



**MMM COLLEGE OF HEALTH SCIENCES**

(A Unit of The Madras Medical Mission)  
Affiliated to Tamilnadu Dr.MGR Medical University  
"Preparing for Life"



# COURSE INFORMATION



# GROUP A - NCAHP CURRICULUM (2026 ONWARDS) - SEMESTER SYSTEM

## 1. BACHELOR OF PHYSICIAN ASSOCIATES (B.PA)

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

### Job Scope :

Physician Associates support doctors across all specialties such as General Medicine, Cardiology, Cardiac Surgery, Pulmonology, Nephrology, Neurology, Gastroenterology, Emergency Medicine, Trauma Care, and Operation Theatres. They assist in patient evaluation, diagnostic procedures, ward management, ICU support, catheterization labs, and surgical assistance. They also find roles in hospital administration, research, academics, community health, and specialty care units.

I Semester	II Semester	III Semester	IV Semester
<ol style="list-style-type: none"> <li>1. Professionalism</li> <li>2. Anatomy-I</li> <li>3. Physiology-I</li> <li>4. Biochemistry and Molecular Biology-I</li> <li>5. Introduction to Microbiology</li> <li>6. Introduction to Healthcare Delivery System in India</li> <li>7. Functional English and soft skills</li> <li>8. Community Orientation-I</li> </ol>	<ol style="list-style-type: none"> <li>1. Professionalism</li> <li>2. Anatomy II</li> <li>3. Physiology II</li> <li>4. Biochemistry and Molecular Biology-II</li> <li>5. Medical Microbiology</li> <li>6. Introduction to computers</li> <li>7. Community orientation -II / Clinical skills</li> </ol>	<ol style="list-style-type: none"> <li>1. Pathology</li> <li>2. General Medicine-I</li> <li>3. Pharmacology and toxicology-I</li> <li>4. ENT, Ophthalmology &amp; Dermatology</li> <li>5. Basics of Surgery</li> <li>6. Community Orientation - III / Engagement</li> </ol>	<ol style="list-style-type: none"> <li>1. General Medicine-II</li> <li>2. Advanced Surgery</li> <li>3. Pharmacology &amp; Toxicology-II</li> <li>4. Psychology &amp; Introduction to Behavioral Medicine</li> <li>5. Medical Communication</li> <li>6. Community Medicine and Clinical Research - I</li> </ol>
V Semester	VI Semester	VII & VIII Semester	
<ol style="list-style-type: none"> <li>1. Emergency Medicine</li> <li>2. Paediatrics</li> <li>3. Introduction to healthcare management</li> <li>4. Medical Ethics and Law</li> <li>5. Community Medicine and Clinical Research - II</li> </ol>	<ol style="list-style-type: none"> <li>1. Non-Communicable Diseases</li> <li>2. Geriatric Medicine</li> <li>3. Obstetrics and Gynaecology</li> <li>4. Critical care Medicine</li> <li>5. Community Medicine and Clinical Research-III</li> </ol>	Internship & Project	

## 2. BACCALAUREATE IN ANAESTHESIA & OPERATION THEATRE TECHNOLOGY (B.AOTT)

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

### Job Scope :

Anaesthesia and Operation theatre Technologists are key members of the surgical team and ensure safe preparation and functioning of operation theatres. They assist anesthesiologists, surgeons, and nurses in patient preparation, airway management, surgical equipment handling, and infection control practices, and operation theatre coordination. They are employed in hospitals, surgical centers, ICUs, emergency units, day-care theatres, and trauma units.

I Semester	II Semester	III Semester	IV Semester
1.Introduction to Healthcare Delivery System in India 2.Medical Terminology and Record keeping (including anatomical terms) 3.Anatomy 4.Physiology 5.Health Care Quality & Patient Safety	1.Medical Law and Ethics, Professionalism & Values, Principles of Management 2.Basics of Biomedical sciences in surgery and Anaesthesia 3.Biochemistry & Haematology 4.Pathology & Microbiology 5.Basic Concepts in Pharmacology 6.Basic computers and information Science, Communication and soft skills.	1.Basic techniques of Anaesthesia 2.Basics of Surgical procedures 3. CSSD & Manifold Area. Industrial orientation and Industrial Visit	1.Advanced Anaesthesia Techniques 2.Advanced Surgical procedures 3.Basic Intensive Care 4.Clinical Medicine & Related Management
V Semester	VI Semester	VII & VIII Semester	
1.Specialized Anaesthesia 1 2.Specialized surgery 1 3.Recent Advances in Anaesthesia and Surgical fields 4.Community Medicine & Environmental Sciences	1.Specialized Anaesthesia 2 2.Specialized Surgery 2 3.Specialized Anaesthesia & Surgery 3 4.Research Methodology and Biostatistics	Internship & Project	

