

## 2. PROGRAM EDUCATION OBJECTIVES (PEOs)

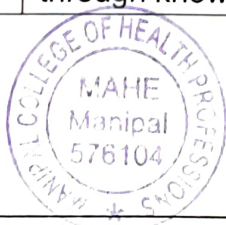
The overall objective of the learning outcome-based curriculum framework (LOCF) for M.Sc. Anaesthesia and Operation Theatre Technology are as follows:

PEO No.	Education Objective
PEO 1	Students will be able to use their fundamental knowledge and clinical competence in various scientific aspects of advanced techniques involved in Anaesthesia & Operation Theatre Technology
PEO 2	Students will demonstrate strong and well defined clinical / practical skills in performing various skill-based activities including assisting the anaesthetist and surgical teams in all kinds of surgical disciplines.
PEO 3	Students will be able to practice the profession with highly professional and ethical attitude, strong communication skills, and to work in an inter-disciplinary team so as to achieve professional excellence.
PEO 4	Students will be able to use interpersonal and collaborative skills to identify, assess and formulate problems and execute the solution to assess the case independently
PEO 5	Students will be able to imbibe the culture of research, innovation, entrepreneurship and incubation through evidence-based to uplift the knowledge in recent techniques and procedure based on Anaesthesia and Operation Theatre Technology
PEO 6	Students will be able to participate in lifelong learning process for a highly productive career and will be able to relate the concepts of trends and issues in the discipline related to innovation in the techniques and procedural skills



### 3. GRADUATE ATTRIBUTES

S No.	Attribute	Description
1	<b>Domain Knowledge</b>	Demonstrate comprehensive knowledge, competency and understanding of one or more disciplines that form a part of a professional domain
2	<b>Clinical / Hands-on skills</b>	Demonstrate clinical / hands-on skills in order to deliver and manage quality health care services
3	<b>Communication Skills</b>	Demonstrate the ability to listen carefully, read and write analytically, and present complex information in a clear and concise manner to different groups using appropriate media.
4	<b>Team work</b>	Demonstrate the ability to effectively and efficiently work and collaborate with diverse teams in the best interest of health care needs of the community
5.	<b>Professional ethics</b>	Demonstrate the ability to embrace moral/ethical values in conducting one's life, formulate a position/argument about an ethical issue from multiple perspectives, and use ethical practices in professional life.
6.	<b>Research / Innovation-related Skills</b>	A sense of inquiry and investigation for raising relevant and contemporary questions, synthesizing and articulating.
7.	<b>Critical thinking and problem solving</b>	Demonstrate capacity to think critically and extrapolate from what one has learned by applying their competencies and knowledge to solve different kinds of non-familiar problems in real life situations.
8	<b>Information/Digital Literacy</b>	Demonstrate capability to use ICT in a variety of learning situations, demonstrate ability to access, evaluate, and use a variety of relevant information sources and to use appropriate software for analysis of data.
9	<b>Multicultural Competence</b>	Demonstrate knowledge of the values and beliefs of multiple cultures and a global perspective, effectively engage in a multicultural society, interact respectfully with diverse groups.
11.	<b>Leadership qualities</b>	Demonstrate leadership capability to formulate an inspiring vision, build a team, motivate and inspire team members to attain organizational vision
12.	<b>Lifelong Learning</b>	Demonstrate the ability to acquire knowledge and skills, that are necessary for participating in learning activities throughout life, through self-paced and self-directed learning aimed at personal development, meeting economic, social and cultural objectives, and adapting to demands of work place through knowledge/skill development/reskilling.



#### 4. PROGRAM OUTCOMES (POs):

After successful completion of Masters / MSc Anaesthesia and Operation Theatre Technology program students will be able to:

PO No.	Attribute	Competency
PO1	<b>Domain knowledge</b>	Possess and acquire <b>scientific knowledge</b> to work as a health care professional
PO2	<b>Clinical/ Hands-on skills</b>	Demonstrate and possess <b>clinical and hands-on skills</b> to provide quality health care services
PO3	<b>Team work</b>	Demonstrate <b>team work skills</b> to support shared goals with the interdisciplinary health care team to improve societal health
PO4	<b>Ethical value &amp; professionalism</b>	Possess and demonstrate <b>ethical values and professionalism</b> within the legal framework of the society
PO5	<b>Communication</b>	<b>Communicate effectively</b> and appropriately with the interdisciplinary health care team and the society
PO6	<b>Evidence based practice</b>	Demonstrate high quality <b>evidence based practice</b> that leads to excellence in professional practice
PO7	<b>Life-long learning</b>	Enhance knowledge and skills with the use of advancing technology for the <b>continual improvement</b> of professional practice
PO8	<b>Entrepreneurship, leadership and mentorship</b>	Display <b>entrepreneurship, leadership and mentorship</b> skills to practice independently as well as in collaboration with the interdisciplinary health care team



