

**CERTIFICATE COURSE IN
FOOTWEAR DESIGNING AND MANUFACTURING
(1 YEAR DURATION)**



**STATE BOARD OF TECHNICAL EDUCATION & TRAINING
SANKETHIKA VIDYA BHAVAN, MASAB TANK,
TELANGANA, Hyderabad.**

FOOTWEAR DESIGNING AND MANUFACTURING

Course Title : **Footwear Designing and manufacturing**

Duration of the course : **12 months**

SUB CODE	NAME OF THE SUBJECT	PERIODS/WEEK		TOTAL PERIODS PER 6 MONTHS	SCHEME OF EXAMINATION			
		Theor y	Practical s		Duratio n Hours	Sessiona l Marks	End Exam Mark s	Total Mark s
FW-101	BASICS OF FOOTWEAR TECHNOLOGY	03	--	50	03	--	100	100
FW-102	DESIGN & PATTERN DEVELOPMENT IN FOOTWEAR TECHNOLOGY	03	--	50	03	--	100	100
FW-103	OPERATIONS OF FOOTWEAR MANUFACTURING	03		50	03	-	100	100
FW-104	FABRICATION PROCESS IN FOOTWEAR TECHNOLOGY	03		50	03	-	100	100
FW-105	FOOTWEAR DRAWING LAB		02	100	03	40	60	100
FW-106	DESIGN & PATTERN DEVELOPMENT LAB		02	100	03	40	60	100
FW-107	MANUFACTURING PROCESS LAB		02	100	03	40	60	100
FW-108	PROJECT WORK			2 MONTHS	-	50	250	300
	TOTAL	12	24	500		--	--	1000

SUBJECT TITLE : BASICS OF FOOTWEAR TECHNOLOGY
SUBJECT CODE : FW- 101
PERIODS/WEEK : 03
PERIODS/YEAR : 50

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	History of Footwear	05
02	Evolution of footwear	05
03	Oriental footwear fashions	10
04	Influence of Footwear shape on Fashion	10
05	Theory of fashion	10
06	Footwear styles	10
	TOTAL	50

UNIT :1 : History of Footwear : historical details of Footwear, right and lefts were made of footwear

Unit-2 : Evolution of footwear: Evolution of Footwear fashion in Greek and Roman Periods - Relation between footwear styles and social positions. - Explain the laws pertaining to the footwear fashion in Greek and Roman period. - Footwear fashion in American Colonies of 17th century.

Unit-3 : Oriental footwear fashions. - five basic elements which a shoe maker analyses before it becomes a popular fashion. –

Unit-4 : Influence of Footwear shape on Fashion. - Illustrate the influence of Design on Footwear fashion. - Influence of Materials on Footwear fashion. - Influence of colour on Footwear fashion. - Influence of Ornamentation and treatment on Footwear fashion.

Unit-5 : Trickle-down & Trickle up theory. - cyclic nature of fashion.

Unit-6 : Classification of footwear as 7 basic styles. - characteristics of Derby style. - Oxford style. - Slip on style. - Moccasin style. - Court shoe style. - Boot style. - Sandal style

SUBJECT TITLE : DESIGN & PATTERN DEVELOPMENT IN FOOTWEAR TECHNOLOGY

SUBJECT CODE : FW- 102

PERIODS/WEEK : 03

PERIODS/YEAR : 50

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Designing and pattern development of open type footwear	05
02	Design and pattern development of Derby style - oxford style	05
03	Design and Pattern development of Slip on, pantafola & loafers.	10
04	Designing and pattern development of Court shoe, Moccasins.	10
05	Designing and pattern development of Boot style	10
06	Designing and pattern development of Bottom components	10
	TOTAL	50

UNIT-1 : Designing and pattern development of open type footwear

Unit-2 : Design and pattern development of Derby style - oxford style

Unit-3 : Design and Pattern development of Slip on, pantafola& loafers.

Unit-4 : Designing and pattern development of Court shoe, Moccasins.

Unit-5 : Designing and pattern development of Boot style

Unit-6 : Designing and pattern development of Bottom components

SUBJECT TITLE : OPERATIONS OF FOOTWEAR MANUFACTURING
SUBJECT CODE : FW- 103
PERIODS/WEEK : 03
PERIODS/YEAR : 50

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Clicking operation	07
02	Pre Fitting operations	07
03	Fitting operations	08
04	Lasting operations.	08
05	Sole attaching operations	10
06	Finishing operations	10
	TOTAL	50

UNIT-1 : Clicking operation

Unit-2 : Pre Fitting operations

Unit-3 : Fitting operations.

