Education Dept, Govt of West Bengal, "No Application Processing Fee" is required to pay along with the Application Form
18. Please scan duly filled up Application Form ( Registration Form in case of Vocational Students and candidates have secured more than 60% in HS or Equivalent) in either pdf or jpg format and send to our Email: [mrcbvocadmission2025@gmail.com](mailto:mrcbvocadmission2025@gmail.com) or whatsapp the same to : 9733038150
19. After submission of Application form applicant will receive a 'Submission and verification' SMS to his/her registered Mobile Number.
20. Selected Candidates will be intimated about their selection and procedure of admission by SMS to their registered mobile number and Email
21. Merit List of the Selected Candidates will also be published in the College Website.