

CONTENTS

SR.NO.	PARTICULARS	PAGE NO.
-	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	4
5.	Abstract of Curriculum Areas	6
6.	Horizontal and Vertical Organisation of the Subject	7
7.	Study and Evaluation Scheme	8
8.	Guidelines for Assessment of Student Centred Activities and Internal Assessment	14
9.	Detailed Contents of various Subjects	

FIRST SEMESTER

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

SECOND SEMESTER

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

THIRD SEMESTER

3.1	Engineering Fundamentals	63
3.2	Strength of Materials	68
3.3	Fluid Flow	72
3.4	Polymer Science	74
3.5	Chemical Process Calculations	76
3.6	Mechanical Operations	78
3.7	Computer Aided Drafting	80

FOURTH SEMESTER

4.1	Polymer Processing Techniques - I	82
4.2	Polymeric Materials and Properties	84
4.3	Heat Transfer	86
4.4	Mass Transfer	89
4.5	Chemical Engineering Thermodynamics	92
4.6	Computer Aided Mould Design	94
	Industrial Training	95

FIFTH SEMESTER

5.1	Polymer Processing Techniques - II	96
5.2	Design of Dies and Moulds - I	98
5.3	Chemical Reaction Engineering	101
5.4	Polymer Compounding and Formulation	103
5.5	Employability Skills - I	105
5.6	Environmental Education	106

SIXTH SEMESTER

6.1	Polymer Testing Characterisation and Quality Control	108
6.2	Design of Dies and Moulds - II	111
6.3	Plastic Product Design	113
6.4	Process Instrumentation and Control	115
6.5	Employability Skills - II	117
6.6	Entrepreneurship Development and Management	118
6.7	Project Work	122

10.	Resource Requirements	124
11.	Evaluation Strategy	128
12.	Recommendations for Effective Implementation of Curriculum	131
13.	List of Participants	133

