## 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**

<table>
<thead>
<tr>
<th>Course Name: Leather Goods Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Semester: Fifth</td>
</tr>
<tr>
<td>Branch Code: LGT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SL. No.</th>
<th>Subject</th>
<th>Credits</th>
<th>Periods</th>
<th>Evaluation Scheme</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>L</td>
<td>TU</td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ESE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MARKS</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Leather Goods Costing</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Quality Assurance and Total Quality Management</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>3.</td>
<td>Leather Goods Merchandising</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>4.</td>
<td>Machineries for Leather Goods-Part-II</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
<tr>
<td>5.</td>
<td>Material Testing</td>
<td>4 (2+2)</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>6.</td>
<td>Elective-I (Select Any One)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>Footwear Technology-I</td>
<td>4 (2+2)</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>B.</td>
<td>Leather Technology-I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Design Project-I</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8.</td>
<td>Professional Practice-III</td>
<td>2</td>
<td>-</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total** | 25 | 13 | 3 | 17 | 45 | 90 | 135 | 315 | 75 | 300 | 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.
LEATHER GOODS COSTING

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>2 Lecture 1 Tutorial</td>
<td>125 [100+25]</td>
</tr>
</tbody>
</table>

OBJECTIVE
1. To forecast as accurately as possible how much it cost to make a particular leather goods in condition we have in our surroundings.
2. To make the participants aware about the areas of cost reduction.
3. To make the participants aware about the Cost Management Techniques in Leather Goods industry.
4. **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) Marks - 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.
Term Work Assessment of 25 marks shall be held throughout the semester based on entire syllabus.

<table>
<thead>
<tr>
<th>SL NO</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>L TU PR</td>
<td>INTERNAL SCHEME</td>
<td>ESE TW PR TOTAL MARKS</td>
</tr>
<tr>
<td>1</td>
<td>LEATHER GOODS COSTING</td>
<td>3</td>
<td>2 1 -</td>
<td>TA CT TOTAL 10 20 30 70 25 - 125</td>
</tr>
</tbody>
</table>

DETAIL COURSE CONTENT

• **END OF SEMESTER**

1. **INTRODUCTION TO COST ACCOUNTING**

2. **DETERMINING PRICING OF LEATHER GOODS PRODUCTS**
   Procedure to estimate leather costing, costing of different leather components of a leather goods product - Cost Sheet - Procedure for estimating cost of other material used like accessories, lining, adhesives etc. – Total Cost of a Leather goods item.

3. **TREATMENT OF OVERHEAD**
   Definition, Importance & Classification of Overhead – Allocation & Apportionment of Overhead – Bases of Apportionment – Distribution of Overhead to PRODUCTION & SERVICE DEPARTMENT – Re-

4. LABOUR COST

5. CAPITAL EXPENDITURE & WORKING CAPITAL RETURN ON CAPITAL INVESTED AT LEATHER GOODS INDUSTRY.

6. BUDGET/BUDGETARY CONTROL AT LEATHER GOODS INDUSTRY

7. STANDARD COSTING FOR LEATHER PRODUCTS

8. INVENTORY CONTROL AT LEATHER GOODS INDUSTRY
   Inventory - Inventory Control - Perpetual Inventory System - Redundant/Obsolete Stores – Continuous Physical Stock Taking – Inventory Turnover Ratio.

9. PROCESS COSTING

10. MARGINAL COSTING COST VOLUME PROFIT ANALYSIS & DECISION MAKING

•TERM WORK

1. Determination of Instant Costing (Profit) / (Loss) of a given Leather Goods Industry.

2. Preparation of Cost sheet in MS Excel.

•TEXT BOOKS


QUALITY ASSURANCE AND TOTAL QUALITY MANAGEMENT

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>2 Lecture</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>
OBJECTIVE
1. Quality Assurance: To provide knowledge to the students the way of preventing mistakes or defects in manufactured products and avoiding problems when delivering solutions or services to the customers.
2. Total Quality Management: Total Quality Management refers to the organization-wide efforts to install and make permanent a climate in which an organization continuously improves its ability to deliver a high quality products and services to customers.

