



Symbiosis Institute of Health Sciences, Pune
Bachelor of Science (Medical Technology)
Programme Structure 2020-23

1.	OBJECTIVE	To train students in the technological aspects of medical care with a good scientific foundation. These students will be in a position to competently assist the Physician or Surgeon, especially in high-tech medical procedures to cater to the health care industry globally.			
2.	DURATION (IN MONTHS)	36 (Full Time)			
3.	INTAKE	120			
4.	RESERVATION	I. Within the sanctioned intake	a) SC (In Percentage)	b) ST (In Percentage)	c) Differently abled (In Percentage)
			15	7.5	3
		II. Over and above the sanctioned intake	a) Kashmiri Migrants (In Seats)	b) International Students (In Percentage)	
			2	15	
5.	ELIGIBILITY	<p>Std. XII Pass with any two of the following subjects: Physics, Chemistry, Biology, Botany, Zoology, Biochemistry, Microbiology, Mathematics OR equivalent as decided by competent authority.</p> <p>Working Professionals: For the candidates who have educational qualification and work experience in Cardiac Care, Respiratory Therapy, Imaging Sciences, Clinical Lab, Dialysis or Operation Theatre and Anesthesia, admissions will be given directly to 2nd year, subject to approval of the SIU.</p>			
6.	SELECTION PROCEDURE	Selection based on marks in Qualifying Examination followed by Entrance Examination, Personal Interaction and Written Ability Test.			
7.	MEDIUM OF INSTRUCTION	English			
8.	PROGRAMME PATTERN	Semester			
9.	COURSE & SPECIALIZATION	As per Annexure A			
		<p>B.Sc. (Medical Technology) programme combines campus classroom instructions and practical training in the tertiary care hospitals.</p> <p>Students can opt for any one of the following specializations after 1st year:</p> <ol style="list-style-type: none"> 1. Cardiac Care 2. Respiratory Therapy 3. Imaging Sciences 4. Clinical Laboratory 5. Dialysis 6. Operation Theatre and Anaesthesia 7. Laparoscopy & Endoscopy 8. Ophthalmic Sciences 9. Neurosciences Technology 			
10.	FEE		Academic Fee p.a	Institute Deposit	Total
		Indian Students	150000	10000	160000
		International Students (USD equivalent to INR)	225000	10000	235000

11.	ASSESSMENT	All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 40% internal component and 60% external component [University] examination.
12.	STANDARD OF PASSING	The assessment of the student for each examination is done, based on relative performance. Maximum Grade Point (GP) is 10 corresponding to O (Outstanding). For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 4 corresponding to Grade P. Students securing less than 40% absolute marks in each head of passing will be declared FAIL. The University awards a degree to the student who has achieved a minimum CGPA of 4 out of maximum of 10 CGPA for the programme.
13.	AWARD OF DEGREE/ DIPLOMA/ CERTIFICATE	Bachelor of Science (Medical Technology) will be awarded at the end of semester VI examination by taking into consideration the performance of all semester examinations after obtaining minimum 4.00 CGPA out of 10 CGPA.

14. NATURE WISE DISTRIBUTION OF CREDITS

Semester	Generic Core	Generic Elective	Specialization Core	Specialization Elective	Open Elective	Audit	Total
1	20	1	0	0	0	0	21
2	18	1	0	0	0	0	19
3	8	2	10	0	0	1*	20
4	9	4	7	0	0	1*	20
5	10	2	8	0	0	0	20
6	7	2	11	0	0	0	20
Total	72	12	36	0	0	0	120

* Satisfactory completion of the letter grade courses 'Integrated Disaster Management' and 'Core Environmental Studies' is mandatory for award of degree.

Satisfactory completion of minimum 1 month observer ship with hospital after completion of semester II examination and 3 months of On Job Training with hospital/industry/Research organization after completion of final year (semester VI) examination is mandatory for award of degree.

