

**PROPOSED CURRICULAR STRUCTURE FOR PART-III (3rd YEAR) OF THE
FULLTIME DIPLOMA COURSE IN ENGINEERING & TECHNOLOGY.**

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION												
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES												
COURSE NAME: LEATHER GOODS TECHNOLOGY												
SEMESTER: SIXTH												
BRANCH CODE: LGT												
SL. NO.	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
1.	INDUSTRIAL MANAGEMENT AND LEATHER GOODS MARKETING	3	3	1	-	10	20	30	70	-	-	100
2.	ENTREPRENEURSHIP DEVELOPMENT, PROFESSIONAL VALUES & ETHICS	4	3	1	-	10	20	30	70	25	-	125
3.	FUNDAMENTALS OF SAFETY LEATHER GOODS	2	2	-	-	5	10	15	35	-	-	50
4.	ELECTIVE-II (Select Any One) A. FOOTWEAR TECHNOLOGY-II B. LEATHER TECHNOLOGY-II	4 (2+2)	2	-	4	5	10	15	35	-	50	100
5.	DESIGN PROJECT-II	6	-	-	11	-	-	-	-	-	200	200
6.	INDUSTRIAL TRAINING AND PROJECT	3	-	1	5	-	-	-	-	50	100	150
7.	VIVA-VOCE	3	-	-	-	-	-	-	-	-	100	100
TOTAL		25	10	3	20	30	60	90	210	75	450	825
STUDENT CONTACT HOURS PER WEEK: 33 HRS. THEORY & PRACTICAL PERIOD OF 60 MINUTES EACH. L-LECTURE; TU- TUTORIALS; PR-PRACTICAL; TW- TERM WORK ; TA-TEACHERS ASSESSMENT; CT- CLASS TEST; ESE- END OF SEMESTER.												

INDUSTRIAL MANAGEMENT AND LEATHER GOODS MARKETING

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	3 Lecture 1 Tutorial	100

OBJECTIVE

1. The knowledge of this subject is required of all diploma holders who wish to choose industry/field as this career. This course is designed to develop understanding of various functions of management, role workers and engineers and providing knowledge about safety and labor, industrial laws and management in different areas.
2. To provide knowledge about business discipline which focuses on the practical application of marketing techniques and the management of a firm's marketing resources and activities.

EXAMINATION SCHEME

Internal Assessment - 30 marks and End of Semester (ESE) - 70 marks.

Distribution of Internal Assessment marks:

Teacher's Assessment (TA) - 10 marks; Class Test (CT) - 20 marks.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
1.	INDUSTRIAL MANAGEMENT AND LEATHER GOODS MARKETING	3	3	1	-	10	20	30	70	-	-	100

DETAIL COURSE CONTENT

• END OF SEMESTER

INDUSTRIAL MANAGEMENT

A. INTRODUCTION TO MANAGEMENT SCIENCE

Principles and function of Management-Contribution of different Management Writer's (Henry Fayol, F.W. Taylor, Max Weber) in the field of Management Science.

B. ORGANISATIONAL BEHAVIOR

Behavior-Motivation-Motivational Theories-Morale-Leadership-Communication.

C. HUMAN RESOURCE MANAGEMENT

Human Resource Management-Concept and Definition-Function-Recruitment-Training-Performance-Appraisal-Industrial Safety.

D. MATERIAL MANAGEMENT

Material Management-Concept and Definition- Function-Purchase-Store-Inventory Control-ABC Analysis-VED Analysis.

E. INTRODUCTION TO INDUSTRIAL ENGINEERING (Basic Idea), PRINCIPLES OF SHOP

FLOOR SUPERVISION WITH EMPHASIS ON 5S, SAFETY AND MOTIVATION.

LEATHER GOODS MARKETING

A. Introduction to Leather Goods Marketing.

B. Understanding the Marketing Mix (Product, Price, Place & Promotion)- specific consequences of Leather Goods Marketing.

C. MARKETTING ENVIRONMENT

Scope of Marketing Leather Goods in rural market, in cities, in different regions, in different countries.

D. SEGEMENTATION OF MARKET AND TARGET SETTING

E. TREND ESTIMATION AND STRATEGY SETTING

Ability to read trend of Leather Goods in respect of Fashion, Style and Economy and Setting Strategy accordingly.

F. MARKETING TECHNIQUES

Through shops (own and others), stall, locally, regionally, nationally, internationally, wholesalers, traders, popular brands, big house, Govt. initiatives (State and Council), export agents, and direct export buyers.

G. ADVERTISING MANAGEMENT

Media selection for Advertising campaign.

