

SYMBIOSIS INSTITUTE OF TECHNOLOGYM.TECH. (CAD&M)PROGRAMME STRUCTURE 2012-2014

1	Objectives	<ol style="list-style-type: none">1. To generate competent manpower in the emerging areas of Computer Aided Design and Manufacture Technology2. To inculcate among the students an aptitude for engineering and research for the furthering of knowledge in the chosen field.
2	Duration	2 years
3	Proposed Intake	18
4	Reservation of Seats	Within the sanctioned intake SC-15% ST-7.5% Differently abled-3%
5	Eligibility	B.Tech, Mechanical, Production, Industrial, Automobile, Aeronautical Engineering.
6	Selection Procedure	GATEscore or entrance test for non-GATE
7	Medium of Instruction	English
8	Pattern of Programme	Semester: Master level with lectures, tutorials, practicals followed by dissertation/thesis in the final semester.
9	Subjects & Specialization	List of the courses attached
10	Fee Structure	Rs. 1,30,000/-
11	Examination and Method of Assessment	Internal tests, assignments, presentation and external exams both theory and practical.
12	Standard of Passing	As per grading system of the university. The thesis/dissertation should be

approved.

13 Award of Degree

On successful completion of all the internal and external components with a minimum overall CGPA of 2.0

Semester I											
Subject Code	Subject	Nature of Subject	Teaching Scheme			Examination Scheme Marks				Total Credit	Total Marks
			L	T	Lab	Practical		CA	ESE		
						Int	Ext				
070142101	Computer Graphics & Data Structure	C	4	0	0	0	0	80	120	4	200
070142102	Mechatronics	C	4	0	0	0	0	80	120	4	200
070142103	Advanced Numerical Methods in Engineering	ES	4	0	0	0	0	80	120	4	200
070142104	Computer Aided Production, Planning & Control	C	4	0	0	0	0	80	120	4	200
070142105	Computer Aided Design	C	4	0	0	0	0	80	120	4	200
070142106	Computer Graphics & Data Structure Lab	C	0	0	2	20	30	0	0	1	50
070142107	Mechatronics Lab	C	0	0	2	20	30	0	0	1	50
070142108	Advanced Numerical Methods in Engineering Lab	ES	0	0	2	20	30	0	0	1	50
070142109	Computer Aided Design Lab	C	0	0	2	20	30	0	0	1	50
		Total	20	0	08	80	120	400	600	24	1200

Semester II											
Subject Code	Subject	Nature of Subject	Teaching Scheme			Examination Scheme Marks				Total Credit	Total Marks
			L	T	Lab	Practical Int	Practical Ext	CA	ESE		
070142201	Computer Aided Manufacturing	C	4	0	0	0	0	80	120	4	200
070142202	Research Methodology	PD	3	0	0	0	0	60	90	3	150
070142203	Finite Element Method	C	4	0	0	0	0	80	120	4	200
070142204	Industrial Automation & Robotics	C	4	0	0	0	0	80	120	4	200
070142205	Computational Fluid Dynamics	C	4	0	0	0	0	80	120	4	200
070142206	Emerging Concepts & Techniques in Manufacturing Management	C	4	0	0	0	0	80	120	4	200
070142207	Computer Aided Manufacturing Lab	C	0	0	2	20	30	0	0	1	50
070142208	Finite Element Method Lab	C	0	0	2	20	30	0	0	1	50
070142209	Computational Fluid Dynamics Lab	C	0	0	2	20	30	0	0	1	50
		Total	23	0	6	60	90	460	690	26	1300

Semester III										
Subject Code	Subject	Nature of Subject	Teaching Scheme			Examination Scheme Marks			Total Credit	Total Marks
			L	T	Lab	TW	CA	ESE		
070142301	Project-1	PD	0	0	0	0	270	180	9	450
070142302	Seminar-I	PD	0	0	0	0	240	160	8	400
Elective I (Choose any one from 303 to 305)										
070142303	Product Design and Development	C	4	0	0	0	80	120	4	200
070142304	Engineering Optimization Techniques	C	4	0	0	0	80	120	4	200
070142305	Mechanical System Design	C	4	0	0	0	80	120	4	200
Elective II (Choose any one from 306 to 308)										
070142306	Artificial Intelligence	C	4	0	0	0	80	120	4	200
070142307	Advanced Materials	C	4	0	0	0	80	120	4	200
070142308	Fracture and Failure Analysis	C	4	0	0	0	80	120	4	200
070142309	Integrated Disaster Management Program				0	0	150	0	3*	150
		Total	8	0	0	0	820	580	25+3	1400
*Internal Credits (Over and above)										

Semester IV										
Subject Code	Subject	Nature of Subject	Teaching Scheme			Examination Scheme Marks			Total Credit	Total Marks
			L	T	Lab	TW	CA	ESE		
070142401	Thesis	PD	0	0	0	0	750	500	25	1250
		Total	0	0	0	0	750	500	25	1250

Summary

Semester	Internal Credits	External Credits	Total Credits	Total Marks
Semester I	0	24	24	1200
Semester II	0	26	26	1300
Semester III	3(IDMP)	25	25+3	1250+150
Semester IV	0	25	25	1250
Total	3	100	100+3	5000+150

C - Core Subject

ES - Engineering Science Subject

GP - General Proficiency Subject

TW-Term Work (Practical)

ID - Inter Disciplinary Subject

PD - Professional Development Subject

L- Lecture, T-Tutorial, HA-Home Assignment

CA-Continuous Assessment, ESE- End Semester Examination