

FOOTWEAR ASSEMBLING TECHNICIAN (FTATA)

Syllabus

(Safety Practices 25 Hrs, Theory 100 Hrs, Practical 450 Hrs, Employability Skill 75 Hrs)

SL No	Reference Learning Outcomes	Details of Safety syllabus	Hours
1.	To identify Occupational Health, Hazard and Safety Issue.	A. OCCUPATIONAL SAFETY & HEALTH <ul style="list-style-type: none"> Identify responsibilities in maintaining Health and Safety in the workplace. Hazard Identification & Avoidance. Identifying the types of PPE used in the footwear industry. Basic Safety Introduction Personal Protection Basic injury prevention, Basic First Aid. Safety Sign for Danger, Warning caution and personal safety message, use of Fire Extinguisher. Various safety measurements involved in the Footwear Industry, Elementary First Aid, Concept of Standard etc. B. PERSONAL SAFETY <ul style="list-style-type: none"> Importance of Personal Safety in Footwear department. Applications and Proper use of Safety Personal belongings such as Safety Shoe, Safety Hat, Safety belt, Scaffolding, Cut resistant gloves, Goggles, Dust mask, Apron, Earplug etc. 	25

SL No	Reference Learning Outcomes	Details Theory & Practical Syllabus	Hours Distribution	
			Theory	Practical
1.	To acquire the basic concepts on Principles of Footwear Manufacture, Designing & Pattern Developing, Methodologies for various footwear operations and also about material science relating to footwear.	Module-1 PRINCIPLES OF FOOTWEAR MANUFACTURE <p>a. Introduction to Footwear: Definition & Function of Footwear, Classification of Footwear & Different Upper and Bottom Components of Footwear.</p> <p>b. Foot Anatomy: Function of foot, General outline structure of Human Foot mentioning the bones, joints, Ligaments, Muscles & Arches.</p> <p>c. Foot Abnormalities: Brief knowledge about various troubles of foot relating the troubles of Skins, Toe and Arches.</p> <p>d. Footwear Last: Definition of Last, Classification of Shoe Last (Material & Construction wise), Various points on Last and Difference between Human Feet & Shoemaking Last.</p> <p>e. Size & Fitting: Definition, Various types of Size system, Fitting of a Shoe.</p> <p>f. Foot & Last measuring devices: Various types of Foot measuring devices viz. Shoe Size stick, Brannock devices etc.</p>	15	14
		Module-2 DESIGNING & PATTERN DEVELOPING <p>a. Mean Forme: Mean Forme making from Last by various methods.</p> <p>b. Designing: Basis of Design, Function and Tools of a Shoe Designer. Designing of Open Type Footwear (Chappal & Sandal) for Gents/Women's/Children (at least Two Style each)</p> <p>c. Pattern Making: Pattern making of upper, linings, Insole (Plain, covered & Outside lasted), Heel and Soles (Unit Soles, Built-up soles) of aforesaid styles.</p> <p>d. Pattern Grading: Pattern grading of various components to various sizes from master pattern.</p>	02	97
		Module-3 LEATHER SCIENCE <ul style="list-style-type: none"> Introduction to Anatomical Structure of Hides & Skins. Identify sources of leather and their characteristics-Calf leather, Hide leather, Kid leather, Goat skin, Sheep skin. Identify the quality region of Hides & Skins. Identify Quality variance relating to various parts of hides and skins 	10	25

	<p>(Stretch, Color, Texture, Substance, Grain & Area).</p> <ul style="list-style-type: none"> • Defects marking up on leather (Anti mortem & Post mortem defects of leather). • Familiarization on Purpose of Grading-Calculation of Cutting/Clicking Value-Methods of grading- Area & defect measurement-Leather Sorting-Leather Storage. • Perform Pattern lay-outing and interlocking on Leather, Synthetics, Linings, Re-inforcing and Soling materials with special emphasis to pattern interlocking relating to economic clicking for reduction in production cost. • Identify various types of material wastage. 		
	<p>Module 4 PRE-FABRICATING OPERATION-I</p> <ul style="list-style-type: none"> • Introduction to Clicking and its importance. • Familiarization with the responsibility of a clicker. • Identify different types of hand tools for hand clicking operations. • Identify and apply various method and process of holding the tools. • Practice sharpening of tools, scissors, knives and other cutting tools. • Practice on material clicking by hand. • Care and maintenance of trade tool. • Identify various types clicking dyes and also the size marking and codes on it. • Identify the maintenance and storage of clicking dyes. • Identify different parts, its function and operation of Material Clicking machines. • Identify the machine/instrument specification. • Practice various clicking core cutting methods viz. press cutting, machine clicking. • Clicking upper components such as lining, socks, re-inforcing materials, fabrics & bottom components such as Toe-puffs, Stiffeners, Insole & Soles economically. 	07	25
	<p>Module-5 PRE-FABRICATING-II</p> <ul style="list-style-type: none"> • Introduction to Skiving and its importance. • Identify various types of skiving operations along with their parameters. • Identify different types of hand tools for hand skiving operations. • Identify and apply various method and process of holding the tools. • Practice sharpening of skiving tools. • Practice on material skiving by hand. • Care and maintenance of trade tool. • Identify different parts, its function and operation of Skiving machines. • Identify the machine/instrument specifications. • Practice various types of skiving on footwear materials. • Perform skiving and folding for making upper. 	08	25
	<p>Module-6 CLOSING OPERATION</p> <ul style="list-style-type: none"> • Introduction to Closing. • Introduction to Stitching. • Identify different parts, its function and operation of Post bed, Cylinder bed and zigzag sewing machine. • Identify the machine/instrument and needle specifications. • Identify Types of Stitch (Lock & Chain). • Knowledge of edges, seams and their treatment, seam strength used in closing upper ornamentation. • Brief description about various types of decorative and subsidiary stitching operations. • Prepare by upper stitching machines-like post bed sewing machines, cylinder bed sewing machine and zigzag sewing machine. • Practicing stitching on Paper & Leather. • Final checking of closed upper. • Bottom Operations-Insole attaching, Drafting, Adhesive application, Lasting, Sole attaching ,Finishing & Final Inspection. 	08	25
	<p>Module 7 MATERIAL SCIENCE (NON-LEATHER) AND ACCESSORIES</p> <p>Non-Leather</p> <ul style="list-style-type: none"> • Brief introduction to various non leather materials used for making 		