Programme Structure is approved by the Academic Council subject to its norms & conditions. Any provision in the Programme Structure which violates the basic rules & regulations is deemed to be termed "Null & Void".

Head-Academics

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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Credits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
Semester : 1									
Generic Core Courses									
T4565	0401210101	Anatomy I		4	40	40	0	20	100
T4429	0401210102	Physiology I		4	40	40	0	20	100
T4948	0401210103	Basic Biochemistry		4	40	40	0	20	100
T4107	0401210104	Basic Pharmacology		2	20	0	0	30	50
T4430	0401210105	Hospital Practices and Patient Care I		2	20	0	0	30	50
T4946	0401210106	Basic Sciences		2	20	0	0	30	50
T4427	0401210107	Medical Ethics and Legal Aspects		1	25	0	0	0	25
T4947	0401210108	Communication Skills for Allied Health Professionals - Foundation		1	25	0	0	0	25
Total				20	230	120	0	150	500
Generic Elective Courses Group									
T4432	0401210109	Psychology		1	25	0	0	0	25
T4431	0401210110	Sociology		1	25	0	0	0	25
T4433	0401210111	Computer Skills		1	25	0	0	0	25
Total Required Credits				1	25	0	0	0	25
Semester : 2									
Generic Core Courses									
T4949	0401210201	Basic Microbiology & Parasitology		4	40	40	0	20	100
T4950	0401210202	Pathology		4	40	40	0	20	100
T4566	0401210203	Anatomy II		3	30	0	0	45	75
T4436	0401210204	Physiology II		3	30	0	0	45	75
TH4093	0401210205	Hospital Practices & Patient Care II		2	20	0	0	30	50
T4435	0401210206	Communication Skills for Allied Health Professionals - Advanced		1	25	0	0	0	25
T4499	0401210207	Medical Physics		1	25	0	0	0	25
Total				18	210	80	0	160	450
Generic Elective Courses Group									
T4502	0401210208	Computer Language		1	25	0	0	0	25
T4439	0401210209	Nutrition & Dietetics		1	25	0	0	0	25
T4440	0401210210	Applied Mathematics		1	25	0	0	0	25
Total Required Credits				1	25	0	0	0	25
Semester : 3									



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Catalog Course Code	Course Code	Course Title	Specialization	Credits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
Generic Core Courses									
T2208	0401210301	Research Methodology		4	40	40	0	20	100
T2560	0401210302	Principles and Practices of Management		2	20	30	0	0	50
T4441	0401210303	Personality Development for Allied Health Professionals - I		1	25	0	0	0	25
T4951	0401210304	Basic Patient Assessment		1	25	0	0	0	25
T2883	0401210305	Core Environmental Studies *		0	0	0	0	0	Non Letter Grade
Total				8	110	70	0	20	200
Specialization Core Courses : Cardiac Care									
T4954	0401210306	Cardiovascular Diseases	Cardiac Care	4	40	40	0	20	100
T4952	0401210307	Applied Clinical Sciences (Cardiac Care)	Cardiac Care	2	20	30	0	0	50
T4953	0401210308	Cardiac Pharmacology	Cardiac Care	2	20	30	0	0	50
T4955	0401210309	Electrocardiography I	Cardiac Care	2	20	0	0	30	50
Total				10	100	100	0	50	250
Specialization Core Courses : Clinical Laboratory									
T4471	0401210310	General and Clinical Pathology	Clinical Laboratory	4	40	40	0	20	100
T4965	0401210311	Haematology	Clinical Laboratory	4	40	40	0	20	100
T4964	0401210312	Applied Clinical Sciences (Clinical Laboratory)	Clinical Laboratory	2	20	30	0	0	50
Total				10	100	110	0	40	250
Specialization Core Courses : Dialysis									
T4968	0401210313	Renal Diseases , Disease Management & Pharmacology	Dialysis	4	40	40	0	20	100
T4136	0401210314	Principles of Haemodialysis I	Dialysis	2	20	0	0	30	50
T4966	0401210315	Applied Clinical Sciences (Dialysis)	Dialysis	2	20	30	0	0	50
T4967	0401210316	Theory and Principles of Dialysis	Dialysis	2	20	30	0	0	50
Total				10	100	100	0	50	250
Specialization Core Courses : Imaging Sciences									
T4963	0401210317	Conventional Radiographic Techniques and Procedures	Imaging Sciences	3	30	45	0	0	75