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.

<table>
<thead>
<tr>
<th>S L N O</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
<th>TOTAL MARKS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>L</td>
<td>TU</td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TA</td>
<td>CT</td>
<td>TOTAL</td>
</tr>
<tr>
<td>2.</td>
<td>QUALITY ASSURANCE AND TOTAL QUALITY MANAGEMENT</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

DETAIL COURSE CONTENT

• END OF SEMESTER

QUALITY ASSURANCE

1. QUALITY CONCEPT AND ITS EVALUATION
Historical background and present status; What is Quality? – Quality Definitions, Quality Requirements.

2. QUALITY ASSURANCE
Concept and Definitions, Responsibilities of Quality Assurance Department, Evaluation of Quality Assurance Model.

3. QUALITY STANDARDS

TOTAL QUALITY MANAGEMENT

4. METHODOLOGY AND IMPLEMENTATIONS
Definitions of Total Quality Management (TQM), principles of Total Quality Management, Ten mantras for Total Quality Management, Phases of Quality Management, Tools and Techniques for TQM; World Class Quality through Total Quality management.

5. QUALITY CIRCLES
Historical Background, Definitions of Quality Circles, Objectives of Quality Circles
Quality Circle – Why and how to be promoted? Problems affecting Quality Circles.
**TEXT BOOKS**
1. “Quality Assurance” by Insung Jung, Tat Meng Wong, Tian Belawati. SAGE Publications.

**LEATHER GOODS MERCHANDISING**

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>2 Lecture</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

**OBJECTIVE**
1. To provide knowledge about the art of selling or displaying of the products in such a way that it stimulates interest and entices customers to make a purchase.

**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.

<table>
<thead>
<tr>
<th>S L</th>
<th>NO</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>L</td>
<td>TU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TA</td>
<td>CT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ESE</td>
<td>TW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL MARKS</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>LEATHER GOODS MERCHANDISING</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**DETAIL COURSE CONTENT**

**END OF SEMESTER**
1. Introduction to Leather goods merchandising.
2. Merchandising Theories.
3. Definition of Merchandising Philosophy.
4. Importance of Merchandising.
5. Function of Merchandiser.
6. The Definition of Merchandising Techniques.
7. Time Management- Production scheduling- Route Card format.
8. Follow up- Various processes of Follow up & Practical Check Points.
9. Pattern Approval- Size set Approval procedures- Pre- (Pilot Run Inspection) – Order execution procedures.
10. Fashion Merchandising Vs. Retail Merchandising.
11. Job objectives of Retail Merchandising.
12. Definition of Promotional Merchandising.
14. Sales focused Merchandising.
15. Outlet Vs Retail.
16. SWOT Analysis for retail.
17. The advantages of Retail Outlets.

**TEXT BOOKS**

---

**MACHINERIES FOR LEATHER GOODS - PART- II**

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>3 Lecture</td>
<td>100</td>
</tr>
</tbody>
</table>

**OBJECTIVE**
1. To understand the basic theory underlying machine learning.
2. To make the students acquainted with different machine operations and also with its various parts.
3. To be able to formulate machine learning problems corresponding to different applications.

**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.

<table>
<thead>
<tr>
<th>S L N O</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>L</td>
<td>TU</td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TA</td>
<td>CT</td>
<td>TOTAL</td>
</tr>
<tr>
<td>4.</td>
<td>MACHINERIES FOR LEATHER GOODS - PART-II</td>
<td>3</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

**DETAIL COURSE CONTENT**

**END OF SEMESTER**
1. EMBOSSSING MACHINE.
2. EYELETING MACHINE.
3. STAMPING MACHINE.
4. EDGE BEVEALING MACHINE.
5. SEAM RUBBING MACHINE.
6. PIPING MACHINE.
7. BUTTON RIVETING MACHINE WITH DIES FOR DIFFERENT SIZES AND RIVETS.
8. SPRAY BOOTH.
9. EDGE COLOURING MACHINE.
10. CURVING MACHINE.
11. ROUGHENING MACHINE.
12. CEMENTING MACHINE.
13. WORK STATION IN CUTTING & PRE-FITTING SECTION & RELATED MACHINE.
14. FINIFLEX.
15. PLATING.

