



Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India
(Autonomous Institute Affiliated to University of Mumbai)

CURRICULUM for M. Tech PROGRAM: 2020 ITERATION (EXTC)

Nomenclature of the Courses

BSC	Basic Science Course
SBC	Skill Based Course
ABL-SATVA	Self- Accomplishment Through Various Activities
ABL-SEVA	Social Empowerment Through Various Activities
PC	Program Core
PE	Program Elective
MLC	Mandatory Learning Course
OE	Open Elective
HSSME	Humanities, Social Science, Management Elective

Abbreviations

L	Lecture Hour	O	Other Work (Self Study)
T	Tutorial Hour	E	Total Engagement in Hours
P	Laboratory Hour	C	Credit Assigned

Sem I

No	Type	Course Code	Course	L	T	P	O	E	C
1	PC	EC501	Advanced Digital Signal Processing	3	0	0	5	8	3
2	PC	EC502	Embedded and Internet of Things (IOT)	2	0	2	5	8	3
3	PC	EC503	Next Generation Network	3	0	0	5	8	3
4	PE	EC5X1	Program Elective-I	2	0	2	3	7	3
5	SBC	EC504	Programming Lab *	0	0	4	3	7	2
6	SBC	EC505	Digital Image and video processing Lab	0	0	4	3	7	2
7	HSSME	HSSXX	HSS-I	2	0	0	3	5	2
8	SBC	AS501	Writing Skills	1	0	2	2	5	2
			TOTAL	13	0	14	29	55	20

Sem II

No	Type	Course Code	Course	L	T	P	O	E	C
1	PC	EC506	Advanced Radiating System	3	0	0	5	8	3
2	PC	EC507	Modern Wireless Communication	3	0	0	5	8	3
3	PE	EC5X2	Program Elective-II	2	0	2	3	7	3
4	PE	EC5X3	Program Elective-III	2	0	2	3	7	3
5	SBC	EC508	High Performance Computing Lab *	0	0	4	3	7	2
6	SBC	EC509	5G Technology Lab	0	0	4	3	7	2
7	HSSME	HSEXX	HSS-II	2	0	0	3	5	2
8	SBC	AS502	Communication Skills	1	0	2	2	5	2
			TOTAL	13	0	14	27	54	20



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SUMMER TERM					
No	Type	Course Code	Course	E	C
1	MLC	AS601	Constitution of India	50	NC
2	SBC	EC601	Seminar (Based on Literature Survey)	50	2
3	SBC	AS603	Selling and Negotiation Skills	100	2
			TOTAL	200	4

Sem III									
No	Type	Course Code	Course	L	T	P	O	E	C
1	OE*	OEXXX	Open Elective-I	3	0	0	5	08	3
3	HSSME*	HSEXX	HSS-III	2	0	0	3	05	2
4	SBC	EC602/EC603	Dissertation-I/Research Internship Stage I	0	0	10	5	45	12
			TOTAL	5	0	10	13	58	17

Sem IV									
No	Type	Course Code	Course	L	T	P	O	E	C
1	OE*	OEXXX	Open Elective-II	3	0	0	5	08	3
2	SBC	EC604/EC605	Dissertation-I / Research Internship Stage II	0	0	0	-	45	12
			TOTAL	3	0	0	5	53	15

*May be studied ONLINE mode or through MOOC's

PROGRAM ELECTIVES

Sr. No.	Vertical/Thread	Program Elective I	Program Elective II	Program Elective III	
1	Communication	Millimeter Wave Technology	Software Defined Radio and its Application	Applied Optimization for Wireless, Machine Learning, Big Data	
		Course Code	EC511	EC512	EC513
2	Data Science	Fundamentals of Data Science	Machine Intelligence	Explainable AI	
		Course Code	EC521	EC522	EC523
3	Cyber-Security and Digital Forensics	Cyber-security Technologies	Digital Forensics and Incident Response (DFIR)	Mobile Device Forensics & Cloud Forensics	
		Course Code	EC531	EC532	EC533
	Open Basket	Any course approved BoS & Principal	Any course approved BoS & Principal	Any course approved BoS & Principal	



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OPEN ELECTIVES (I & II)-May be studied in ONLINE mode or from MOOC's

Sr. No	Course Title
1	Project Management
2	Finance for Engineers
3	Law for Engineers
4	Information and Knowledge management
5	User Experience Design
N	...

HSSE: HUMANITIES & SOCIAL SCIENCE ELECTIVES

HSSE-I								
Sr. No.	Course Type	Course Title	Scheme				Sp note	
			Lectures	Practical	Total	Credits		
1	HSS-I	Psychology-I				2		
2		Philosophy-I				2		
5		Foreign Language-I				2	German, French, Spanish, Japanese, Mandarin	
6		Indian Language-I				2	Sanskrit, Kannad, Tamil, Telgu, Malyalum etc	
7		Economics-I				2		
8		Rise & Fall of Societies				2		
9		Finance-I				2		
10		Political Science-I				2		
10		Any other course on MOOC approved by the HoD & Dean Academics						
HSSE-II								
1	HSS-II	Psychology-II				2		
2		Philosophy-II				2		
5		Foreign Language-II				2	German, French, Spanish, Japanese, Mandarin	
6		Indian Language-II				2	Sanskrit, Kannad, Tamil, Telgu, Malyalum etc	
7		Law for Engineers				2		
8		Economics-II				2		
9		Finance-II				2		
10		The Modern World-I (1760-1910)				2		
		Political Science-II						
11		Any other course on MOOC approved by the HoD & Dean Academics						



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HSSE-III							
1	HSS-III	Psychology-III				2	
2		Philosophy-III				2	
5		Foreign Language-III				2	German, French, Spanish, Japanese, Mandarin
6		Indian Language-III				2	Sanskrit, Kannad, Tamil, Telgu, Malyalam etc
7		IPR & Patent Writing				2	
8		Economics-III				2	
9		Finance-III				2	
11		The Mod. World-II (1910 Onwards)				2	
12		Any other course on MOOC approved by the HoD & Dean Academics					