Unit-4 : Lasting operations.

Unit-5 : Sole attaching operations

Unit-6 : Finishing operations

**SUBJECT TITLE : FABRICATION PROCESS IN
FOOTWEAR TECHNOLOGY**

SUBJECT CODE : FW- 104

PERIODS/WEEK : 03

PERIODS/YEAR : 50

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Fabrication of chappal	07
02	Fabrication of Sandal	07
03	Fabrication of shoe	08
04	Fabrication of Boot	08
05	Advanced Techniques in fabrication of chappal & Sandal	10
06	Advanced Techniques in fabrication of Shoe & Boot	10
	TOTAL	50

UNIT-1 : Fabrication of chappal

Unit-2 : Fabrication of Sandal

Unit-3 : Fabrication of shoe.

Unit-4 : Fabrication of Boot.

Unit-5 : Advanced Techniques in fabrication of chappal & Sandal

Unit-6 : Advanced Techniques in fabrication of Shoe & Boot

SUBJECT TITLE : **FOOTWEAR DRAWING LAB**
SUBJECT CODE : **FW- 105**
PERIODS/WEEK : **03**
PERIODS/YEAR : **100**

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Basic shapes of drawing	14
02	Orthographic Projections	14
03	Development of Surfaces	16
04	Assembly Drawing	16
05	Drawings of Footwrear	20
06	Drawing of patterns of footwear	20
	TOTAL	100

UNIT-1 : Drawing of basic shapes : Tiangle, Rectangle Square, Circle, Polygon, Curves

Unit-2 : Orthographic Projections : Points, Straight Lines, Solids,

Unit-3 : Development of surfaces : Sections of Solids, Development of Sections of Solids

Unit-4 : Assembly Drawing : Bolt-Nut Joints, Couplings, Screwjack

Unit-5 : Drawings on different types footwear styles- Chappal, Sandal, Shoes, Boot

Unit-6 : Drawing of footwear patterns- Various sizes-Left & right sides

SUBJECT TITLE : **DESIGN & PATTERN DEVELOPMENT LAB**
SUBJECT CODE : **FW- 106**
PERIODS/WEEK : **03**
PERIODS/YEAR : **100**

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Practice on Designing and pattern making of open type footwear	14
02	Practice on Design and pattern development of Derby style - oxford style	14
03	Practice on Design and Pattern making of Slip on, pantafola & loafers.	16
04	Practice on Designing and pattern making of Court shoe, Moccasins.	16
05	Practice on Designing and pattern making of Boot style	20
06	Practice on Designing and pattern making of Bottom components	20
	TOTAL	100

UNIT-1 : Practice on Designing and pattern making of open type footwear

Unit-2 : Practice on Design and pattern development of Derby style - oxford style

Unit-3 : Practice on Design and Pattern making of Slip on, pantafola & loafers.

Unit-4 : Practice on Designing and pattern making of Court shoe, Moccasins.

Unit-5 : Practice on Designing and pattern making of Boot style

Unit-6 : Practice on Designing and pattern making of Bottom components

SUBJECT TITLE : **MANUFACTURING PROCESS LAB**
SUBJECT CODE : **FW- 107**
PERIODS/WEEK : **03**
PERIODS/YEAR : **100**

S.NO.	MAJOR TOPICS	NUMBER OF PERIODS
01	Practice on Clicking operation, Pre Fitting operations	14
02	Practice on Fitting operations, Lasting operations	14
03	Practice on Sole attaching operations, Finishing operations	16
04	Practice on Fabrication of chappal & Sandal	16
05	Practice on Fabrication of shoe	20
06	Practice on Fabrication of Boot	20
	TOTAL	100

UNIT-1 : Practice on Clicking operation, Pre Fitting operations

Unit-2 : Practice on Fitting operations, Lasting operations

Unit-3 : Practice on Sole attaching operations, Finishing operations

Unit-4 : Practice on Fabrication of chappal & Sandal

Unit-5 : Practice on Fabrication of shoe

Unit-6 : Practice on Fabrication of Boot

SUBJECT TITLE	:	PROJECT WORK
SUBJECT CODE	:	FW- 108
DURATION	:	2 Months before the End Examination
Report	:	Project Work Final Report to be submitted before the starts of examination

