

M.Sc. Operation Theatre & Anesthesia Technology	
PROGRAM OUTCOMES (POs)	
PO1	Nurture the scientific and/or clinical knowledge and skills for development of industrial applications, health care practices and entrepreneurship.
PO2	Develop the ability of critical thinking to analyse, interpret problems and to find out systematic approach for solution.
PO3	Impart decision making capability for handling various circumstances in their respective areas
PO4	Demonstrate research skills for planning, designing, implementation and effective utilization of research findings for community.
PO5	Develop an ability to function as an efficient individual and team player in multidisciplinary sectors for effective outcomes
PO6	Demonstrate an effective written and oral communication skills to communicate effectively in health care sector, industries, academia and research.
PO7	Inculcate code of ethics in professional and social circumstances to execute them in daily practices and research in respective areas of specialization
PO8	Develop lifelong learning attitude and values for enhancement of professional and social skills for an overall development
Course Outcomes (COs)	
Course Code	M.Sc. Operation Theatre & Anesthesia Technology
SEMESTER I	
MOTAT 101 T	Applied Anatomy & Physiology
CO1	Explain the structure and function of the human body in relation to healthcare practices.
CO2	Analyze physiological mechanisms and their relevance to clinical applications.
CO3	Apply anatomical and physiological concepts to patient care and medical procedures.
MOTAT 102 T	Pre-operative Assessment & Optimization Strategies
CO1	Identify key pre-operative assessment parameters to ensure patient safety.
CO2	Analyze risk factors and develop optimization strategies for surgical interventions.
CO3	Demonstrate decision-making skills in managing pre-operative patient conditions.
MOTAT 103 T	Surgical Equipment & Technology
CO1	Describe the working principles of various surgical instruments and technologies.
CO2	Demonstrate safe handling and maintenance of surgical equipment.
CO3	Apply knowledge of surgical technology in clinical and emergency settings.
CC 001 T	Research Methodology & Biostatistics
CO1	Understand the fundamentals of research methodology and biostatistics.
CO2	Apply statistical tools to analyze healthcare data and interpret research findings.
CO3	Develop research proposals addressing healthcare challenges.
MOTAT 104 P	Pre-operative Assessment & Optimization Strategies
CO1	Identify key pre-operative assessment parameters to ensure patient safety.
CO2	Analyze risk factors and develop optimization strategies for surgical interventions.
CO3	Demonstrate decision-making skills in managing pre-operative patient conditions.
MOTAT 105 P	Surgical Equipment & Technology
CO1	Describe the working principles of various surgical instruments and technologies.
CO2	Demonstrate safe handling and maintenance of surgical equipment.
CO3	Apply knowledge of surgical technology in clinical and emergency settings.
MOTAT 106 CP	MOTAT Directed Clinical Education - I
CO1	Demonstrate fundamental skills in OT and anesthesia procedures.
CO2	Assist in preoperative and intraoperative patient care.
CO3	Apply infection control and sterilization protocols in clinical settings.

CC 001 P	Research Methodology & Biostatistics
CO1	Understand the fundamentals of research methodology and biostatistics.
CO2	Apply statistical tools to analyze healthcare data and interpret research findings.
CO3	Develop research proposals addressing healthcare challenges.
SEMESTER II	
MOTAT 107 T	Anaesthetic Equipment & Procedures
CO1	Explain the principles and functioning of anaesthetic equipment.
CO2	Demonstrate proper handling and maintenance of anaesthetic devices.
CO3	Apply anaesthesia techniques based on clinical requirements.
MOTAT 108 T	Advanced Anaesthesia Techniques
CO1	Understand advanced anaesthesia techniques for different surgical procedures.
CO2	Analyze patient responses and modify anaesthetic plans accordingly.
CO3	Demonstrate proficiency in administering specialized anaesthesia methods.
MOTAT 109 T	Concept of Disease in Relation to Critical Care
CO1	Explain the pathophysiology of critical illnesses and their impact on patient management.
CO2	Analyze clinical conditions requiring critical care interventions.
CO3	Demonstrate decision-making skills in managing critically ill patients.
MOTAT 110 P	Anaesthetic Equipment & Procedures
CO1	Explain the principles and functioning of anaesthetic equipment.
CO2	Demonstrate proper handling and maintenance of anaesthetic devices.
CO3	Apply anaesthesia techniques based on clinical requirements.
MOTAT 111 P	Concept of Disease in Relation to Critical Care
CO1	Explain the pathophysiology of critical illnesses and their impact on patient management.
CO2	Analyze clinical conditions requiring critical care interventions.
CO3	Demonstrate decision-making skills in managing critically ill patients.
MOTAT 112 CP	MOTAT Directed Clinical Education - II
CO1	Manage anesthesia and surgical equipment effectively.
CO2	Assist in advanced anesthesia and OT procedures.
CO3	Evaluate and respond to critical situations in the operation theatre.
SEC 001 T	Innovation and Entrepreneurship
CO1	Develop an entrepreneurial mindset in the healthcare sector.
CO2	Apply innovation strategies to improve medical practices and patient care.
CO3	Demonstrate business planning and problem-solving skills in healthcare startups.
SEC 002 T	NPTEL (One Health)
CO1	Understand the interconnectedness of human, animal, and environmental health in a global context.
CO2	Analyze the impact of zoonotic diseases and antimicrobial resistance on public health and ecosystems.
CO3	Evaluate policies and strategies for disease prevention and sustainable development within the One Health framework.