

**GUJARAT TECHNOLOGICAL UNIVERSITY, AHMEDABAD, GUJARAT**

**COURSE CURRICULUM**  
**COURSE TITLE: INDUSTRIAL MANAGEMENT OF WET PROCESSING**  
**INDUSTRIES**  
**(COURSE CODE: 3352803)**

Diploma Program in which this course is offered	Semester in which offered
Textile Processing Technology	5 <sup>th</sup> Semester

**1. RATIONALE**

Diploma graduates are required to manage operations of textile processing in industries. They should have knowledge of management principles, cost control, work flow management, material handling, marketing, and various social acts such as Factory, Boiler, Labour, etc. This will enable them to function effectively. This course has been designed to provide such exposure.

**2. COMPETENCY**

The course content should be taught and implemented with the aim to develop required skills in the students so that they are able to acquire the following competency:

- **Manage operations of textile processing industry ethically using management principles, cost control, marketing and socially acceptable practices.**

**3. COURSE OUTCOMES**

The theory should be taught and practical should be carried out in such a manner that students are able to acquire different learning outcomes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

- i. Explain the applications of Industrial management of wet processing industry
- ii. Explain the Costing and Finance management process in wet processing industry
- iii. Describe the implementation of Materials and Manufacturing Management
- iv. Explain optimum methods of for enhanced Sales and Marketing Management
- v. Interpret Industrial Relations and Factory Acts properly

**4. TEACHING AND EXAMINATION SCHEME**

Teaching Scheme (In Hours)			Total Credits (L+T+P)	Examination Scheme				Total Marks
L	T	P		Theory Marks		Practical Marks		
L	T	P	C	ESE	PA	ESE	PA	100
4	0	0	4	70	30	0	0	

**Legends:** L-Lecture; T – Tutorial/Teacher Guided Student Activity; P - Practical; C – Credit; ESE - End Semester Examination; PA - Progressive Assessment.

## 5. COURSE DETAILS

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
<b>Unit – I Industrial management of wet processing industry</b>	1a. Describe salient features of industrial management. 1b. Describe the impact of industrial management. 1c. Features of textile management. 1d. Describe plant layout and site selection	1.1 Objectives and Organization structure of industrial management. 1.2 Scientific management and traditional management. 1.3 Impact of Scientific management. 1.4 Features of textile management. 1.5 Plant lay out and site selection for wet processing industry
<b>Unit– II Costing and Finance management</b>	2a. Distinguish between cost and cost control 2b. Differentiate between profit and profitability 2c. Differentiate between Break Even Analysis, depreciation and obsolescence.	2.1 Cost and cost control. 2.2 Theory of costing 2.3 Profit and Profitability 2.4 Break Even Analysis, Depreciation and obsolescence
<b>Unit– III Materials and Manufacturing Management</b>	3a. Explain Production management. 3b. Describe various techniques of production and its impact. 3c. Explain principles of material Handling and its impact. 3d. Differentiate between production management and material handling	3.1 Production management, Methods of production, Production function and plant lay-out, Production planning and control. 3.2 Role of supervisor. 3.3 Principles of Material Handling, Flow patterns for Material handling. 3.4 Production management and Material Handling.
<b>Unit – IV Sales and Marketing Management</b>	4a. Differentiate between sales management and Marketing Management 4b. Describe the features of advertising and marketing 4c. State the marketing functions 4d. Explain impact of marketing and advertising on sales	4.1 Sales management and Marketing management 4.2 Organization structure and functions of sales department. 4.3 Marketing strategies, structure and Marketing function. 4.1 Advertising and methods of advertising; Different media for advertising. 4.2 Impact of marketing and advertising on sales.
<b>Unit – V Industrial Relations and</b>	5a. State the objectives of Indian Factory Act 5b. Describe the objectives of	5.1 Indian Factory Act 5.2 Labour welfare acts with social accountability (SA –

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
<b>Factory Acts</b>	Labour welfare acts 5c. State the objectives of Boiler Acts 5d. Describe the features of Labour welfare acts 5e. Describe the features of Important pollution control Acts 5f. Describe the features of Environment laws.	8000) 5.3 Boiler Acts 5.4 Important pollution control Acts 5.5 Environmental laws.