Objectives of the Course :

On completion of the study of the subject the student should be able to

- 1. History of Footwear Fashion, Basic styles of Footwear.**
 - 1.2 Explain historical details of Footwear.
 - 1.3 Explain when right and lefts were made
 - 1.4 Evolution of Footwear fashion in Greek and Roman Periods
 - 1.5 Relation between footwear styles and social positions.
 - 1.6 Explain the laws pertaining to the footwear fashion in Greek and Roman period.
 - 1.7 Footwear fashion in American Colonies of 17th century.
 - 1.8 Explain oriental footwear fashions.
 - 1.9 Explain five basic elements which a shoe maker analyses before it becomes a popular fashion.
 - 1.10 Illustrate the influence of Footwear shape on Fashion.
 - 1.11 Illustrate the influence of Design on Footwear fashion.
 - 1.12 Illustrate the influence of Materials on Footwear fashion.
 - 1.13 Illustrate the influence of colour on Footwear fashion.
 - 1.14 Illustrate the influence of Ornamentation and treatment on Footwear fashion.
 - 1.15 Explain trickledown theory.
 - 1.16 Explain Trickle up theory.
 - 1.17 Explain cyclic nature of fashion.
 - 1.18 Classify footwear as 7 basic styles.
 - 1.19 Describe the characteristics of Derby style.
 - 1.20 Describe the characteristics of Oxford style.
 - 1.21 Describe the characteristics of Slip on style.
 - 1.22 Describe the characteristics of Moccasin style.
 - 1.23 Describe the characteristics of Court shoe style.
 - 1.24 Describe the characteristics of Boot style.
 - 1.25 Describe the characteristics of Sandal style.

2. Mean form preparation.

2.2 Use the following hand tools used in Footwear designing.

2.2.1 Scotch tape.

2.2.2 Cutting mat.

2.2.3 Shoe measuring tape.

2.2.4 Divider.

2.2.5 Pattern sheet.

2.2.6 Roller.

2.2.7 Glue stick.

2.2.8 knife.

2.2.9 Pencil.

2.2.10 Scale.

2.2.11 Scissors.

2.3 Define mean form.

2.4 Distinguish last and mean form.

2.5 Distinguish inside form, Outside form, Mean form.

2.6 Develop Mean form from the Scotch tape.

3. Designing and pattern development of Open type footwear.

3.2 Develop Upper and lining Patterns for Single Piece Sandal.

3.3 Develop Upper and Lining Patterns for Two piece Sandal.

3.4 Develop Patterns for Sandal with Vamp, Buckled Counter Strap .

3.5 Develop Patterns for Sandal with other variations.

4. Designing and pattern development of Derby style.

4.2 Develop derby base from the mean form.

4.3 Develop derby upper shell from the Derby base.

4.4 Develop patterns for various upper components of derby shoe from derby shell.

4.5 Derby lining shell from the Derby Upper shell.

4.6 Develop patterns for various lining components of derby shoe from lining shell.

4.7 Develop Toe cap Derby Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.

4.8 Develop Wing cap Derby Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.

- 4.9 Develop Toe cap, Facing and Foxing Derby Upper shell, lining shell, Upper patterns, Lining Patterns from the given mean form.
- 4.10 Develop Wing cap, Facing and Counter Derby Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 4.11 Develop Wing cap, Facing and Counter Derby with zimped edges Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 4.12 Develop Derby other variations Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.

5. Designing and pattern development of Oxford style

- 5.2 Develop Oxford standard from the mean form.
- 5.3 Develop Oxford upper shell.
- 5.4 Develop patterns for various upper components of Oxford shoe from Oxford Upper shell.
- 5.5 Develop Oxford lining shell from the Oxford upper shell.
- 5.6 Develop patterns for various lining components of Oxford shoe from lining shell.
- 5.7 Develop Toe cap Oxford Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 5.8 Develop Wing cap Oxford Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 5.9 Develop Toe cap, Facing, Foxing Oxford Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 5.10 Develop Wing cap , Facing, Counter Oxford Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.
- 5.11 Develop Wing cap , Facing, Counter Oxford with zimped edges Upper shell, Lining shell, Upper patterns, Lining Patterns from the given mean form.