• TEXT BOOKS
1. “Comprehensive Footwear Technology” by Somenath Ganguly. ILTA Kolkata Publications.

MATERIAL TESTING

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year</td>
<td>17 Weeks</td>
<td>2 Lecture 3 Practical</td>
<td>150 [100+50]</td>
</tr>
</tbody>
</table>

OBJECTIVE
1. To get a rough idea about the extent to which a leather article will perform its duty satisfactorily.

EXAMINATION SCHEME

Internal Assessment - 30 marks; End of Semester (ESE) - 70 marks and Practical - 50 Marks.

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

Practical - 50 marks

Internal Assessment - 25 marks.

Distribution of Internal Assessment marks:
Practical Examination (Job Performed) - 10 marks; Periodic Assignment - 10 marks;
Practical Note Book- 5 marks;
External Assessment - 25 marks.

Distribution of External Assessment marks:
Practical Examination (Job Performed) - 15 marks; Viva-Voce - 10 marks.

DETAIL COURSE CONTENT

• END OF SEMESTER

B. Collection and Preparation of Leather samples, sampling position, Conditioning of test pieces, Simple Tools and apparatus for measuring area, thickness etc of leather, Press and Cutting knives, few thumb tests for leather.

C. TESTING EQUIPMENTS


D. TEST METHODS FOR LEATHER

- Measurement of Tensile Strength.
- Percentage Elongation.
- Tear Strength.
- Grain crack.
- Plasticity and Heat setting.
- Wrinkles along feather line.
- Flexing endurance.
- Water proof ness / Water resistance.
- Rubbing damage.
- Upper flexing.

E. TEST METHODS FOR FABRICS

- Threads per inch or centimeter of a fabric.
- Seam Strength.
- Martindale Abrasion.
- Staining.

F. TEST METHODS FOR SYNTHETIC COATED FABRICS

- Breaking Load.
- Breaking Extension.
- Tearing Strength.
- Load and Distention (Lastometer).
- Seam Strength / Needle Pull out test.
- Adhesion of Coated film to Fabrics.
- Flexing.
- Abrasion.

G. TESTING AND QUALITY ASSESSMENT FOR ADHESIVES

Solid content, Viscosity, Drying Time, Tack, Shelf Life, Pot Life, Peel Strength, Strength of Joint in Shear, Hot Melt Adhesive, Bond Strength.

H. TESTING AND QUALITY ASSESSMENT FOR ACCESSORIES

PRACTICAL

A. SAMPLING POSITION DETERMINATION

Determination of Sampling position for Physical & Chemical Testing from full Hide, bends or butts, shoulder & belly.
B. CONDITIONING
Conditioning of test piece before testing (in an ageing oven).

C. TEST METHODS FOR LEATHER
Tensile strength, Elongation at break, Tear strength, Grain crack, Determination of water vapour permeability, Water proofness, Rubbing damage, Adhesion to finish film, Flexing endurance.

D. OTHER TESTING METHODS

TEXT BOOKS

ELECTIVE - I
A. FOOTWEAR TECHNOLOGY – I

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>2 Lecture 4 Practical</td>
<td>100 [50+50]</td>
<td></td>
</tr>
</tbody>
</table>

OBJECTIVE
1. To provide knowledge about footwear designing and manufacturing.
2. To provide a brief knowledge about anatomy, muscles, arches ligaments etc of human foot.
3. To provide knowledge to the students about different types of Footwear Materials.

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.