H. SALES PROMOTION

Importance- tools & techniques of sales promotion- Organizing sales Promotion campaign.

•TEXT BOOKS

1. "Marketing Management" by *S.A. Sherlekar*. Himalaya Publishing House.
2. "Marketing Management" by *Phillip Kotler* . Prentice Hall Inc (1996).
3. "Industrial Engineering and Management" by *Dr. Ravi Shankar*. Galgotia Publications.

ENTREPRENUERSHIP DEVOLOPMENT, PROFESSIONAL VALUES AND ETHICS

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	3 Lecture 1 Tutorial	125 [100+25]

OBJECTIVE

1. To develop and strengthen entrepreneurial quality among the participants.
2. To analyze environmental set up relating to small industry or need for achievement.
3. **Term Work:** The included objective aimed to provide an opportunity for the students to apply their classroom knowledge, develop their skill and clarify their career plans.

EXAMINATION SCHEME

Internal Assessment - 30 marks; End of Semester (ESE) - 70 marks and Term Work – 25 marks.

Distribution of Internal Assessment marks:

Teacher’s Assessment (TA) - 10 marks; Class Test (CT) - 20 marks.

Term Work - 25 marks: Assessment of 25 marks shall be held throughout the semester based on entire syllabus.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
2.	ENTREPRENEURSHIP DEVELOPMENT, PROFESSIONAL VALUES AND ETHICS	4	3	1	-	10	20	30	70	25	-	125

DETAIL COURSE CONTENT

• END OF SEMESTER

ENTREPRENEURSHIP DEVELOPMENT

A. INTRODUCTION TO ENTREPRENEURSHIP

Concept of Entrepreneurship, early career dilemmas of an Entrepreneur, essential qualities of entrepreneur, entrepreneurship as a style management, entrepreneurial venture and the entrepreneurial organization.

B. CREATIVITY AND INNOVATION

Exercise on creativity, Value analysis and innovation and Entrepreneurship, modules of Innovation.

C. CHOOSING A DIRECTION

Opportunity recognition and entry strategies, New product franchising, Partial momentum, Sponsorships and acquisition,

The strategic Window Opportunity: Scanning, Positioning & Analyzing.

Intellectual Property: Creation and Protection.

D. BUSINESS PLANNING PROCESS

Business Structure- Sole Proprietorship Business, Joint business, Partnership Business, Joint Stock Business, Co-operative Business, State Enterprise.

Business Law- how to incorporate a company- Memorandum of Association, Article of Association, Certificate of Incorporation, Object Clause, Launching an Enterprise.

E. ENTREPRENEURSHIP DEVELOPMENT AND ROLE OF GOVERNMENT

Role of Central Government (MSME) and State Government in promoting Entrepreneurship, role of agencies like SIDBI, RRB, Co-operative Banks, NGOs, Microfinance in the Entrepreneurship Development.

PROFESSIONAL VALUES AND ETHICS

Engineering Profession: Ethical issues in Engineering Practice, Conflicts between Business Demands and Professional Ideals. Social and Ethical Responsibilities of Technologists. Codes of Professional Ethics. Whistle Blowing and beyond Profession and Human Values. Crisis of values in Contemporary Society. Nature of values: Value Spectrum of a 'Good' life.

•TERM WORK

1. Students have to make Individual Project Report for their Business.

•TEXT BOOKS

1. "Entrepreneurship Development" by *S. Anil Kumar , S.C Poornima, Mini K. Abraham, K Jayashree*.
New Age International Publishers.
2. "Marketing Management" by *Philip Kotler*. Prentice Hall (2001).
3. "Customer dissatisfaction as A Source of Entrepreneurial Opportunity by *K. Ramachandran*. Indian School of Bussiness.

FUNDAMENTALS OF SAFETY LEATHER GOODS

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	2 Lecture	50

OBJECTIVE

1. To provide the participants a basic idea about safety leather items like gloves and apron.

EXAMINATION SCHEME

Internal Assessment - 15 marks and End of Semester (ESE) - 35 marks.

Distribution of Internal Assessment marks:

Teacher's Assessment (TA) - 5 marks; Class Test (CT) - 10 marks.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
3.	FUDAMENTALS OF SAFETY LEATHER GOODS	2	2	-	-	5	10	15	35	-	-	50

DETAIL COURSE CONTENT

• END OF SEMESTER

A. GLOVE

Introduction, History, Classification, Materials Specification, Discussion on glove leather, Making of glove, Physical and Chemical testing of glove leather as well as finished product, Types of machines used in glove manufacturing, Types of threads used, Types of seam.

