

SIDDHARTHA INSTITUTE OF TECHNOLOGY- TUMAKURU-572105

(A constituent College of Siddhartha Academy of Higher Education, Deemed-to-be-University)

Scheme of Teaching and Examination (88 Credits, 2024-SCHEME)**FIRST YEAR M. TECH: PRODUCT DESIGN & MANUFACTURING (PDM), ACADEMIC YEAR 2024-25****1st SEMESTER MTech**

SI No	Course Code		Course Title	Teaching Dept.	L	T	P	Credits	CIE Marks	SEE Marks	Total Marks	Exam Hrs.
1	PC	24PDM 11	Engineering Statistics and application	ME	4	-	-	4	50	50	100	3
2	PC	24PDM 12	Finite Element Analysis	ME	4	-	-	4	50	50	100	3
3	PC	24PDM 13	Product Design and Development	ME	4	-	-	4	50	50	100	3
4	PC	24PDM 14	Product Life Cycle Management	ME	3	-	-	3	50	50	100	3
5	PE	24PDM 15X	Professional Elective-I	ME	3	-	-	3	50	50	100	3
6	PE	24PDM16X	Professional Elective-II	ME	3	-	-	3	50	50	100	3
7	PC	24PDM TS1	Technical Seminar-I	ME	-		3	1.5	50	-	50	-
8	PC	24PDM LB1	CAM/FEA Laboratory	ME	-	-	3	1.5	50	-	50	-
L: Lecture, T-Tutorial, P-Practical/Drawing, CIE: Continuous Internal Evaluation, SEE: Semester End Examination				Total	21	-	6	24	400	300	700	-

Professional Elective-I		Professional Elective-II	
24PDM151	Simulation and Modeling of Manufacturing Systems	24PDM161	Advanced Manufacturing Practices
24PDM152	Computer Applications in Design	24PDM162	Product Planning and Marketing
24PDM153	Lean Manufacturing Systems	24PDM163	Advanced Materials Technology

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Scheme of Teaching and Examination (88 Credits, 2024-SCHEME)**FIRST YEAR M. TECH: PRODUCT DESIGN & MANUFACTURING (PDM), ACADEMIC YEAR 2024-25****3rd SEMESTER M.Tech**

SI No	Course Code		Course Title	Teaching Dept.	L	T	P	Credits	CIE Marks	SEE Marks	Total Marks	Exam Hrs.
1	PC	24PDMIS1	Internship	ME	-	-	-	9	100	-	100	-
2	PC	24PDMOE1	NPTEL/MOOC/SWAYAM	-	-	-	-	3	50	-	50	--
2	PC	24PDMPW1	Project Phase-I	ME	-	-	-	08	50	-	50	-
L: Lecture, T-Tutorial, P-Practical/Drawing, CIE: Continuous Internal Evaluation, SEE: Semester End Examination				Total	-	-	-	20	150	-	150	-

4th SEMESTER M. Tech

SI No	Course Code		Course Title	Teaching Dept.	L	T	P	Credits	CIE Marks	SEE Marks	Total Marks	Exam Hrs.
1	PC	24PDMPW2	Professional Work Phase-II	ME	-	-	-	20	100	200	300	-
2 Paper Publications is compulsory (Conference/Journal)												
L: Lecture, T-Tutorial, P-Practical/Drawing, CIE: Continuous Internal Evaluation, SEE: Semester End Examination				Total	-	-	-	20	100	200	300	-
Credits Distribution: 1st Sem=24, 2nd Sem =24, 3rd Sem=20, 4th Sem=20, Total Credits=24+24+20+20=88 Credits												

Total Credits: 24+24+20+20=88

SRI SIDDHARTHA INSTITUTE OF TECHNOLOGY
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DEPARTMENT OF MECHANICAL ENGINEERING

M.TECH - PRODUCT DESIGN & MANUFACTURING (PDM)

INTERNSHIP

Sub. Code: 24PDMIS1
Credits: 12

CIE Marks: 100
Exam Marks: 100

Internship: Comprises the following;

1. Report Evaluation on Internship (50 Marks)
2. Viva-Voce and Evaluation on Internship (50 Marks)

NPTEL / MOOC / SWAYAM

Sub. Code: 24PDMOE1
Credits: 03

CIE Marks: 50
Exam Marks: 50

Student should pass the online courses prescribed by the department

PROJECT WORK: PHASE - I

Sub. Code: 24PDM3PW1

CIE Marks: 50
Credits: 08

Project Phase – I: Candidate in consultation with the guide shall carryout literature survey / visit industry to finalize the topic of project and present the same (50 Marks)

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DEPARTMENT OF MECHANICAL ENGINEERING

M.TECH - PRODUCT DESIGN & MANUFACTURING (PDM)

PROJECT WORK: PHASE- II

Sub. Code: 24PDMPW2

CIE Marks: 50+50

Exam Hours: 20

Exam Marks: 125+75

Project Phase – II: comprises the following;

1. **Project work Seminar –I:** Presentation of the Project work carried for the first six weeks (Evaluate for 50 Marks)
2. **Project work Seminar –II:** Presentation of the Project work carried for the next eight weeks (Evaluate for 50 Marks)
3. **Project Work Evaluation** – Taken up at the end of fourth Semester.
 - **Report evaluation:** Average of Marks evaluated by internal and external examiners (125 Marks)
 - **Viva-Voce:** Conducted and evaluated jointly by internal and external examiners (75 Marks).

GUIDELINES FOR PREPARATION OF PROJECT REPORTS

ARRANGEMENT OF CHAPTERS -

1. **Cover title page** -Format enclosed
2. **Inner title page** – Same as cover title page
3. **Certificate** from guide and head with declaration by the student
4. **Certificate** from Company / Firm whether the project work is carried out.
(Not required if done themselves)
5. **Acknowledge**
6. **List of tables and figures**
7. **Abbreviations** / operational definitions used
8. **Introduction** should include the following:
 - a. Problem definition / statement. This will cover company profile to the topic chosen pertain to the company – 5 pages

- b. Research Objectives (maximum 5) – 1 page
- c. Research Methodology – state the basic and secondary research design. If it is a simple survey, explain sampling design and questionnaire design, sources of data and techniques of data analysis – 3, 4 pages
- d. Limitations of Project study – 1 page

9. Chapter – 1: Literature review

Discuss the theory, concepts, hypotheses, models, etc., underpinning the project work (Project report is an application of the theoretical knowledge in analyzing a real life problem/issue faced by an organization) – 15 pages

10. Chapter – II, III & IV: Findings

This is the longest section of the project report. In this chapter, data collected will be presented and analysed without drawing any inference. Depending on the volume of the data presented, there could be 3 to 4 chapters in this section. – at least 40 pages

11. Chapter V: Summary of Findings

This chapter be a brief statement of analysis already stated in the findings section – 3 pages

12. Chapter VI: Conclusions and suggestions – 3 pages

Total number of pages must be at least 80 but not more than 100.

13. Bibliography: References like articles, books, websites, etc., used in the project work must be included in this section strictly following the citation style prescribed by the University.

14. Appendix: This will include printed secondary data (only if it is very critical) and any questionnaire used for the study.