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T4959	0401210318	Applied Clinical Sciences & Image Interpretation	Imaging Sciences	2	20	30	0	0	50
T4961	0401210319	Fudamentals of Medical Image Processing	Imaging Sciences	2	20	30	0	0	50
T4962	0401210320	Physics & Instrumentation of X- ray & USG	Imaging Sciences	2	20	0	0	30	50
T4960	0401210321	Radiation Physics & Protection – Basic	Imaging Sciences	1	25	0	0	0	25
Total				10	115	105	0	30	250
Specialization Core Courses : Laparoscopy & Endoscopy									
T4877	0401210322	Introduction to Endoscopy Instruments	Laparoscopy & Endoscopy	4	40	40	0	20	100
T4875	0401210323	Applied Clinical Sciences (Laparoscopy & Endoscopy)	Laparoscopy & Endoscopy	2	20	30	0	0	50
T4876	0401210324	Fundamental Concepts and Principles of Endoscopy Techniques	Laparoscopy & Endoscopy	2	20	30	0	0	50
T4878	0401210325	Care of Specific Endoscope Procedures	Laparoscopy & Endoscopy	2	20	0	0	30	50
Total				10	100	100	0	50	250
Specialization Core Courses : Neurosciences Technology									
T4884	0401210326	Neurological Diseases	Neurosciences Technology	4	40	40	0	20	100
T4883	0401210327	Applied Clinical Sciences (Neurosciences)	Neurosciences Technology	2	20	30	0	0	50
T4885	0401210328	Neuro Pharmacology	Neurosciences Technology	2	20	30	0	0	50
T4886	0401210329	Electroencephalography- I	Neurosciences Technology	2	20	0	0	30	50
Total				10	100	100	0	50	250
Specialization Core Courses : Operation Theatre & Anaesthesia									
T4971	0401210330	Pre Operative Preparation & Anaesthetic Management of Surgical Procedures	Operation Theatre & Anaesthesia	4	40	40	0	20	100
T4488	0401210331	Instrument Trays for Surgical Procedure	Operation Theatre & Anaesthesia	2	20	0	0	30	50
T4969	0401210332	Applied Clinical Sciences (Operation Theatre & Anaesthesia)	Operation Theatre & Anaesthesia	2	20	30	0	0	50
T4970	0401210333	Fundamentals Concepts and Procedures Related to Operation Theatre	Operation Theatre & Anaesthesia	2	20	30	0	0	50
Total				10	100	100	0	50	250