### 3. BACHELOR OF MEDICAL LABORATORY SCIENCE (B.MLS)

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

**Job Scope :**

Medical Laboratory Scientists perform diagnostic investigations in clinical chemistry, hematology, immunology, microbiology, molecular diagnostics, transfusion medicine, toxicology, and pathology. They work in hospitals, diagnostic labs, public health laboratories, research centers, pharmaceutical companies, and academic institutions. They also take up roles in laboratory management, quality control, biomedical companies, and laboratory informatics.

I Semester	II Semester	III Semester	IV Semester
1.Human Anatomy 2.Human Physiology 3.Fundamentals of the Healthcare System and Medical Laboratory Science 4. Communication and Professionalism 5.Basic Emergency care and First aid 6.Basics of Computer Application	1.Fundamentals of Microbiology 2. Basics of Biochemistry 3.Fundamentals of Haematology 4.Preventive and Social Medicine	1.Bacteriology 2.Intermediary Metabolism and Endocrinology 3.Clinical Haematology 4.Basics of Pharmacology	1.Virology and Immunology 2.Genetics and Molecular Biology 3. Clinical Pathology Medical Laboratory Management and Quality Control
V Semester	VI Semester	VII & VIII Semester	
1.Mycology & Parasitology 2.Analytical Biochemistry 3.Immuno-hematology and Transfusion Medicine 4.Medical Law and Ethics	1.Applied Pathobiology 2.Cytology and Histopathology 3.Clinical Biochemistry Biostatistics and Research Methodology	Internship & Project	

## 4. BACHELOR OF DIALYSIS THERAPY TECHNOLOGY (B.DTT)

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

### Job Scope :

Dialysis Technologists are trained to provide hemodialysis and peritoneal dialysis services for patients with acute and chronic kidney disease. They manage dialysis machines, water treatment systems, patient monitoring, infection control, vascular access care, and emergency protocols. Career opportunities include hospitals, nephrology centers, dialysis units, transplant programs, home dialysis care, and community renal care programs.

I Semester	II Semester	III Semester	IV Semester
1. Medical Terminology and Record keeping 2. Professionalism and values & Indian constitution 3. Human Anatomy 4. Human Physiology 5. Biochemistry 6. Introduction to Dialysis Therapy 7. Community Orientation & Clinical visit	1. Pathology 2. Microbiology 3. General Pharmacology 4. Applied anatomy & Physiology related to Dialysis Therapy 5. Fundamentals of Dialysis Therapy	1. Sociology in Health Care 2. Biomedical Waste Management 3. Basic Principles of Nursing Care 4. Medical Law and Ethics 5. Pathophysiology of the kidney diseases 6. Instrumentation Specific to Dialysis Therapy 7. Elective course	1. Pharmacology related to Dialysis therapy 2. Psychology 3. Renal Nutrition 4. Dialysis Therapies – Part I 5. Medical Electronics for Health Sciences 6. Research Methodology and Biostatistics
V Semester	VI Semester	VII & VIII Semester	
1. Dialysis Therapies – Part II 2. Renal Transplantation and Coordination 3. Clinical Problems and Evidenced Based Practice in Dialysis Therapy 4. Advanced Extracorporeal Therapies 5. Elective course	1. Recent Advancements in Renal replacement therapies 2. Principals of Management 3. Introduction to Quality Assurance in dialysis and Patient safety 4. Basic and Advanced Cardiac Life Support 5. Elective course	Internship & Project	

# GROUP B - NON SEMESTER SYSTEM

## 1.B.Sc. CARDIO PULMONARY PERFUSION CARE TECHNOLOGY

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

### Job Scope :

Cardiovascular Perfusionists are vital members of the cardiothoracic surgical team, with the primary responsibility of operating & managing the heart-lung machine and other ancillary equipment. During cardiac surgery, they closely monitor the patient's blood flow and other vital signs and are responsible for administering intravenous fluids, blood products and medications as required. They assist in ECMO and other critical care procedures.