6. Design and Pattern development of Slip on, pantafola& loafers.

- 6.2 Develop Slip on standard from the mean form.
- 6.3 Develop Slip on with half Saddle Upper Shell from the mean form.
- 6.4 Develop Slip on with half Saddle Upper Patterns from the Upper Shell.
- 6.5 Develop Slip on with half Saddle Lining shell from the Upper shell.
- 6.6 Develop Slip on with half Saddle Lining patterns from the Lining shell.
- 6.7 Develop Slip on with full Saddle Upper Shell from the mean form.
- 6.8 Develop Slip on with full Saddle Upper Patterns from the Upper Shell.

- 6.9 Develop Slip on with full Saddle Lining shell from the Upper shell.
- 6.10 Develop Slip on with full Saddle Lining patterns from the Lining shell.
- 6.11 Develop Slip on with bar Upper Shell from the mean form.
- 6.12 Develop Slip on with bar Upper Patterns from the Upper Shell.
- 6.13 Develop Slip on with bar Lining shell from the Upper shell.
- 6.14 Develop Slip on with bar Lining patterns from the Lining shell.
- 6.15 Develop Slip on with Decorative half Saddle Upper Shell from the mean form.
- 6.16 Develop Slip on with Decorative half Saddle Upper Patterns from the Upper Shell.
- 6.17 Develop Slip on with Decorative half Saddle Lining shell from the Upper shell.
- 6.18 Develop Slip on with Decorative half Saddle Lining patterns from the Lining shell.
- 6.19 Develop Slip on Variation Upper Shell from the mean form.
- 6.20 Develop Slip on Variation Upper Patterns from the Upper Shell.
- 6.21 Develop Slip on Variation Lining shell from the Upper shell.
- 6.22 Develop Slip on Variation Lining patterns from the Lining shell.

7. Designing and pattern development of Court shoe

- 7.2 Develop Court shoe standard from the mean form.
- 7.3 Develop Court shoe Upper shell from the court shoe standard.
- 7.4 Develop patterns for various upper components of Court shoe from Court shoe upper shell.
- 7.5 Develop Court shoe lining shell.
- 7.6 Develop patterns for various lining components from lining shell.
- 7.7 Develop Toe cap Court shoe Upper shell from the court shoe standard.
- 7.8 Develop Toe cap court shoe upper patterns from Court shoe upper shell.
- 7.9 Develop Toe cap court shoe lining shell from the upper shell.
- 7.10 Develop Toe cap court shoe lining patterns for various lining components from lining shell.
- 7.11 Develop Wing cap Court shoe Upper shell from the court shoe standard.
- 7.12 Develop Wing cap court shoe upper patterns from Court shoe upper shell.
- 7.13 Develop Wing cap court shoe lining shell from the upper shell.
- 7.14 Develop Wing cap court shoe Lining patterns for various lining components from lining shell.
- 7.15 Develop Court shoe with counter Upper shell from the court shoe standard.
- 7.16 Develop Court shoe with counter upper patterns from Court shoe upper shell.
- 7.17 Develop Court shoe with counter lining shell from the upper shell.

- 7.18 Develop Court shoe with counter lining patterns for various lining components from lining shell.
- 7.19 Develop Court shoe Variation Upper shell from the court shoe standard.
- 7.20 Develop Court shoe Variation upper patterns from Court shoe upper shell.
- 7.21 Develop Court shoe variation lining shell from the upper shell.
- 7.22 Develop Court shoe Variation Lining patterns for various lining components from lining shell.

8. Designing and pattern development of Boot style

- 8.2 Develop Ankle Boot upper base from the mean form.
- 8.3 Develop Ankle Boot upper shell from boot upper base.
- 8.4 Develop patterns for various upper components of Boot from Boot shell.
- 8.5 Develop Ankle Boot lining shell from the boot upper shell.
- 8.6 Develop patterns for various lining components from lining shell.
- 8.7 Ankle Boot with Collar upper shell from boot upper base.
- 8.8 Develop patterns for various upper components of Boot from Boot shell.
- 8.9 Develop Collar upper, Collar foam patterns from boot upper shell.
- 8.10 Develop Ankle Boot with Collar lining shell from the boot with collar upper shell.
- 8.11 Develop patterns for various lining components from lining shell.
- 8.12 Develop Collar lining pattern from the lining shell.
- 8.13 Develop Boot variation upper base from the mean form.
- 8.14 Develop Boot variation upper shell from boot upper base.
- 8.15 Develop patterns for various upper components of Boot from Boot shell.
- 8.16 Develop Boot Variation lining shell from the boot upper shell.
- 8.17 Develop patterns for various lining components from lining shell.