## 6. SUGGESTED SPECIFICATION TABLE WITH HOURS and MARKS (Theory)

Unit No.	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total
1.	Industrial management of wet processing industry	08	2	4	4	10
2.	Costing and Finance management	10	4	8	4	16
3.	Materials and Manufacturing Management	14	4	8	6	18
4.	Sales and Marketing Management	12	4	8	6	18
5.	Industrial Relations and Factory Acts	12	2	4	2	08
	<b>Total</b>	<b>56</b>	<b>16</b>	<b>32</b>	<b>22</b>	<b>70</b>

**Legends:** R = Remembrance; U = Understanding; A = Application and above levels (Revised Bloom's taxonomy)

**Note:** This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

## 7. SUGGESTED LIST OF PROPOSED STUDENT ACTIVITIES

Following is the proposed list of students activities like:

- i. Collect data on various cost reduction activities in wet processing textile industries.
- ii. Collect information on marketing strategies to enhance market share,
- iii. Collect information on industry adherence on social laws.
- iv. Collect information on industry accidents.
- v. Literature survey of management for Textile Wet Processing Industries.
- vi. Visit to textile industries to study the management system and prepare reports.
- vii. Group discussion on importance and needs of management in textile wet processing industries.
- viii. Collect data related to management system of various textiles wet processing industries and prepare Power point Presentation.

## 8. SPECIAL INSTRUCTIONAL STRATEGY (if Any)

- i. Industrial Demonstration of Management system during industrial visit.
- ii. Understand different managerial functions and tasks during Industrial visit.
- iii. Video clips of management system for easy learning.
- iv. Guest lecturers from industry experts for contemporary practices of industries.

## 9. SUGGESTED LEARNING RESOURCES

### A. List of Books

S. No.	Author	Title of Books	Publication
1.	T. R. Banga and S. G. Sharma	Industrial Organization and Engineering Economics	Khanna Publisher, New Delhi, Latest Publication
2	V. D. Dudeja	Management of Textile Industry	Textile Trade Press, Ahmedabad. Latest Publication
3	B. A. Bhagwatwar	Organizational Behavior	

### B. List of Software/Learning Website

- i. [www.wikipedia.org](http://www.wikipedia.org)
- ii. [www.fibre2fashion.com](http://www.fibre2fashion.com)
- iii. <http://textilelearner.blogspot.in>
- iv. [www.youtube.com](http://www.youtube.com)
- v. <http://global.kyocera.com/inamori/management/twelve.html>
- vi. <http://managementinnovations.wordpress.com/2008/12/04/henri-fayols-14-principles-of-management/>
- vii. [http://faculty.mercer.edu/jackson\\_r/Ownership/chap02.pdf](http://faculty.mercer.edu/jackson_r/Ownership/chap02.pdf)

## 10. COURSE CURRICULUM DEVELOPMENT COMMITTEE

### Faculty Members from Polytechnics

- **Prof. J. H. THAKKER**, Lecturer, Textile Processing Dept., R. C. Technical Institute, Ahmedabad.
- **Prof. C. R. Madhu**, Adhoc Lecturer, Textile Processing Dept., R. C. Technical Institute, Ahmedabad.
- **Prof. D. D. VYAS**, Adhoc Lecturer, Textile Processing Dept., Dr. S. and S. S. Ghandhy College of Engineering and Technology, Surat.
- **Prof. K. J. UMRIGAR**, Adhoc Lecturer, Textile Processing Dept., Dr. S. and S. S. Ghandhy College of Engineering and Technology, Surat.

### Faculty Members from NITTTR, Bhopal

- **Dr. C. K. Chugh**, Professor, Department Mechanical Engineering
- **Dr. Joshua Earnest**, Professor, Department Electrical and Electronics Engineering