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Specialization Core Courses : Ophthalmic Sciences									
T4881	0401210334	Physical And Physiological Optics	Ophthalmic Sciences	4	40	40	0	20	100
T4879	0401210335	Applied Clinical Sciences (Ophthalmic Sciences)	Ophthalmic Sciences	2	20	30	0	0	50
T4880	0401210336	Ocular Biochemistry	Ophthalmic Sciences	2	20	30	0	0	50
T4882	0401210337	Ocular Microbiology	Ophthalmic Sciences	2	20	0	0	30	50
Total				10	100	100	0	50	250
Specialization Core Courses : Respiratory Therapy									
T4819	0401210338	Cardiopulmonary Diseases	Respiratory Therapy	4	40	40	0	20	100
T4512	0401210339	Cardiopulmonary Pharmacology	Respiratory Therapy	2	20	30	0	0	50
T4452	0401210340	Respiratory Therapy Technology- I	Respiratory Therapy	2	20	30	0	0	50
T4956	0401210341	Applied Clinical Sciences (Respiratory Therapy)	Respiratory Therapy	2	20	30	0	0	50
Total				10	100	130	0	20	250
Generic Elective Courses Group									
T4444	0401210342	Clinical Nutrition		1	25	0	0	0	25
T4445	0401210343	Understanding of Basic Investigations - I		1	25	0	0	0	25
T4446	0401210344	Basics of Epidemiology		1	25	0	0	0	25
Total Required Credits				2	50	0	0	0	50
Semester : 4									
Generic Core Courses									
T8000	0401210401	Service Learning		4	100	0	0	0	100
T4771	0401210402	Fitness and Lifestyle Management		2	50	0	0	0	50
T4447	0401210403	Personality Development for Allied Health Professionals - II		1	25	0	0	0	25
T4775	0401210404	Self Defence		1	25	0	0	0	25
T4777	0401210405	Yoga		1	25	0	0	0	25
T4005	0401210406	Integrated Disaster Management *		0	0	0	0	0	Non Letter Grade
Total				9	225	0	0	0	225
Specialization Core Courses : Cardiac Care									



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T4973	0401210407	Introduction to Medical Devices & Instruments (Cardiac Care)	Cardiac Care	4	40	40	0	20	100
T4972	0401210408	Electrocardiography II	Cardiac Care	3	30	0	0	45	75
Total				7	70	40	0	65	175
Specialization Core Courses : Clinical Laboratory									
T4937	0401210409	General & Clinical Biochemistry	Clinical Laboratory	3	30	45	0	0	75
T4981	0401210410	Bacteriology	Clinical Laboratory	2	20	0	0	30	50
T4978	0401210411	Introduction to Equipment & Instruments (Clinical Laboratory)	Clinical Laboratory	1	25	0	0	0	25
T4982	0401210412	Diagnostic Parasitology	Clinical Laboratory	1	25	0	0	0	25
Total				7	100	45	0	30	175
Specialization Core Courses : Dialysis									
T4980	0401210413	Introduction to Medical Devices and Instruments (Dialysis)	Dialysis	4	40	40	0	20	100
T4979	0401210414	Principles of Hemodialysis II	Dialysis	3	30	0	0	45	75
Total				7	70	40	0	65	175
Specialization Core Courses : Imaging Sciences									
T4977	0401210415	Operations of Computed Tomography	Imaging Sciences	4	40	40	0	20	100
T4976	0401210416	Physics and Instrumentation of Computed Tomography	Imaging Sciences	3	30	45	0	0	75
Total				7	70	85	0	20	175
Specialization Core Courses : Laparoscopy & Endoscopy									
T4888	0401210417	Introduction to Laparoscopy Instruments	Laparoscopy & Endoscopy	4	40	40	0	20	100
T4887	0401210418	Endoscopy Setup & Patient Preparation.	Laparoscopy & Endoscopy	3	30	0	0	45	75
Total				7	70	40	0	65	175
Specialization Core Courses : Neurosciences Technology									
T4893	0401210419	Introduction to Medical Devices & Instruments (Neurosciences)	Neurosciences Technology	4	40	40	0	20	100
T4891	0401210420	Electroencephalography II	Neurosciences Technology	2	20	0	0	30	50
T4892	0401210421	Vestibular Myography	Neurosciences Technology	1	25	0	0	0	25