I Year	II Year	III Year	IV Year
1.Anatomy & Physiology 2.Biochemistry & Pathology 3.Basics of Computer	1.Pharmacology, Pathology & Clinical Microbiology 2.Pathology - II 3.Principles of Perfusion Technology - I	1.Introduction to Surgery & CSSD 2.Cardio-Pulmonary Bypass and its Complications, Sterile Techniques & Surgical Asepsismaintenance 3.Principles of Perfusion Technology – II	Internship & Project

## 2. B.Sc. CARDIAC TECNOLOGY

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

### **Job Scope :**

Cardiac technologists perform diagnostic tests of cardio vascular system (ECHO, ECG, TREADMILL, etc) of patients to aid physician to treat in heart problems. Cardiac technologists assist doctors with cardiac catheterizations (including balloon angioplasty) and pacemakers.

I Year	II Year	III Year	IV Year
1.Applied Anatomy, Physiology and Biochemistry related to Cardiac Technology 2.Pathology, Microbiology, & Pharmacology related to Cardiac Technology 3.Medical Electronics, Biophysics and Computer usage relevant to Cardiac Technology 4.Basic Electrocardiography 5.Computer 6.English	1.Advanced Electro Cardiograph 2.Treadmill exercise stress testing and 24 hour Ambulatory ECG recording 3.Echocardiography 4.Clinical Features & Treatment relevant to CardiacTechnology –II and Basic Life Support	1.Cardiac catheterization laboratory basics 2.Cardiac catheterization laboratory advanced	Internship & Project

### 3. B.Sc. MEDICAL SOCIOLOGY

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

**Job Scope :**

Medical sociologists play a vital role in non-clinical areas of the hospitals like Administration, community medicine, HR. Front Office, Medical Records, Patient relations, counseling and transplant coordination. They also work in Government and Non-Governmental Organizations as Research Assistants and Program Officers, social Investigators in research organizations, content writers, as medical journalists and as health insurance investigators.

I Year	II Year	III Year	IV Year
1.Communication skills in English 2.Anatomy and Physiology 3.Foundation of Sociology & Cultural Anthropology 4.Social & Health Psychology 5.Medical Terminology& Coding 6.Introduction to Computer Science	1.Medical sociology I 2.Community Health & Social Medicine 3.Social Problems & Medical Social Work 4.Social Research Methods and Statistics	1.Medical sociology II 2.Medical Ethics, Legal Aspects & Human Rights 3.Principles of Management & Hospital Operations 4.Disaster Management & Environmental studies 5.Hospital Oriented Project	Internship & Project

### 3. B.Sc. MEDICAL SOCIOLOGY

**Eligibility :** 10+2, Physics, Chemistry and Biology subjects with 50%

**Duration :** 4 years

**Job Scope :**

Medical sociologists play a vital role in non-clinical areas of the hospitals like Administration, community medicine, HR. Front Office, Medical Records, Patient relations, counseling and transplant coordination. They also work in Government and Non-Governmental Organizations as Research Assistants and Program Officers, social Investigators in research organizations, content writers, as medical journalists and as health insurance investigators.

I Year	II Year	III Year	IV Year
1.Communication skills in English 2.Anatomy and Physiology 3.Foundation of Sociology & Cultural Anthropology 4.Social & Health Psychology 5.Medical Terminology& Coding 6.Introduction to Computer Science	1.Medical sociology I 2.Community Health & Social Medicine 3.Social Problems & Medical Social Work 4.Social Research Methods and Statistics	1.Medical sociology II 2.Medical Ethics, Legal Aspects & Human Rights 3.Principles of Management & Hospital Operations 4.Disaster Management & Environmental studies 5.Hospital Oriented Project	Internship & Project

# POSTGRADUATE COURSES NCAHP CURRICULUM (2026 ONWARDS) - SEMESTER SYSTEM

## 1.MASTERS OF NUTRITION AND DIETETICS

**Eligibility :** B.Sc Nutrition & Dietetics / Food & Nutrition/ Nutrition, Food Service Management & Dietetics / Clinical Nutrition on regular mode from recognized university.

**Duration :** 2 years

**Mode of Selection :** Entrance examination & Interview

### Job Scope :

Clinical Dietitian, Hospital Nutritionist, Research Dietitian, Public Health Nutritionist, Consultant Nutritionist, Corporate Dietitian, Sports Nutritionist, Food Industry Specialist, Consultant in NGOs, and Teaching Faculty.