B. APRON

Introduction, History, Material Specification, Discussion on leather used for apron, Making of apron, Physical and chemical testing of leather used for apron, Machines used for making of apron.

TEXT BOOKS

1. "Practical Glove Making" by *Isabel M. Edwards*. Read Books (24 July 2009).
2. "A Guide to Making Leather Gloves" by *Various Authors*. Gleed Press (August 17, 2011).
3. "The Apron Book"- Making, Wearing and Sharing a Bit of Cloth and Comfort" by *Ellyn Anne Geisel*. Andrews McMeel Publishing.

ELECTIVE - II

A. FOOTWEAR TECHNOLOGY – II

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	2 Lecture 4 Practical	100 [50+50]

OBJECTIVE

1. To provide knowledge about footwear designing and manufacturing.
2. To provide brief knowledge different types of footwear construction involved in footwear making.

EXAMINATION SCHEME

Internal Assessment - 15 marks; End of Semester (ESE) - 35 marks and Practical - 50 marks.

Distribution of Internal Assessment marks:

Teacher's Assessment (TA) - 5 marks; Class Test (CT) - 10 marks.

Practical-50 marks

Internal Assessment - 25 marks.

Distribution of Internal Assessment marks:

Practical Examination (Designing and Job Performed) -10 marks; Periodic Assignment (Designing and Job Performed) - 10 marks; Practical Note Book- 5 marks;

External Assessment – 25 marks.

Distribution of External Assessment marks:

Practical Examination (Designing and Job Performed) - 15 marks; Viva-voce - 10 marks.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
4.	A. FOOTWEAR TECHNOLOGY-II	4 (2+2)	2	-	4	5	10	15	35	-	50	100

DETAIL COURSE CONTENT

• END OF SEMESTER

A. FOOTWEAR CONSTRUCTIONS

Sequential operations of

- a. Stuck-on Construction
- b. Weltd Construction
- c. Stitch down Construction.
- d. Goodyear Weltd Construction
- e. California Construction
- f. String Lasted Construction.
- g. Moccasin Construction
- h. DVP and DIP Construction
- i. Moulded Construction (Rubber/ PVC/PU/EVA).

B. MATERIAL AND QUALITY REQUIREMENTS FOR DIFFERENT FOOTWEAR COMPONENTS

- a. Insoles
- b. Stiffeners
- c. Soles
- d. Toe-Puffs
- e. Heels
- f. Shanks.

C. COSTING AND QUALITY CONTROL

COSTING

Definition, Objectives, Function, Costing of a shoe, Process of costing

QUALITY CONTROL

Objective, Factors of quality, Material Specifications, Material Quality Control, Method of control, in-Process Quality Control (Old System and New System)

D. PRODUCTION GUIDE

E. MATERIAL SELECTION AND SEQUENCE OPERATION OF MAKING THE FOLLOWING ITEMS

- A. SANDALS (at least two different styles)
- B. OXFORD SHOE (with TOE CAP).
- C. CASUAL SHOE.

• PRACTICAL

A. BASE MODEL CONSTRUCTION:

Construction of base model and sectional patterns of upper and lining for I. SANDALS (atleast two types) II. OXFORD (with TOE-CAP) SHOE III. CASUAL SHOE and also preparation of bottom components for the above designs.

B. MANUFACTURING TECHNIQUES:

Making of I. SANDALS II. OXFORD SHOE (TOE-CAP also) III. CASUAL SHOE.

•TEXT BOOKS

1. “Comprehensive Footwear Technology” by *Somenath Ganguly*. ILTA, Kolkata Publication.
2. “Manual of Shoe Making” by *Jane & Clark*. Clarks Limited.

ELECTIVE - II
B. LEATHER TECHNOLOGY – II

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	2 Lecture 4 Practical	100 [50+50]

OBJECTIVE

1. To impart knowledge to the students about the different principles involved in post tanning operations and finishing.

EXAMINATION SCHEME

Internal Assessment - 15 marks; End of Semester (ESE) - 35 marks and Practical - 50 marks.

Distribution of Internal Assessment marks:

Teacher’s Assessment (TA) - 5 marks; Class Test (CT) - 10 marks.

Practical - 50 marks

Internal Assessment - 25 marks.

Distribution of Internal Assessment marks:

Practical Examination -10 marks; Periodic Assignment - 10 marks; Practical Note Book- 5 marks;

External Assessment - 25 marks.

Distribution of External Assessment marks:

Practical Examination – 15 marks; Viva-voce- 10 marks.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
4.	B. LEATHER TECHNOLOGY-II	4 (2+2)	2	-	4	5	10	35	50	-	50	100

DETAIL COURSE CONTENT

• END OF SEMESTER

A. POST TANNING OPERATIONS

Post tanning operations (Chemical and Mechanical processes) for Leather making.
Neutralisation, Bleaching, Dyeing, Fatliquoring, Currying, Theory of Leather Drying.