<table>
<thead>
<tr>
<th>SL NO</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>L</td>
<td>TU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TA</td>
<td>CT</td>
</tr>
<tr>
<td>6.</td>
<td>A. FOOTWEAR TECHNOLOGY-I</td>
<td>4 (2+2)</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>
DETAIL COURSE CONTENT

• END OF SEMESTER

A. INTRODUCTION
   History of Footwear Evolution, Nomenclature of different types of footwear, Different parts of Footwear.

B. ANATOMY OF HUMAN FEET

C. LAST
   Definition, classification of last, different parts of last, construction of mould for making P.V.C last. Comparison of last with human foot.

D. SIZE AND FITTINGS
   Foot measurement technique, English shoe size system, American size system, French size system, Centimeter size system, Europoint size system, Mondopoint size system etc., Width & Girth measurement, Fittings.

E. FOOT ABNORMALITIES
   Damages of Skin, Troubles of the Toe, Troubles of the Arches.

F. BASIC DESIGNS

G. DESIGN MAKING BY MEAN FORME

F. FOOTWEAR MATERIALS

• PRACTICAL

A. MEAN FORME CONSTRUCTION

B. BASE MODEL CONSTRUCTION
   Construction of base model and sectional patterns of upper and linning for I. CHAPPALS (at least two types) II. DERBY SHOE (TOE-CAP AND MUDGUARD) and also preparation of bottom components for the above designs.

C. PATTERN GRADING
   Introduction to Radial tool and grading of the sectional pattern (at least one size up and down) of the above design.

D. PATTERN TRACING FOR ONE PAIR MATERIAL CONSUMPTION

E. CLICKING TECHNOLOGY
   Introduction, Material selection, Method [If hand (tools used) or machine], Pattern interlocking.

F. THICKNESS REDUCTION OF COMPONENTS (IF NECESSARY)
   Skiving (hand or machine), Splitting.

G. UPPER FABRICATION
   Introduction, Gluing, Folding, Stitching and Trimming.
H. LASTING
  Lasting of upper by hand/machine.

I. BOTTOM STOCK PREPARATION
  Application of adhesive to the lasted bottom and sole and attachment on a sole pressing machine.

J. CLEANING AND FINISHING FOR UPPER AND BOTTOM COMPONENTS BY HAND OR MACHINE

K. MANUFACTURING TECHNIQUES:
  Manufacturing of I.CHAPPALS & II.DERBY SHOE (TOE-CAP AND MUDGUARD).

**TEXT BOOKS**
1. “Comprehensive Footwear Technology” by Somenath Ganguly. ILTA, Kolkata Publications.

---

**ELECTIVE - I**

**B. LEATHER TECHNOLOGY - I**

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year</td>
<td>17 Weeks</td>
<td>2 Lecture</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>1st Semester</td>
<td></td>
<td>4 Practical</td>
<td>[50+50]</td>
</tr>
</tbody>
</table>

**OBJECTIVE**
1. To impart knowledge to the students about the different principles involved in making leather (upto tanning process) from raw hides or skins.

**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.

<table>
<thead>
<tr>
<th>S L N O</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>L</td>
<td>T U PR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>B. LEATHER TECHNOLOGY-I</td>
<td>4</td>
<td>2</td>
<td>- 4</td>
</tr>
</tbody>
</table>
DETAIL COURSE CONTENT

• END OF SEMESTER

A. RECOVERY, COLLECTION AND CLASSIFICATION OF RAW HIDES AND SKINS

B. PRESERVATION OF RAW HIDES AND SKINS
   Control, pH control using toxic materials, Drying simple salting, concrete mixer, brine curing, combined method, Indian method.

C. PRETANNING OPERATIONS FOR LEATHER MAKING (PRINCIPLES, MATERIALS, METHOD AND MACHINERIES)
   Soaking, Liming, Deliming, Bating, Pickling, Degreasing.