I Semester	II Semester	III Semester	IV Semester
1.Advanced Human Nutrition and Metabolism 2.Advanced Pathophysiology and Clinical Biochemistry 3.Preventive & Therapeutic Dietetics 4.Research Methodology for Dietetics and Public Health 5.Biostatistics	1.Nutrition Assessment Methods & Applications for Dietitians 2.Advances in Enteral and Parenteral Nutrition 3.Advances in Public Health Nutrition 4.Nutrition and Immunity 5.Innovation in Food product development 6.Scientific writing skills	1.Intellectual Property Rights 2.Precision Nutrition 3.Institutional Food Service Management and Quantity Cookery 4.Advanced Communication Skills for Nutrition Practice 5.Internship	Internship & Project

## 2. MASTER OF MEDICAL LABORATORY SCIENCE (M.MLS)

**Eligibility :** B.Sc MLT on regular mode from recognized university.

**Duration :** 2 years

**Mode of Selection :** Entrance examination and Interview

### Job Scope :

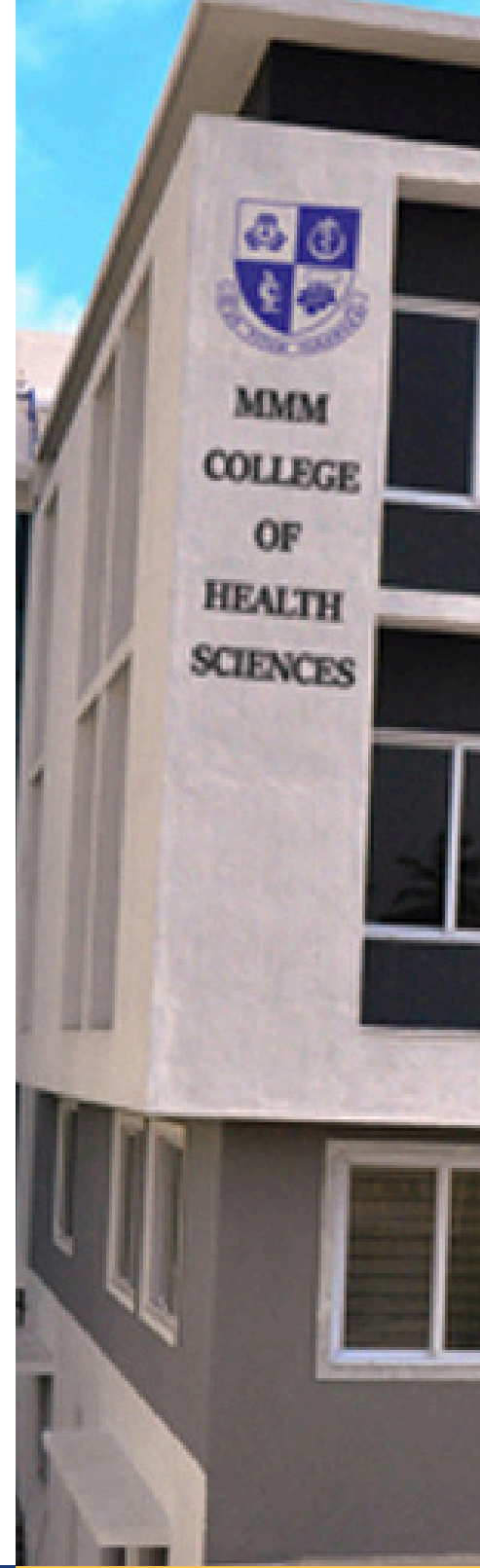
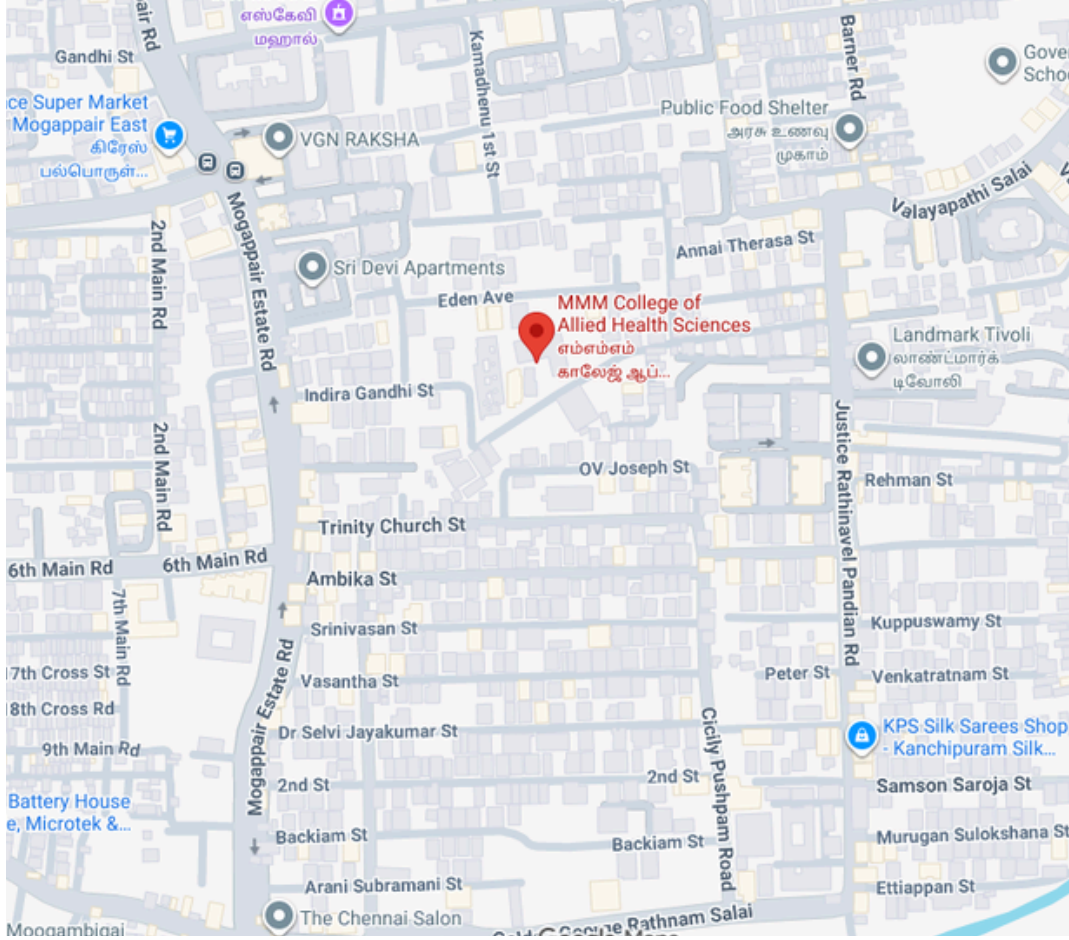
Medical Laboratory Scientist, Lab Manager, Quality Control Officer, Laboratory Consultant, Research Associate, Molecular Diagnostics Specialist, Public Health Lab Scientist, Faculty in Academic Institutions, and Laboratory Informatics Specialist.