## 6. COURSE STRUCTURE, COURSE WISE LEARNING OBJECTIVE, AND COURSE OUTCOMES (COs)

### SEMESTER - I

Course Code	Course Title	Credit Distribution (hours/week)						Marks Distribution		
		L	T	P	PW	CL	CR	IAC	ESE	Total
ABS5101	Advanced Biostatistics & Research Methodology	3	1	-	-	-	4	30	70	100
AOT5101	Applied medical sciences	2	1	-	-	-	3	50	50	100
AOT 5102	Anaesthetic Equipments and Procedures	3	-	2	-	-	4	50	50	100
AOT5103	Pharmacology of Anaesthetics	2	1	-	-	-	3	50	50	100
AOT5151	Research project	-	-	-	6	-	2	100	-	100
AOT5131	Comprehensive clinical skills - I	-	-	-	-	12	4	100	-	100
<b>Total</b>		<b>10</b>	<b>3</b>	<b>2</b>	<b>6</b>	<b>12</b>	<b>20</b>	<b>380</b>	<b>220</b>	<b>600</b>

**Note:**

ESE for:

ABS5101 will be conducted for 50 marks &amp; normalised to 70marks for grading

AOT5101, AOT5102, AOT5103 Will be conducted for 100 marks &amp; normalised to 50 marks for grading.

Research topic to be finalized by the end of the semester.

### SEMESTER - II

Course Code	Course Title	Credit Distribution (hours/week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
EPG5201	Ethics & Pedagogy	1	1	-	-	2	100	-	100
AOT5221	Advanced Anaesthesia Techniques	2	2	2	-	5	50	50	100
AOT5222	Applied Surgical Technology	2	2	2	-	5	50	50	100
AOT5201	Operation Theatre Management	2	1	-	-	3	50	50	100
AOT5231	Comprehensive clinical skills - II	-	-	-	15	5	100	-	100
<b>Total</b>		<b>7</b>	<b>6</b>	<b>4</b>	<b>15</b>	<b>20</b>	<b>350</b>	<b>150</b>	<b>500</b>

**Note:**

ESE for:

AOT5221, AOT5222, AOT5201 Will be conducted for 100 marks &amp; normalised to 50 marks for grading

Submit and obtain IRC, IEC/CTRI approval for the research proposal by end of the semester.

**SEMESTER - III**

Course Code	Course Title	Credit Distribution (hours/week)					Marks Distribution		
		L	T	P	CL	CR	IAC	ESE	Total
AOT6121	Subspecialty Surgical Techniques	2	1	2	-	4	50	50	100
AOT6101	Disaster Management	2	-	2	-	3	50	50	100
AOT6102	Basic principles of Health Care management	2	1	-	-	3	100	-	100
AOT****	Program Elective	1	1	2	-	3	50	50	100
AOT6131	Comprehensive clinical skills -III	-	-	-	21	7	50	50	100
<b>Total</b>		<b>7</b>	<b>3</b>	<b>6</b>	<b>21</b>	<b>20</b>	<b>300</b>	<b>200</b>	<b>500</b>

**Note:**

ESE for:

AOT6121, Will be conducted for 100 marks & normalised for 50 marks for grading.

AOT6101 will be conducted out of 50.

Data analysis to be completed by end of the semester.

**SEMESTER - IV**

Course Code	Course Title	Credit Distribution (hours/week)						Marks Distribution		
		L	T	P	CL	PW	CR	IAC	ESE	Total
AOT6201	Subspecialty Anaesthesia Techniques	3	2	-	-	-	5	50	50	100
AOT6221	Anaesthesia & Critical Care	1	1	4	-	-	4	50	50	100
AOT6251	Dissertation	-	-	-	-	9	3	50	50	100
AOT6231	Comprehensive clinical skills -IV	-	-	-	24	-	8	50	50	100
<b>Total</b>		<b>4</b>	<b>3</b>	<b>4</b>	<b>24</b>	<b>9</b>	<b>20</b>	<b>200</b>	<b>200</b>	<b>400</b>

**Note:**

ESE for:

AOT6201, AOT6251 will be conducted for 100 marks & normalised to 50 marks for grading.

AOT6221 will be conducted out of 50

**LIST THE PROGRAM ELECTIVE**

Elective Code	Elective Title	L	T	P	CR	IAC	ESE	Total
AOT6013	<b>Program Elective I:</b> Advanced Cardiac and Basic Life Support	1	1	2	3	50	50	100
AOT6023	<b>Program Elective II:</b> Transfusion and Intravenous Therapy	1	1	2	3	50	50	100

**Note:**

ESE for AOT6013 and AOT6023 will be conducted out of 50.

### OVERALL CREDIT DISTRIBUTION

Semester	Credit distribution						Marks Distribution		
	L	T	P	PW	CL	CR	IAC	ESE	Total
I - Semester	10	3	6	6	12	20	380	220	600
II - Semester	7	6	4	-	15	20	350	150	500
III - Semester	7	3	6	-	21	20	300	200	500
IV - Semester	4	3	4	9	24	20	200	200	400
<b>Grand Total</b>	<b>28</b>	<b>15</b>	<b>20</b>	<b>15</b>	<b>72</b>	<b>80</b>	<b>1230</b>	<b>770</b>	<b>2000</b>

### INTERNAL ASSESSMENT COMPONENT (IAC) WEIGHTAGE DISTRIBUTION

Theory		Practical	
Components	%	Components	%
Mid semester exam	50	Practical exam	50
Class seminar	30	Record submission	20
Assignments/Quiz	20	Practical/viva voce	30

