

GUJARAT TECHNOLOGICAL UNIVERSITY (GTU)

V - SEMESTER

Course Title: Logistics

(Course Code: 1353405)

Diploma Programme in which this course is offered	Semester in which offered
Mechanical (Manufacturing Technology)	Fifth Semester

Module.	Topics	Hours
Module 1	Fundamentals of Supply Chain Management 1.1 Introduction 1.2 Objectives of Supply Chain Management 1.3 Difference between SCM and Logistics Management	2 h
Module 2	Basics of Logistics Management 2.1 Introduction to physical distribution 2.2 Logistics Management and its elements 2.3 Modern concepts in Logistics 2.4 Role of Logistics in Industry 2.5 Different types of Cargo	3 h
Module 3	Packaging 3.1 Criteria of Packaging 3.2 Permitted and Non-permitted material 3.3 Strapping 3.4 Stackability 3.5 Packaging of Hazardous goods 3.6 One-way Packaging 3.7 Returnable Packaging 3.8 Labelling Methods	3 h
Module 4	Warehouse 4.1 Introduction to Warehousing 4.2 Warehouse Functions 4.3 Warehouse Types 4.4 Value Added Services provided by Warehouse 4.5 Warehouse internal operation 4.6 Storage methods at Warehouse	3 h
Module 5	Material Handling 5.1 Material handling equipment's used in Warehouse 5.2 Advantages and Application 5.3 Automatic Storage and Retrieval System	3 h
Module 6	Documentation and Clearance processes 5.1 Material handling equipment's used in Warehouse 5.2 Advantages and Application 5.3 Automatic Storage and Retrieval System	2 h

Module 7	Basics of Transportation 7.1 Introduction to Multimodal Transport 7.2 Transport by Air 7.3 Transport by Sea 7.4 Transport by Road 7.5 Transport by Rail	2 h
Module 8	Risk and Insurance Management 8.1 Introduction and Significance of Risk, Disaster and Internal Management 8.2 Risks in Supply Chain, Risk Management Framework 8.3 Disaster Management 8.4 Principles and types of Insurance	3 h
Module 9	Recent developments in Logistics 9.1 Transport and Mobility Technologies 9.2 Green logistics 9.3 Cold chain logistics 9.4 Role of IT in logistics 9.5 3D Printing and Wearable devices in logistics 9.6 Transport services, Costing and Performance	3 h