

SYMBIOSIS INSTITUTE OF TECHNOLOGY
MASTER OF TECHNOLOGY (ELECTRONICS AND
TELECOMMUNICATION)
PROGRAM STRUCTURE 2013-15

1	Objectives	<ul style="list-style-type: none">• To generate competent manpower in the emerging areas of Electronics and Telecommunication Technology.• To inculcate among the students an aptitude for engineering and research for the furthering of knowledge in the chosen field.
2	Duration	2 Years Full Time
3	Intake	18 Students
4	Reservation	I. Within the sanctioned intake: <ul style="list-style-type: none">a) SC-15%b) ST-7.5%c) Differently abled-3% II. Over and above the sanctioned intake: <ul style="list-style-type: none">a) Kashmiri Migrants - 2 Seatsb) International Students – 15%
5	Eligibility	At least 55% marks in B Tech/B.E in Electrical, Electronics, Communication Engineering, Electronics and Telecommunication or Instrumentation.
6	Selection Procedure	GATE score or entrance test for non-GATE candidates.
7	Medium of Instruction	English

8	Program Pattern	Semester Pattern – 4 Semesters
9	Courses & Specialization	As per Annexure A
10	Fee	Rs. 1,40,000 p.a.+ Rs. 10, 000 Institute Deposit
11	Assessment	All internal courses will have 100% component as internal evaluation at the institute level. All external courses will have 60% internal component and 40% component as external [University] examination.
12	Standard of Passing	The assessment of students for each examination is done, based on relative performance. Maximum Grade Point (GP) is 4.000 corresponding to A+. For all courses, a student is required to pass both internal and external examination separately with a minimum Grade Point of 2.000 corresponding to Grade D. 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 2.000 out of maximum of 4.000 for the program.
13	Award of Degree	Master of Technology (Electronics and Telecommunication) will be awarded at the end of semester IV examination by taking into consideration the performance of all semester examinations after obtaining minimum 2.00 CGPA out of 4.000.

Annexure A

Semester – I

Course Code	Title of the Course	Nature of Course	Teaching Scheme			Examination Scheme Marks				Total Credit	Total Marks
			L	T	Lab	Practical		CA	ESE		
						Int	Ext				
070143101	Advanced Digital Signal Processing	C	4	-	-	-	-	80	120	4	200
070143102	Mechatronics	C	4	-	-	-	-	80	120	4	200
070143103	Random Variable and Stochastic Processes	ES	3	2	-	-	-	80	120	4	200
070143104	Non Linear Systems	C	4	-	-	-	-	80	120	4	200
070143105	Advanced Engineering Electromagnetics and Radiation Systems	C	4	-	-	-	-	80	120	4	200
070143106	Cyber Security	GP	2	-	-	-	-	100	-	2	100
070143107	Advanced Digital Signal Processing Lab	C	-	-	2	20	30	-	-	1	50
070143108	Mechatronics Lab	C	-	-	2	20	30	-	-	1	50
070143109	Non Linear Systems Lab	C	-	-	2	20	30	-	-	1	50
		Total	21	2	6	60	90	500	600	25	1250

Semester – II

Course Code	Title of the Course	Nature of Course	Teaching Scheme			Examination Scheme Marks				Total Credit	Total Marks
			L	T	Lab	Practical		CA	ESE		
						Int	Ext				
070143201	Research Methodology & Communication	C	2	2	-	-	-	60	90	3	150
070143202	Wireless Communication and Mobile Computing	C	4	-	-	-	-	80	120	4	200
070143203	Sensor Networks	C	4	-	-	-	-	80	120	4	200
070143204	Alternate Energy	C	3	-	-	-	-	60	90	3	150
070143205	Lasers and Optical Electronics	C	4	-	-	-	-	80	120	4	200
070143206	Digital Image Processing	C	4	-	-	-	-	80	120	4	200
070143207	Digital Image Processing Lab	C	-	-	2	20	30	-	-	1	50
070143208	Wireless Communication and Mobile Computing Lab	C	-	-	2	20	30	-	-	1	50
070143209	Lasers and Optical Electronics Lab	C	-	-	2	20	30	-	-	1	50
		Total	21	2	6	60	90	440	660	25	1250
070143210	*Integrated Disaster Management	ID	-	-	-	-	-	-	1	-	-

Semester – III

Course Code	Title of the Course	Nature of Course	Teaching Scheme			Examination Scheme Marks			Total Credit	Total Marks
			L	T	Lab	TW	CA	ESE		
070143301	Project-I	PD	-	-	-	-	270	180	9	450
070143302	Seminar-I	PD	-	-	-	-	240	160	8	400
070143303-8	Elective-I	C	4	-	-	-	80	120	4	200
070143309-15	Elective-II	C	4	-	-	-	80	120	4	200
		Total	8	-	-	-	670	580	25	1250

List of Elective	
Elective – I (Choose any one)	
070143303	Telemetry and Transport Industry
070143304	Biomedical Sensors
070143305	Mobile ad hoc Networks
070143306	Embedded and Real Time Systems
070143307	Embedded Automotive System
070143308	Advanced FPGA Design
Elective – II (Choose any one)	
070143309	Neural Networks
070143310	Adaptive Signal Processing
070143311	System on Chip
070143312	Nanotechnology
070143313	VLSI Digital Signal Processing System
070143314	Radars and Radar Systems
070143315	Sensors for harsh environment

Semester – IV

Course Code	Title of the Course	Nature of Course	Teaching Scheme			Examination Scheme Marks			Total Credit	Total Marks
			L	T	Lab	TW	CA	ESE		
070143401	Thesis	PD	-	-	-	-	750	500	25	1250
		Total	-	-	-	-	750	500	25	1250

Marks Distribution of Continuous Assessment: 60 marks for two unit test and 20 marks for assignment/quiz/presentations

Summary

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester I	02	23	25	1250
Semester II	-	25	25	1250
Semester III	-	25	25	1250
Semester IV	-	25	25	1250
Total	02	98	100	5000

*Integrated Disaster Management course is mandatory for the award of degree.

C – Core Course

ID – Inter Disciplinary Course

ES – Engineering Science Course

PD – Professional Development Course

GP – General Proficiency Course

L – Lecture T– Tutorial

TW – Term Work (Practical)

HA – Home Assignment

ESE – End Semester Examination

CA – Continuous Assessment