I Semester	II Semester	III Semester	IV Semester
1. Medical Laboratory Management 2. Cell and Molecular Biology 3. Research Methodology & Biostatistics 4. Advanced Molecular Diagnostic Techniques 5. Digital Health Technologies 6. Elective Course	<b>Medical Biochemistry</b> 1. Bioorganic & Biophysical Chemistry 2. Instrumentation in Biochemistry 3. Enzymology & Nutrition 4. Intermediary Metabolism  <b>Medical Microbiology</b> 1. Essential and Applied Microbiology 2. Systematic Bacteriology 3. Medical Entomology and Parasitology 4. Immunology and Immunodiagnostics  <b>Haematology and Transfusion Medicine</b> 1. Haematology and Haematological Disorders 2. Haemostatic Disorders 3. Applied Immunopathology in Haematology 4. Clinical Pathology  <b>Histology and Cytology</b> 1. Translational Anatomy and Cell Dynamics 2. Essentials of Histology 3. Essentials of Cytopathology 4. Cancer Epidemiology and Digital Pathology	<b>Medical Biochemistry</b> 1. Clinical Biochemistry I 2. Clinical Biochemistry II 3. Immunology 4. Endocrinology & Biochemistry of Aging  <b>Medical Microbiology</b> 1. Medical Virology 2. Medical Mycology 3. Public Health Microbiology 4. Advances in Microbial Informatics  <b>Haematology and Transfusion Medicine</b> 1. Blood Banking and Immunohematology 2. Transfusion Medicine 3. Molecular Hematology 4. Advanced Haematological Techniques  <b>Histology and Cytology</b> 1. Diagnostic Histopathology 2. Cytological Techniques 3. Immunohistochemistry & Diagnostic Markers 4. Molecular Techniques in Histopathology & Cytology	Dissertation

# MMM College of Health Sciences

For more details in curriculum of NCAHP

[ncahp.abdm.gov.in](http://ncahp.abdm.gov.in)



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