

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA IN PLASTICS ENGINEERING
Semester: 4

Subject Name INJECTION MOULD DESIGN

Sr.No	Course content0
1.	INJECTION MOULD MATERIALS <ol style="list-style-type: none"> 1. Introduction 2. Mould Material Requirements 3. Heat Treatment of Mould Materials 4. Steels for Moulds
2.	BASICS OF TWO-PLATE MOULD DESIGN <ol style="list-style-type: none"> 1. Introduction 2. Constructional Details of Two-Plate Mould 3. Injection Press Requirement 4. Shrinkage Calculation 5. Venting 6. Taper Location Recess in Core & Cavity Plate 7. Limits, Fits & Tolerances 8. Mould Cost Estimation 9. Mould Assembling Procedure 10. Mould Designer's Check List 11. Balancing of Gates & Runners in Multi-impression & Family Moulds
3.	THREE-PLATE MOULD DESIGN <ol style="list-style-type: none"> 1. Constructional Details 2. Runner Ejection Techniques 3. Opening Control Devices 4. Comparison with Two-Plate Mould
4.	SPLIT MOULD DESIGN <ol style="list-style-type: none"> 1. Significance of Split Mould Design 2. Sliding Splits & Guiding Plate Designs 3. Constructional Details of Split Mould 4. Split Actuation Methods 5. Split Locking Methods 6. Split Safety Arrangements
5.	MOULDS FOR THREADED COMPONENTS <ol style="list-style-type: none"> 1. Introduction 2. Methods for Internally Threaded Components Methods for Externally Threaded Components

Reference Books:

SR. NO.	NAME OF REFERENCE	AUTHOR
1	Plastic Materials & Processes	Goodman
2	Injection Moulding	Irvin I. Rubin
3	Injection Mould Design	R.G.W. Pye
4	Plastic Engineering Handbook	Berins
5	Injection Moulding Handbook	Rosato & Rosato
6	Injection Mould Design Fundamentals	Denton & Glenvill
7	Workshop Technology	Khurmi & Gupta