B. FINISHING

Leather Finishing Techniques and various Grain pattern
Theory of Finishing, Finishing Materials and Finishing Techniques.

• **PRACTICAL**

VISITING TANNERIES - Visiting Tanneries; through study of Practical Procedures to make leather specially in Wet-End Section, Preparing Practical Hand Book.

• **TEXT BOOKS**

1. “An Introduction to the Principles of Leather Manufacture” (4th Edition) by *S.S. Dutta*. ILTA, Kolkata Publication.
2. “Theory and Practice of Leather Manufacture” by *K.T. Sarkar*. K.T Sarkar (1965).

DESIGN PROJECT - II

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	11 Practical	200

OBJECTIVE

1. To provide knowledge about designing and manufacturing of apron; jackets and waist belt.

EXAMINATION SCHEME

Practical - 200 marks

Internal Assessment - 100 marks.

Distribution of Internal Assessment marks:

Practical Examination (Designing and Job Performed) – 40 marks; Periodic Assignment (Designing and Job Performed) - 40 marks; Practical Note Book – 20 (10+10) marks.

External Assessment - 100 marks.

Distribution of External Assessment marks:

Practical Examination (Designing and Job Performed) - 80 (40+40) marks; Viva Voce - 20 (10+10) marks.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
5.	DESIGN PROJECT-II	6	-	-	11	-	-	-	-	-	200	200

DETAIL COURSE CONTENT

• **PRACTICAL**

Part A: DESIGNING

Development of Base Model; Cutting of component patterns & working patterns (mentioning its measurements) of the following items:

- a. APRON b. JACKETS c. WAIST BELT d. HAND GLOOVES

Part B: MANUFACTURING TECHNIQUES

Making of following items mentioning its purpose of use, material selection, lining, tools, fittings & adhesive used.

- a. APRON b. JACKETS. c. WAIST BELT d. HAND GLOOVES

•TEXT BOOKS

1. “The Apron Book” by *Ellyn Anne Geisel*. Andrews McMeel Publishing - Crafts & Hobbies (01-Jan-2009).
2. “Leather Work including Glove Making” by *Albert H. Crompton*. Imprint, London : Frederick Warne, [19--].

INDUSTRIAL TRAINING AND PROJECT

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks	5 Practical 1 Tutorial	150 [100+50]

OBJECTIVE

1. Industrial Training refers to work experience that is relevant to professional development.
2. Students should note that industrial training is an essential component in the development of the practical and professional skill required for an engineer and aid to prospective employee for the future employment.
3. **Term Work:** The included objective aimed to provide an opportunity for the students to apply their classroom knowledge, develop their skill and clarify their career plans.

EXAMINATION SCHEME

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
6.	INDUSTRIAL TRAINING AND PROJECT	3	-	1	5	-	-	-	-	50	100	150

DETAIL COURSE CONTENT**• PRACTICAL**

Industrial Training for one month (at least) in reputed Leather Goods organization and preparing an individual project report on any topic as guided by CFTC teachers / concerned organization. During examination they have to produce an Industrial Training Report and Seminar Presentation on Individual Project.

• TERM WORK

Industrial Training Report and Seminar Presentation on Individual Project.

VIVA VOCE

Subject Code	Course offered in	Course Duration	Contact Period Per Week	Full Marks
	3 rd Year 2 nd Semester	17 Weeks		100

OBJECTIVE

1. To provide the student an opportunity to recapitulate of what he/she had studied in his/her last three years.

EXAMINATION SCHEME

The final **Viva-Voce Examination** shall take place at the end of the Part-III, Second Semester. It is to be taken by **One External and One Internal Examiner**. The **External Examiner** is to be from Industry/Engineering College/ university/ Government Organization and he/she should give credit out of **50 marks**; whereas, the **Internal Examiner** should normally be the **Head of the Department** and he/she should give credit of **50 marks**. In absence of the Head of the Department the senior most Lecturer will act as the Internal Examiner.

S L N O	SUBJECT	CREDITS	PERIODS			EVALUATION SCHEME						
			L	TU	PR	INTERNAL SCHEME			ESE	TW	PR	TOTAL MARKS
						TA	CT	TOTAL				
7.	VIVA-VOCE	3	-	-	-	-	-	-	-	-	100	100

DETAIL COURSE CONTENT

• PRACTICAL

The syllabi of all the theoretical and practical papers taught in the three years of Diploma Examination.