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Total				7	85	40	0	50	175
Specialization Core Courses : Operation Theatre & Anaesthesia									
T4984	0401210422	Introduction to medical Devices and Instruments (Operation Theatre & Anaesthesia)	Operation Theatre & Anaesthesia	4	40	40	0	20	100
T4983	0401210423	Procedures Prior & During Anaesthesia	Operation Theatre & Anaesthesia	3	30	0	0	45	75
Total				7	70	40	0	65	175
Specialization Core Courses : Ophthalmic Sciences									
T4890	0401210424	Introduction to Medical Devices & Instruments (Ophthalmic Sciences)	Ophthalmic Sciences	4	40	40	0	20	100
T4889	0401210425	Ocular Pharmacy And Pharmacology	Ophthalmic Sciences	3	30	0	0	45	75
Total				7	70	40	0	65	175
Specialization Core Courses : Respiratory Therapy									
T4975	0401210426	Introduction to medical devices & Instruments (Respiratory Therapy)	Respiratory Therapy	4	40	40	0	20	100
T4974	0401210427	Respiratory Therapy Technology II	Respiratory Therapy	3	30	0	0	45	75
Total				7	70	40	0	65	175
Generic Elective Courses Group									
T6507	0401210428	Introduction to Social Justice		2	50	0	0	0	50
T6477	0401210429	Theater		2	50	0	0	0	50
T6284	0401210430	Contemporary India and The World		2	50	0	0	0	50
T6604	0401210431	Political Science		2	50	0	0	0	50
SWM01	0401210432	Swayam Course		2	50	0	0	0	50
T6487	0401210433	Film Appreciation		1	25	0	0	0	25
T6475	0401210434	Creative Writing		1	25	0	0	0	25
T6476	0401210435	World Music		1	25	0	0	0	25
T6491	0401210436	Cyber Law		1	25	0	0	0	25
Total Required Credits				4	100	0	0	0	100
Semester : 5									
Generic Core Courses									
T4906	0401210501	Summer Internship Programme		7	70	0	0	105	175
T4451	0401210502	Basic Life Support		2	25	0	0	25	50



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T4567	0401210503	Soft Skills for Allied Health Professionals - I		1	25	0	0	0	25
Total				10	120	0	0	130	250
Specialization Core Courses : Cardiac Care									
T4798	0401210504	Clinical Cardiology	Cardiac Care	4	40	40	0	20	100
T4084	0401210505	Applied Management in Cardiac Care Unit	Cardiac Care	2	20	0	0	30	50
T4935	0401210506	Echocardiography Techniques	Cardiac Care	2	20	30	0	0	50
Total				8	80	70	0	50	200
Specialization Core Courses : Clinical Laboratory									
T4991	0401210507	Blood Banking- Basic	Clinical Laboratory	4	40	40	0	20	100
T4543	0401210508	Applied Management in Clinical Laboratory	Clinical Laboratory	2	20	0	0	30	50
T4990	0401210509	Diagnostic Microbiology & Basic	Clinical Laboratory	2	20	30	0	0	50
Total				8	80	70	0	50	200
Specialization Core Courses : Dialysis									
T4992	0401210510	Principles of Peritoneal Dialysis & Other Procedures	Dialysis	4	40	40	0	20	100
T4551	0401210511	Applied Management in Renal Care Unit	Dialysis	2	20	0	0	30	50
T4993	0401210512	Water Treatment in Dialysis	Dialysis	2	20	30	0	0	50
Total				8	80	70	0	50	200
Specialization Core Courses : Imaging Sciences									
T4989	0401210513	Operations of Magnetic Resonance Imaging	Imaging Sciences	4	40	40	0	20	100
T4094	0401210514	Applied Management in Radiology Unit	Imaging Sciences	2	20	0	0	30	50
T4988	0401210515	Physics and Instrumentation of Magnetic Resonance Imaging	Imaging Sciences	2	20	30	0	0	50
Total				8	80	70	0	50	200
Specialization Core Courses : Laparoscopy & Endoscopy									
T4894	0401210516	Basic principles of Laparoscopy Technique	Laparoscopy & Endoscopy	4	40	40	0	20	100
T4895	0401210517	Infection control & Sterilization in Laparoscopy set up	Laparoscopy & Endoscopy	2	20	30	0	0	50



