

SYMBIOSIS INSTITUTE OF TECHNOLOGY
MASTER OF TECHNOLOGY (COMPUTER SCIENCE)
PROGRAMME STRUCTURE 2015-17

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| 1. OBJECTIVES | <ul style="list-style-type: none">• 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 | Two Years Full Time |
| 3. INTAKE | 24 Students |
| 4. RESERVATION | I. Within the sanctioned intake:
a) Scheduled Castes-15%
b) Scheduled Tribes-7.5%
c) Differently abled-3%

II. Over and above the sanctioned intake:
a) Kashmiri Migrants - 2 Seats
b) International Students – 15% |
| 5. ELIGIBILITY | At least 50% marks in B. Tech./B.E in Computer Science and Engineering or Information Technology (45% for SC/ST candidates) |
| 6. SELECTION PROCEDURE | GATE score or Entrance Test for non-GATE candidates |
| 7. MEDIUM OF INSTRUCTION | English |
| 8. PROGRAMME PATTERN | Semester Pattern – 4 Semesters |
| 9. COURSES & SPECIALIZATION | As per Annexure A |

10. FEE**Indian Students**

Academic Fee p.a.	Rs. 1,50,000
Institute Deposit p.a.	Rs. 20,000
Total p.a.	Rs. 1,70,000

International Students

Academic Fee p.a.	Rs. 2,25,000
Institute Deposit p.a.	Rs. 20,000
Total p.a.	Rs. 2,45,000

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 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

Master of Technology (Computer Science) M.Tech. (CS) degree 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.

**Annexure A
Semester I**

Catalog Course Code	Course Code	Course Title	Nature of Course	Teaching Scheme			Examination Scheme Marks				Credits	Total Marks
				L	T	Lab	Practical		CA	ESE		
							CA	ESE				
T7059	070144101	Applied Algorithms	C	4	-	-	-	-	80	120	4	200
T7055	070144102	Advanced Computing	C	4	-	-	-	-	80	120	4	200
T7004	070144103	Advanced Numerical Methods in Engineering	ES	3	-	-	-	-	60	90	3	150
T7070	070144104	Network Computing	C	3	-	-	-	-	60	90	3	150
T7057	070144105	Advanced Databases	C	3	-	-	-	-	60	90	3	150
T7060	070144106	Applied Algorithms Lab	C	-	-	2	20	30	-	-	1	50
T7056	070144107	Advanced Computing Lab	C	-	-	2	20	30	-	-	1	50
T7005	070144108	Advanced Numerical Methods in Engineering Lab	ES	-	-	2	20	30	-	-	1	50
T7071	070144109	Network Computing Lab	C	-	-	2	20	30	-	-	1	50
T7058	070144110	Advanced Databases Lab	C	-	-	2	20	30	-	-	1	50
T7674	070144111	Cyber Security	C	2	-	-	-	-	100	-	2	100
Elective – I (Choose any one)												
T7066	070144112	Information Systems: Tools and Techniques	C	3	-	-	-	-	60	90	3	150
T7061	070144113	Data Mining	C	3	-	-	-	-	60	90	3	150
T7520	070144114	Big Data	C	3	-	-	-	-	60	90	3	150
			Total	22	-	10	100	150	500	600	27	1350

Semester II

Catalog Course Code	Course Code	Course Title	Nature of Course	Teaching Scheme			Examination Scheme Marks				Credits	Total Marks
				L	T	Lab	Practical		CA	ESE		
							CA	ESE				
T7114	070144201	Wireless Communications and Mobile Computing	C	4	-	-	-	-	80	120	4	200
T7026	070144202	Research Methodology in Engineering	PD	3	-	-	-	-	60	90	3	150
T7093	070144203	Digital Image Processing	C	4	-	-	-	-	80	120	4	200
T7137	070144204	Design Patterns	C	4	-	-	-	-	80	120	4	200
T7068	070144205	Intelligent Systems	C	3	-	-	-	-	60	90	3	150
T7139	070144206	Software Testing and Quality Assurance	C	3	-	-	-	-	60	90	3	150
T7113	070144207	Wireless Communication and Mobile Computing Lab	C	-	-	2	20	30	-	-	1	50
T7094	070144208	Digital Image Processing Lab	C	-	-	2	20	30	-	-	1	50
T7069	070144209	Intelligent Systems Lab	C	-	-	2	20	30	-	-	1	50
T7080	070144210	Software Testing and Quality Assurance Lab	C	-	-	2	20	30	-	-	1	50
Elective – II (Choose any one)												
T7062	070144211	Enterprise Resource Planning	C	3	-	-	-	-	60	90	3	150
T7078	070144212	Software Product Line Management	C	3	-	-	-	-	60	90	3	150
T7521	070144213	Artificial Intelligence and Neural Networks	C	3	-	-	-	-	60	90	3	150
			Total	24	-	8	80	120	480	720	28	1400
T4005	070144214	*Integrated Disaster Management	-	-	-	-	-	-	-	-	-	Letter Grade

Semester III

Catalog Course Code	Course Code	Course Title	Nature of Course	Teaching Scheme			Examination Scheme Marks			Credits	Total Marks
				L	T	Lab	TW	CA	ESE		
T7809	070144301	M.Tech Project	PD	-	-	-	-	180	270	9	450
T7675	070144302	Review of Literature	PD	-	-	-	-	160	240	8	400
T7677	070144303	Technical Writing and Seminars	PD	-	-	-	-	60	90	3	150
			Total	-	-	-	-	400	600	20	1000

Semester IV

Catalog Course Code	Course Code	Course Title	Nature of Course	Teaching Scheme			Examination Scheme Marks			Credits	Total Marks
				L	T	Lab	TW	CA	ESE		
T7851	070144401	Thesis	PD	-	-	-	-	500	750**	25	1250
			Total	-	-	-	-	500	750	25	1250

** ESE would be Final VIVA-VOCE conducted by the institute.

Summary

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester I	02	25	27	1350
Semester II	-	28	28	1400
Semester III	-	20	20	1000
Semester IV	-	25	25	1250
Total	02	98	100	5000

*Integrated Disaster Management 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