9. Designing and pattern development of Moccasins

- 9.1 Develop patterns for Moccasin Uppers.
- 9.2 Develop Patterns for Moccasin Linings.

10. Designing and pattern development of Bottom components

- 10.2 Develop patterns for the insole from the given last.
- 10.3 Develop patterns for the sole.
- 10.4 Develop patterns for the Heel.
- 10.5 Develop patterns for the Toe puff.
- 10.6 Develop patterns for stiffener.
- 10.7 Develop patterns for Runner.
- 10.8 Develop patterns for the mid sole.

11. Clicking operations.

- 11.2 Identify stretch and Tightness direction on leather.
- 11.3 Explain Stretch and Tightness requirement of different components of Footwear.
- 11.4 Explain quality requirement for Different components of Footwear.
- 11.5 Identify the quality variation in different parts of leather.
- 11.6 Identify the defects on leather.
- 11.7 Interlock the components for economic cutting of the leather.
- 11.8 Follow the principles for economic cutting of the leather.
- 11.9 Hand cutting of Footwear upper components (Leather) .
- 11.10 Hand cutting of Footwear Upper components (Synthetic)..
- 11.11 Hand cutting of Footwear bottom components.
- 11.12 Operate swing arm clicking machine.
- 11.13 Machine cutting of Footwear Upper components (Leather).
- 11.14 Machine cutting of Footwear Upper components (synthetic).

12. Pre Fitting operations.

- 12.2 Explain Thickness requirement of different components of Footwear.
- 12.3 Split the leather using leather component splitting machine.
- 12.4 Explain different type of Skives.
- 12.5 Skive the leather components using hand tools.
- 12.6 Skive the leather components using skiving machine.
- 12.7 Mark Identification marking, Underlay marking.
- 12.8 Mark stitch marking.

13. Fitting operations.

- 13.2 Explain the formation of Lock stitch.
- 13.3 Stitch leather components using stitching machines.
- 13.4 Fabricate chappal upper.
- 13.5 Fabricate Sandal upper.
- 13.6 Fabricate Shoe upper.
- 13.7 Fabricate Boot Upper.

14. Lasting operations

- 14.2 Prepare and attach Toe puff to the upper.
- 14.3 Prepare and attach Counter stiffener to the upper.
- 14.4 Last Vamp as practice.
- 14.5 Prepare and attach insole.

14.6 Last sandal upper.

14.7 Last shoe upper.

14.8 Last boot upper.

15. Sole attaching operations.

15.2 Rough the upper.

15.3 Rough the Sole.

15.4 Halogenation, Priming, Solvent cleaning of synthetic soles depends on the sole materials.

15.5 Apply adhesive to the upper, soles.

15.6 Dry the adhesive, Reactivation of Adhesive.

15.7 Attach soles.

16. Finishing operations.

16.2 Perform Sole finishing operations.

16.3 Perform heel finishing operations.

16.4 Perform Upper Cleaning operations.

16.5 Perform Upper conditioning operations.

16.6 Apply shoe dressings,

16.7 Perform repairing operations.

16.8 Brush upper and bottoms.

17. Fabrication of Chappal.

17.2 Cut chappal components.

17.3 Split and skive the components.

17.4 Attach and stitch the components and completion of Upper.

17.5 Last the upper.

17.6 Prepare upper and sole for sole attaching operations.

17.7 Attach sole.

17.8 Finish upper and sole.

18. Fabrication of Sandal

18.2 Cut Sandal upper, lining components.

18.3 Split and skive the components.

18.4 Attach and stitch the components and completion of Upper.

18.5 Last the upper.

18.6 Prepare upper and sole for sole attaching operations.

18.7 Attach sole.

18.8 Finish upper and sole.

19. Fabrication of Shoe

19.2 Cut the shoe Upper and lining components.

19.3 Split and skive the components.

19.4 Attach and stitch the components and completion of Upper.

19.5 Last the upper.

19.6 Prepare upper and sole for sole attaching operations.

19.7 Attach sole.

19.8 Finish the Upper and sole.

20. Fabrication of Boot.

20.2 Cut boot upper and lining components.

20.3 Split and skive the components.

20.4 Attach and stitch the components and completion of Upper.

20.5 Last the upper.

20.6 Prepare upper and sole for sole attaching operations.

20.7 Attach sole.

20.8 Finish the Upper and Sole.

Course Contents.

