

GUJARAT TECHNOLOGICAL UNIVERSITY
DIPLOMA IN PLASTICS ENGINEERING
Semester: 4

Subject Name INJECTION MOULD DESIGN

Sr.No	Course content0
1.	INJECTION MOULD MATERIALS <ul style="list-style-type: none">1. Introduction2. Mould Material Requirements3. Heat Treatment of Mould Materials4. Steels for Moulds
2.	BASICS OF TWO-PLATE MOULD DESIGN <ul style="list-style-type: none">1. Introduction2. Constructional Details of Two-Plate Mould3. Injection Press Requirement4. Shrinkage Calculation5. Venting6. Taper Location Recess in Core & Cavity Plate7. Limits, Fits & Tolerances8. Mould Cost Estimation9. Mould Assembling Procedure10. Mould Designer's Check List11. Balancing of Gates & Runners in Multi-impression & Family Moulds
3.	THREE-PLATE MOULD DESIGN <ul style="list-style-type: none">1. Constructional Details2. Runner Ejection Techniques3. Opening Control Devices4. Comparison with Two-Plate Mould
4.	SPLIT MOULD DESIGN <ul style="list-style-type: none">1. Significance of Split Mould Design2. Sliding Splits & Guiding Plate Designs3. Constructional Details of Split Mould4. Split Actuation Methods5. Split Locking Methods6. Split Safety Arrangements
5.	MOULDS FOR THREADED COMPONENTS <ul style="list-style-type: none">1. Introduction2. Methods for Internally Threaded ComponentsMethods 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