D. TANNING OPERATIONS FOR LEATHER MAKING (PRINCIPLES, MATERIALS, METHOD AND MACHINERIES)
   Chrome Tanning, Aluminium Tanning, Zirconium Tanning, Vegetable Tanning, Combination tanning, Syntans, Aldehyde, Oil & Resin Tannage.

• PRACTICAL

VISITING TANNERIES - Thorough study of Practical procedures to make leather specially in Tanning section. Preparing Practical Handbook.

• TEXT BOOKS

DESIGN PROJECT - I

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>10 Practical</td>
<td>200</td>
</tr>
</tbody>
</table>

OBJECTIVE
1. To provide knowledge about designing and manufacturing of different types of Bags.

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.
DETAIL COURSE CONTENT

• **PRACTICAL**

**Part A: DESIGNING**

Development of Base Model; Cutting of component patterns & Working patterns (mentioning its measurements) of the following items (at least of two different styles):

a. Office Bags   
b. Ladies Bags   
c. School Bags   
d. Travel Bags.

**Part B: MANUFACTURING**

**I. PREPARATION OF COMPONENTS**

Practicing of preparation of Gusset, Pockets, Belts etc.

**II. MANUFACTURING TECHNIQUES**

Making of following items (at least two different styles) mentioning its purpose of use, material selection, lining, tools, fittings & adhesive used

a. Office Bags   
b. Ladies Bags   
c. School bags   
d. Travel Bags.

**TEXT BOOKS**


**PROFESSIONAL PRACTICE - III**

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>Course offered in</th>
<th>Course Duration</th>
<th>Contact Period Per Week</th>
<th>Full Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3rd Year 1st Semester</td>
<td>17 Weeks</td>
<td>2 Tutorial</td>
<td>50</td>
</tr>
</tbody>
</table>

**OBJECTIVE**

1. To acquire information from different source.
2. To prepare notes from given topic.
3. To present given topic in seminar.
4. To interact with peers to share thoughts.
5. To prepare a report on industrial visit, expert lecture.
EXAMINATION SCHEME

Internal Assessment - 50 marks.
Distribution of Internal Assessment marks:
Internal Assignment - 25 marks; Seminar Presentation - 15 marks; Industry Visit Report - 10 marks.

<table>
<thead>
<tr>
<th>S L N O</th>
<th>SUBJECT</th>
<th>CREDITS</th>
<th>PERIODS</th>
<th>EVALUATION SCHEME</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>PROFESSIONAL PRACTICE-III</td>
<td>2</td>
<td>- 2 -</td>
<td>TA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CT</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ESE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TW</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TOTAL MARKS</td>
</tr>
</tbody>
</table>

TOTAL MARKS 50

DETAIL COURSE CONTENT

• TERM WORK

Module – I

A. Operating and adjusting controlling parameter of Embossing machine.
B. Operating and adjusting controlling parameter of Eyeleting machine.
C. Operating and adjusting controlling parameter of Stamping machine.
D. Operating and adjusting controlling parameter of Edge Beveling machine.
E. Operating and adjusting controlling parameter of Seam Rubbing machine.
F. Operating and adjusting controlling parameter of Piping machine.
G. Operating and adjusting controlling parameter of Button Riveting Machine with dies for different sizes button and rivets.
H. Operating and adjusting controlling parameter of Edge Coloring Machine
I. Operating and adjusting controlling parameter of Curving Machine.
J. Operating and adjusting controlling parameter of Cementing Machine.
K. Operating and adjusting controlling parameter of Roughening Machine.
L. Operating and adjusting controlling parameter of Finiflex.
M. Spray Booth.
N. Work Station in cutting & pre-Fitting Section and related machine.
O. Plating.

Module – II

A. ANALYSIS OF LEATHER GOODS DESIGN TRENDS BY
B. FORMATION OF MOODBOARD
C. TRENDS PRESENTATION
D. INDUSTRY VISIT - Visit to Leather Goods Manufacturing Unit (2 Times).