1. History of Footwear Fashion, Basic styles of Footwear

History of Footwear Fashion, Greek, Roman Periods, American Colonies period, Oriental Footwear Fashion, Five basic elements of Fashion, seven basic styles of footwear, Trickle down, Trickle up theory of fashion, cyclic nature of Fashion.

2. Mean form preparation

Importance of mean form, tools used, Development of Inside form, Outside form, Mean form preparation for the given last using Scotch tape.

3. Designing and pattern development of open type footwear.

Develop Patterns for Single Piece Sandal, Two piece Sandal, Sandal with Vamp, Buckled Counter Strap, Sandal variations.

4. **Designing and pattern development of Derby style.**

Development of Derby base, Upper shell, Upper pattern, Development of lining shell, Lining pattern for Toe cap Derby, Wing cap Derby, Toe cap Derby with facing and Foxing , Wing cap Derby with Facing and Counter, Derby with zimped edges, Derby variations.

5. **Designing and pattern development of Oxford style.**

Development of Oxford standard, Upper shell, Upper pattern, Development of lining shell, Lining pattern for Toe cap Oxford, Wing cap Oxford, Toe cap Oxford with facing and Foxing , Wing cap oxford with facing and Counter, oxford with zimped , Oxford variations.

6. **Design and Pattern development of Slip on, pantafola& loafers.**

Development of Slip on standard, Upper shell, Upper patterns, Lining shell, Lining patterns, Slip on with half saddle, Full saddle, Bar.

7. **Designing and pattern development of Court shoe style**

Development of Court shoe standard, shell, Upper pattern development from the upper shell, Development of lining shell, Lining pattern development from the lining shell.

8. **Designing and pattern development of Boot style**

Development of Boot base, shell, Upper pattern development from the upper shell, Development of lining shell, Lining pattern development from the lining shell , Boot with Collar Upper shell, lining shell, Upper patterns, Lining patterns, Collar upper patterns, Collar lining patterns.

9. **Designing and pattern development of Moccasins**

Develop patterns for Moccasin Uppers, linings.

10. **Designing and pattern development of Bottom components**

Development of patterns for insole from the last, sole pattern development, Development of heel pattern, Development of toe puff and stiffener patterns, Development of runner pattern.

11 **Clicking operations.**

stretch and Tightness direction on leather, Stretch and Tightness requirement of different components of Footwear, quality requirement for Different components of Footwear, quality variation in different parts of leather, defects on leather, economic cutting of the leather, Hand cutting, Machine cutting.

12 Pre Fitting operations.

Thickness requirement of different components of Footwear, Split the leather, Skive the leather, Markings.

13 Fitting operations.

Stitch leather components , Fabricate chappal upper, Fabricate Sandal upper, Fabricate Shoe upper, Fabricate Boot Upper.

14 Lasting operations

Prepare and attach Toe puff, Stiffener, insole , lasting practice by components , Last Sandal, shoe , boot upper

15 Sole attaching operations.

Upper, sole Preparation, Adhesive application, Drying, reactivation, Sole attaching.

16 Finishing operations.

Sole , Heel finishing operations, Upper cleaning, conditioning, shoe dressings, repairing , finishing operations.

17 Fabrication of Chappal.

Cut chappal components, Split and Skive the components, attach and stitch the components, Lasting, sole attaching, finishing.

18 Fabrication of Sandal

Cut sandal components, Split and Skive the components, attach and stitch the components, Lasting, sole attaching, finishing.

19 Fabrication of Shoe

Cut shoe components, Split and Skive the components, attach and stitch the components, Lasting, sole attaching, finishing.

20 Fabrication of Boot.

Cut Boot components, Split and Skive the components, attach and stitch the components, Lasting, sole attaching, finishing.