CONTENTS

SR.NO	. PARTICULARS	
-	Preface	(i)
-	Acknowledgements	(ii)
1.	Salient Features of the Diploma Programme	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 Organisation of the Subject	8
7.	Study and Evaluation Scheme	9
8.	Guidelines for Assessment of Student Centred Activities and Intern Assessment	nal 15
9.	Detailed Contents of various Subjects	
FIRST	T SEMESTER	
1.1	Communication Skills – I	16
1.2	Applied Mathematics – I	18
1.3	Applied Physics – I	20
1.4	Applied Chemistry – I	24
1.5	Basics of Information Technology	28
1.6	Engineering Drawing – I	33
1.7	General Workshop Practice – I	36
SECO	OND SEMESTER	
2.1	Communication Skills – II	41
2.2	Applied Mathematics – II	44
2.3	Applied Physics – II	46
2.4.	Applied Chemistry – II	49
2.5	Applied Mechanics	53
2.6	Engineering Drawing – II	56
2.7	General Workshop Practice – II	59

THIRD SEMESTER

List of Participants

13.

THIR	D SEMESTER	
3.1	Manufacturing Processes-I	64
3.2	Mechanical Engineering Fundamentals	68
3.3	Electrical Engineering Fundamentals	70
3.4	Computer Programming and Application	74
3.5	Analog Electronic Devices	77
FOU	RTH SEMESTER	
4.1	Digital Electronics	81
4.2	DC and AC Machines	85
4.3	Instrumentation	88
4.4	Electrical and Electronic Instrumentation and Measurement	91
4.5	Hydraulic and Pneumatic Systems	94
4.6	Mechatronics – Design and Drawing	97
	Industrial Training	99
FIFT	H SEMESTER	
5.1	CNC Machines and Automation	100
5.2	Power Electronics	103
5.3	Employability Skills – I	106
5.4	Environmental Education	107
5.5	Embedded Systems	109
5.6	Process Control and Data communication	112
5.7	Manufacturing Processes II	114
SIXT	H SEMESTER	
6.1	Industrial Automation	117
6.2	Robotics	119
6.3	Inspection and Quality Control	121
6.4	Entrepreneurship Development and Management	124
6.5	Employability Skills – II	128
6.6	Mechanisms and Machines	129
6.7	Project Work	131
10.	Resource Requirements	135
11.	Evaluation Strategy Pagementations for Effective Implementation of	143 146
12.	Recommendations for Effective Implementation of curriculum List of Participants	140

148