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T4896	0401210518	Applied Management in Laparoscopy & Endoscopy Unit	Laparoscopy & Endoscopy	2	20	0	0	30	50
Total				8	80	70	0	50	200
Specialization Core Courses : Neurosciences Technology									
T4900	0401210519	Neurobiology	Neurosciences Technology	4	40	40	0	20	100
T4926	0401210520	Nerve Conduction Study	Neurosciences Technology	2	20	30	0	0	50
T4927	0401210521	Applied Management in Neurosciences Unit	Neurosciences Technology	2	20	0	0	30	50
Total				8	80	70	0	50	200
Specialization Core Courses : Operation Theatre & Anaesthesia									
T4994	0401210522	Advanced Sterilization Techniques & Infection Control in Operation Theatre	Operation Theatre & Anaesthesia	4	40	40	0	20	100
T4561	0401210523	Applied Management in OT and Anaesthesia Unit	Operation Theatre & Anaesthesia	2	20	0	0	30	50
T4995	0401210524	Assistance in Perioperative Complications	Operation Theatre & Anaesthesia	2	20	30	0	0	50
Total				8	80	70	0	50	200
Specialization Core Courses : Ophthalmic Sciences									
T4897	0401210525	Investigative Ophthalmology & Refraction	Ophthalmic Sciences	4	40	40	0	20	100
T4898	0401210526	Ophthalmic Procedures	Ophthalmic Sciences	2	20	30	0	0	50
T4899	0401210527	Applied Management in Ophthalmic Unit	Ophthalmic Sciences	2	20	0	0	30	50
Total				8	80	70	0	50	200
Specialization Core Courses : Respiratory Therapy									
T4987	0401210528	Mechanical Ventilation II	Respiratory Therapy	4	40	40	0	20	100
T4089	0401210529	Applied Management in Respiratory Therapy Unit	Respiratory Therapy	2	20	0	0	30	50
T4986	0401210530	Mechanical Ventilation I	Respiratory Therapy	2	20	30	0	0	50
Total				8	80	70	0	50	200
Generic Elective Courses Group									
T4570	0401210531	Quality in Healthcare		1	25	0	0	0	25



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T4576	0401210532	Understanding Basics of Investigations-II		1	25	0	0	0	25
T4571	0401210533	Hospital Information System		1	25	0	0	0	25
T4572	0401210534	Home Health Care		1	25	0	0	0	25
Total Required Credits				2	50	0	0	0	50
Semester : 6									
Generic Core Courses									
T4806	0401210601	Project		6	60	0	0	90	150
T4568	0401210602	Soft Skills for Allied Health Professionals - II		1	25	0	0	0	25
Total				7	85	0	0	90	175
Specialization Core Courses : Cardiac Care									
T4997	0401210603	Cardiac Catheterization-Basic	Cardiac Care	5	50	40	0	35	125
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Cardiac Care	4	40	40	0	20	100
T4998	0401210605	Nuclear Medicine Technology	Cardiac Care	2	20	30	0	0	50
Total				11	110	110	0	55	275
Specialization Core Courses : Clinical Laboratory									
TH4092	0401210606	Histopathology & Cytology	Clinical Laboratory	4	40	40	0	20	100
TH4005	0401210607	Enzymology and Advanced Techniques	Clinical Laboratory	3	30	45	0	0	75
TH4006	0401210608	Basics of Diagnostic Immunology	Clinical Laboratory	2	20	30	0	0	50
TH4007	0401210609	Virology and Mycology - Basic	Clinical Laboratory	2	20	0	0	30	50
Total				11	110	115	0	50	275
Specialization Core Courses : Dialysis									
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Dialysis	4	40	40	0	20	100
TH4010	0401210610	Safety Practices and Patient Care in Dialysis	Dialysis	3	30	45	0	0	75
TH4008	0401210611	Quality Assurance	Dialysis	2	20	0	0	30	50
TH4009	0401210612	Common Investigations in Dialysis	Dialysis	2	20	30	0	0	50
Total				11	110	115	0	50	275
Specialization Core Courses : Imaging Sciences									
T4998	0401210605	Nuclear Medicine Technology	Imaging Sciences	2	20	30	0	0	50
TH4003	0401210613	Interventional Radiology	Imaging Sciences	4	40	40	0	20	100



