Symbiosis Institute of Technology, Pune
Master of Technology (Computer Science and Engineering)
Programme Structure 2018-20

1.	**OBJECTIVE**	To generate competent manpower in the emerging areas of Computer Science and Technology. To inculcate among the students an aptitude for engineering and research for the furthering of knowledge in the chosen field.			
2.	**DURATION (IN MONTHS)**	24 (Full Time)			
3.	**INTAKE**	24			
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**	Engineering graduate (B.E. /B. Tech) from any recognised University/ Institution of National Importance with a minimum of 50% marks or equivalent grade (45% Marks or equivalent grade for Scheduled Caste/ Scheduled Tribes) in the discipline of Computer Science & Engineering or Information Technology.			
6.	**SELECTION PROCEDURE**	GATE score or Entrance Test for non-GATE candidates			
7.	**MEDIUM OF INSTRUCTION**	English			
8.	**PROGRAMME PATTERN**	Semester			
9.	**COURSE & SPECIALIZATION**	As per Annexure A			
10.	**FEE**		**Academic Fee p.a**	**Institute Deposit**	**Total**
		Indian Students	185000	20000	205000
		International Students (USD equivalent to INR)	280000	20000	300000
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% 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 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**	Master of Technology (Computer Sciences and Engineering) will be awarded at the			

		end of semester IV 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	24	3	0	0	0	0	27
2	25	3	0	0	0	1*	28
3	20	0	0	0	0	0	20
4	25	0	0	0	0	0	25
Total	**94**	**6**	**0**	**0**	**0**	**0**	**100**

* Satisfactory completion of the letter grade course 'Integrated Disaster Management' 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

Symbiosis Institute of Technology, Pune
Master of Technology (Computer Science and Engineering)
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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Cre-dits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
Semester : 1									
Generic Core Courses									
T7059	070144101	Applied Algorithms		4	80	120	0	0	200
T7055	070144102	Advanced Computing		4	80	120	0	0	200
T7004	070144103	Advanced Numerical Methods in Engineering		3	60	90	0	0	150
T7070	070144104	Network Computing		3	60	90	0	0	150
T7057	070144105	Advanced Databases		3	60	90	0	0	150
T7060	070144106	Applied Algorithms Lab		1	0	0	20	30	50
T7056	070144107	Advanced Computing Lab		1	0	0	20	30	50
T7005	070144108	Advanced Numerical Methods in Engineering Lab		1	0	0	20	30	50
T7071	070144109	Network Computing Lab		1	0	0	20	30	50
T7058	070144110	Advanced Databases Lab		1	0	0	20	30	50
T7674	070144111	Cyber Security		2	100	0	0	0	100
			Total	**24**	**440**	**510**	**100**	**150**	**1200**
Generic Elective Courses Group									
T7066	070144112	Information Systems: Tools and Techniques		3	60	90	0	0	150
T7061	070144113	Data Mining		3	60	90	0	0	150
T7520	070144114	Big Data		3	60	90	0	0	150
			Total Required Credits	**3**	**60**	**90**	**0**	**0**	**150**
Semester : 2									
Generic Core Courses									
T7114	070144201	Wireless Communications and Mobile Computing		4	80	120	0	0	200
T7026	070144202	Research Methodology in Engineering		3	60	90	0	0	150
T7527	070144203	Internet of Things		4	80	120	0	0	200
T7137	070144204	Design Patterns		4	80	120	0	0	200
T7068	070144205	Intelligent Systems		3	60	90	0	0	150
T7139	070144206	Software Testing and Quality Assurance		3	60	90	0	0	150
T7113	070144207	Wireless Communication and Mobile Computing Lab		1	0	0	20	30	50
T7528	070144208	Internet Of Things Lab		1	0	0	20	30	50
T7069	070144209	Intelligent Systems Lab		1	0	0	20	30	50
T7080	070144210	Software Testing and Quality Assurance Lab		1	0	0	20	30	50
T4005	070144214	Integrated Disaster Management *							Letter Grade

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Annexure A

Catalog Course Code	Course Code	Course Title	Specialization	Cre-dits	Internal Marks	External Mark	Internal Practical Marks	External Practical Marks	Total Marks
			Total	**25**	**420**	**630**	**80**	**120**	**1250**
			Generic Elective Courses Group						
T7062	070144211	Enterprise Resource Planning		3	60	90	0	0	150
T7078	070144212	Software Product Line Management		3	60	90	0	0	150
T7529	070144213	Machine Learning		3	60	90	0	0	150
			Total Required Credits	**3**	**60**	**90**	**0**	**0**	**150**
			Semester : 3						
			Generic Core Courses						
T7809	070144301	M.Tech Project		9	180	270	0	0	450
T7675	070144302	Review of Literature		8	160	240	0	0	400
T7677	070144303	Technical Writing and Seminars		3	60	90	0	0	150
			Total	**20**	**400**	**600**	**0**	**0**	**1000**
			Semester : 4						
			Generic Core Courses						
T7851	070144401	Thesis		25	500	750	0	0	1250
			Total	**25**	**500**	**750**	**0**	**0**	**1250**

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Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester 1	2	25	27	1350
Semester 2	0	28	28	1400
Semester 3	0	20	20	1000
Semester 4	0	25	25	1250
Total	**2**	**98**	**100**	**5000**