

**Program Outcomes (PO's)**

**PO1:** The Course prepares the operating theatre technologist to work as a competent, reliable member of the health care team under the guidance and supervision of doctors in their delivery of patient care, training also focuses on the knowledge and skills of monitoring infection control policy and procedures in the operating theatre.

**PO2:** Employment opportunities can be found in hospitals in both private and public sectors as well as in independent trauma centres.

**PO3:** OTT graduate is encouraged to pursue further qualification to attain senior position in the professional field, also to keep abreast with the advance and new technology; the professional should opt for continuous professional education credits offered by national and international institutes.

**PO4:** Graduates holding the above degree have immense scope to work as assistants in operation theatres both in India and abroad in Corporate Hospitals, Medical Colleges and Nursing Home.

**PO5:** This sector, to function efficiently, will need more qualified allied healthcare professionals. Operation Theatres in hospitals, Emergency Care Departments as well as ICUs in hospitals are places where OT Technicians are needed.

**PO6:** For any operation theatre to function smoothly, OT Technicians are needed. It will give credit to Doctors and nurses for saving patients' lives by performing operations.

**Course Code: MSOT-101**

**Title of the Course: Anatomy, Physiology & Biochemistry**

L	T	P	Credit
3	1	0	4

**Course Outcomes:**

**CO1:** Describe the general structure and functions of the body as a whole.

**CO2:** Describe the general and microscopic structure and functions of each system of the body.

**CO3:** Explain the macroscopic and microscopic structure and functions of each organs of the body.

**Course Code: MSOT-102**

**Title of the Course: Clinical Pharmacology**

L	T	P	Credit
3	1	0	4

**Course Outcomes:**

**CO1:** Describe and interpret drug-induced therapeutic and adverse effects on the various organs and systems;

**CO2:** Assess the risk/benefit ratio of drugs under different conditions of therapeutic usage

**CO3:** Correctly select and use drugs for the treatment of major diseases

**Course Code: MSOT-103**

**Title of the Course: Clinical Pathology and Clinical Microbiology**

L	T	P	Credit
3	1	0	4

**Course Outcomes:**

**CO1:** Demonstrate an understanding of essential basic pathological processes including cell death and injury, inflammation, thrombosis and neoplasia.

**CO2:** Acquire the ability to relate these essential basic pathological processes to the pathogenesis of common and important diseases.

**CO3:** Demonstrate an understanding of the predisposing factors, causes, pathogenesis, morphology and potential complications of such diseases.

**Course Code: MSOT-104**

**Title of the Course: Applied Physics and Basic Computer**

L	T	P	Credit
3	1	0	4

**Course Outcomes:**

**CO1:** Learner will understand basic theorems and concepts of Basic Physics & Basic Computer.

**CO2:** To understand basic theories related with properties of matter and its application to determine values of various physical quantities associated with matter.

**CO3:** To develop basic skills to perform experiments to understand the concept from existing theories of Basic physics.

**Course Code: MSOT-201**

**Title of the Course: Basic Medicine and Medical Ethics**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Demonstrate knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of maladies and the ways in which they operate on the body (pathogenesis).

**CO2:** Demonstrate knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.

**CO3:** Demonstrate understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and non-traditional therapies.

**Course Code: MSOT-202**

**Title of the Course: Basics of Anesthesia**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and implementing patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-203**

**Title of the Course: Basics of surgery**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>4</b>	-	-	<b>4</b>

**Course Outcomes:**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and plummeting patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-204**

**Title of the Course: CSSD Procedures, Sterilization Procedures**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>4</b>	-	-	<b>4</b>

**Course Outcomes:**

**CO1:** Able to do- patient data collection, catheter insertion, airway management , assisting the administration and monitoring of regional and peripheral nerve blockades, support therapy, adjusting anesthetic levels during surgery, inter-operative monitoring, postoperative procedures, pain clinics and patient education, and administrative tasks.

**CO2:** Able to manage medical gases and pipeline system

**CO3:** Able to assist in Intensive care unit

**Course Code: MSOT-205**

**Title of the Course: Biostatistics and Hospital Management**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>3</b>	<b>1</b>	-	<b>4</b>

**Course Outcomes:**

**CO1:** Student will get insight of research tools

**CO2:** The student will gain knowledge of basic statistical approaches

**CO3:** Enhance knowledge of databases in research

**Course Code: MSOT-301**

**Title of the Course: Anesthesia Delivery System and Equipments Used In OT**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>4</b>	-	-	<b>4</b>

**Course Outcomes**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and plummeting patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-302**

**Title of the Course: Basic Anesthesia and Applied Operation Theatre Technology**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
<b>4</b>	-	-	<b>4</b>

**Course Outcomes:**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also

help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and plummeting patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-303**

**Title of the Course: Prior Anesthetic Care and Preparations**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and plummeting patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-304**

**Title of the Course: Preparation for Various Surgeries**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Able to help the anesthesiologist in administering anesthesia, assist in various procedures and also help in continuous monitoring of patients during surgery.

**CO2:** Able to train and develop an individual to independently handle the latest technology and high end biomedical equipment in Operation Theatre

**CO3:** Able to assist anesthesiologists in developing and plummeting patient anesthesia care plans, including pre-operative, surgical theater, recovery room, and post-operative intensive care procedures.

**Course Code: MSOT-401**

**Title of the Course: Anesthesia for Specialty Surgeries and Situations**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Students will observe the basic operations of the operation theatre while interacting with the multidisciplinary team members involved in providing optimal care to the patients.

**CO2:** The student will be introduced to terminologies, equipment's.

**CO3:** The student will be introduced to techniques used for preparation and management of the OT.

**Course Code: MSOT-402**

**Title of the Course: Basic Intensive Care**

L	T	P	Credit
4	-	-	4

**Course Outcomes:**

**CO1:** Able to assist in Intensive care unit

**CO2:** Able to manage Central sterile supply department

**CO3:** Able to assist during Disaster and emergency situations.

**Course Code: MSOT-405**

**Title of the Course: Research Project**

<b>L</b>	<b>T</b>	<b>P</b>	<b>Credit</b>
-	-	<b>0</b>	<b>8</b>

**Course Outcomes:**

**CO1:** The Student will know about various statistical approaches

**CO2:** Students should understand and gain knowledge of research tools in radiology

**CO3:** They will understand databases and their applications