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TH4004	0401210614	Latest Developments in Imaging	Imaging Sciences	3	30	0	0	45	75
TH4002	0401210615	Cross Sectional Anatomy	Imaging Sciences	2	20	30	0	0	50
Total				11	110	100	0	65	275
Specialization Core Courses : Laparoscopy & Endoscopy									
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Laparoscopy & Endoscopy	4	40	40	0	20	100
T4928	0401210616	Laparoscopy Procedures & prerequisites	Laparoscopy & Endoscopy	4	40	40	0	20	100
T4929	0401210617	OT setup for Laparoscopy & Patient preparation	Laparoscopy & Endoscopy	3	30	45	0	0	75
Total				11	110	125	0	40	275
Specialization Core Courses : Neurosciences Technology									
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Neurosciences Technology	4	40	40	0	20	100
T4934	0401210618	Nanotechnology in Neurosciences	Neurosciences Technology	3	30	45	0	0	75
T4932	0401210619	Balance Training	Neurosciences Technology	2	20	0	0	30	50
T4933	0401210620	Repositioning & Testing	Neurosciences Technology	2	20	30	0	0	50
Total				11	110	115	0	50	275
Specialization Core Courses : Operation Theatre & Anaesthesia									
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Operation Theatre & Anaesthesia	4	40	40	0	20	100
TH4011	0401210621	Assistance in Speciality Surgical Procedures	Operation Theatre & Anaesthesia	4	40	40	0	20	100
TH4012	0401210622	Post Operative Care	Operation Theatre & Anaesthesia	3	30	45	0	0	75
Total				11	110	125	0	40	275
Specialization Core Courses : Ophthalmic Sciences									
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Ophthalmic Sciences	4	40	40	0	20	100
T4930	0401210623	Ophthalmic Visual Diagnostic Equipment, Vision Aids & Dispense	Ophthalmic Sciences	4	40	40	0	20	100
T4931	0401210624	Ophthalmic Diagnostic & Minor Surgical Procedure	Ophthalmic Sciences	3	30	45	0	0	75
Total				11	110	125	0	40	275
Specialization Core Courses : Respiratory Therapy									



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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Credits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
T4996	0401210604	Advanced Cardiac Life Support (ACLS)	Respiratory Therapy	4	40	40	0	20	100
T4177	0401210625	Infection Control in Respiratory Care	Respiratory Therapy	4	40	40	0	20	100
TH4001	0401210626	Neonatal and Pediatric Respiratory Care – Basic	Respiratory Therapy	2	20	30	0	0	50
T4999	0401210627	Pulmonary Rehabilitation and Home Care	Respiratory Therapy	1	25	0	0	0	25
Total				11	125	110	0	40	275
Generic Elective Courses Group									
T4573	0401210628	Biomedical Waste Management		1	25	0	0	0	25
T4574	0401210629	Continuous Quality Improvement		1	25	0	0	0	25
T4575	0401210630	Research Proposal Writing		1	25	0	0	0	25
Total Required Credits				2	50	0	0	0	50



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Semester	Internal Credits	External Credits	Total Credits	Total Marks
Cardiac Care				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	29	91	120	3000
Clinical Laboratory				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	15	5	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	31	89	120	3000
Dialysis				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	29	91	120	3000
Imaging Sciences				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	5	15	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	30	90	120	3000
Laparoscopy & Endoscopy				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	29	91	120	3000
Neurosciences Technology				



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Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	14	6	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	30	90	120	3000
Operation Theatre & Anaesthesia				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	29	91	120	3000
Ophthalmic Sciences				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	3	17	20	500
Total	29	91	120	3000
Respiratory Therapy				
Semester 1	3	18	21	525
Semester 2	3	16	19	475
Semester 3	4	16	20	500
Semester 4	13	7	20	500
Semester 5	3	17	20	500
Semester 6	4	16	20	500
Total	30	90	120	3000