

## CONTENTS

Sr. No.	Particulars	Page No.
	Preface	(i)
	Acknowledgement	(ii)
1.	Salient Features of the Course	1
2.	Employment Opportunities	2
3.	Competency Profile	3
4.	Deriving Curriculum Areas from Competency Profile	5
5.	Abstract of curriculum Areas	7
6.	Horizontal and Vertical Organization	8
7.	Study and Evaluation Scheme	9
8.	Detailed Contents	
	<b>FIRST SEMESTER</b>	
1.1	Communication Skills-I	15
1.2	Applied Mathematics-I	17
1.3	Applied Physics-I	19
1.4	Applied Chemistry-I	23
1.5	Basics of Information Technology	27
1.6	Engineering Drawing-I	32
1.7	General Workshop Practice-I	35
	<b>SECOND SEMESTER</b>	
2.1	Communication Skills-II	40
2.2	Applied Mathematics-II	43
2.3	Applied Physics-II	45
2.4	Applied Chemistry-II	48
2.5	Applied Mechanics	52
2.6	Engineering Drawing –II	55
2.7	General Workshop Practice-II	58

Sr. No.	Particulars	Page No.
<b>THIRD SEMESTER</b>		
3.1	Strength of Materials	63
3.2	Principles of Thermal Engineering	66
3.3	Basics of Electrical and Electronics Engineering	69
3.4	Workshop Technology-I	72
3.5	Machine Drawing	76
3.6	Workshop Practice-I	78
<b>FOURTH SEMESTER</b>		
4.1	Materials & Metallurgy	81
4.2	Fabrication Processes –I	85
4.3	Industrial Hydraulic and Pneumatics	87
4.4	Workshops Technology-II	91
4.5	Machine Design and Drawing	94
4.6	Workshop Practice-II	96
4.7	Computer Applications in Fabrication Technology	97
	Industrial Training	101
<b>FIFTH SEMESTER</b>		
5.1	Theory of Machines	102
5.2	Fabrication Processes-II	106
5.3	Industrial Engineering	108
5.4	Workshop Technology III	110
5.5	CNC Machines & Automation	112
5.6	Workshop Practice – III	114
5.7	Computer Integrated Manufacturing (CIM)	116

Sr. No.	Particulars	Page No.
<b>SIXTH SEMESTER</b>		
6.1	Industrial Management	119
6.2	Inspection & Quality Control	122
6.3	Automobile Engineering	124
6.4	Entrepreneurship Development and Management	128
6.5	Installation, Testing and Maintenance	131
6.6	Project Work	134
9.	Resource Requirements	136
10	Recommendations for effective implementation of curriculum	145
11.	List of Participants	146