		<p>Footwear Uppers, Insole & Soling materials.</p> <p>Adhesives</p> <ul style="list-style-type: none"> •Introduction to various types of adhesives used in footwear making with their application •Identify adhesives used in footwear, their names, description and their application such as natural rubber solution, rubber latex, neoprene etc. preparation and application, backing up their leather. • Properties of footwear adhesives. <p>Thread</p> <ul style="list-style-type: none"> •Identification of thread material & thread twist. •Identify the thread related terms such as yarns, cord, ply, tex, denier, stitch/inch & Nm. •Identify thread number and thread properties. • Various thread nos. used in Stitching footwear components. • Various parts of a stitching needle. • Familiarization with Needle size, Needle finishes & Needle Points. 	08	17
		<p>•Module 8 MAKING OF OPEN TYPE FOOTWEAR</p> <ul style="list-style-type: none"> •Making of Open Type Footwear (Chappal & Sandals) of various style reflecting Men's/Women's & Children. •Preparation of Production Guide for each design. •Preparation of Sequence of Operation (SOP) for making the various aforesaid Open type Footwear. 	08	98
		<p>Module 9 SHOE COSTING</p> <ul style="list-style-type: none"> •One pair pattern tracing on paper for costing. •Determining the pricing of Footwear products: Procedures used for estimating allowances for footwear components and effects on these allowances of material variations. 	04	14
		<p>Module 10 EDP/REPORT</p> <ul style="list-style-type: none"> •Brief idea on nature of small business management and Industrial Technical Skill. •Preparation of schemes and vetting to financial Institution/Lead bank for obtaining loans • Rules for setting up business/Production unit. • Maintenance of Accounts; Labor, capital etc. • Man management, Motivation & Communication. • Operational Management. • Market Survey. • Quality Control. • Knowledge of Sales Tax etc. • Brief Idea for Registration of SSI, MSME, Trade License, Project Report, Proposal for loans etc. 	08	16
2.	To have knowledge and skills in Planning the Operational work flow to improve Productivity & Quality.	<p>Module 11 PRODUCT AND QUALITY IMPROVEMENT</p> <ul style="list-style-type: none"> •Preparation and demonstration of Stage Sample board demonstrating various operations regarding upper fabrication. •Sequence of operation relating to particular design: Material identification>Defects identification>Material grading and sorting>Pattern lay-outing maintaining minimum wastage>Clicking operations>Checking>Skiving operations>Checking>Closing operations & Final checking. •Self-understanding and demonstrate the Technical specification sheet. •To improve the quality of clicking, concept and implementation of cutters' ticket, material budget & control. 	10	16
3	Visit to a reputed Footwear Market	<ul style="list-style-type: none"> • Familiarization with various types of materials, tools & instruments used for making footwear. 	06	14
4	Industry Visit at Footwear Unit to	Industry Visit at least one/two Large & Medium established Footwear Unit to assess the total work flow (Clicking to Finishing).	06	64

	assess the Total work flow (Clicking to Finishing)			
TOTAL			100	450
			550	

Detail of Employability Skills Syllabus – 75 Hours

Sl. No.	Content	Details
1.	English Literacy & Communication Skills	<p>Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)</p> <p>Transformation of sentences, Voice change, Change of tense, Spellings. Reading and understanding simple sentences about self, work and environment. Construction of simple sentences, Writing simple English.</p> <p>Speaking with preparation on self, on family, on friends, classmates, on know, picture reading gain confidence through role-playing . Taking messages, passing messages on and filling in message forms Greeting and introductions office hospitality, Resumes or curriculum vita essential parts, letters of application reference to previous communication.</p> <p>Communication and its importance, Principles of Effective communication, Types of communication – verbal, non verbal, written, email, talking on phone. Non verbal communication –characteristics, components-Para-language,</p> <p>Body – language,</p> <p>Barriers to communication and dealing with barriers.</p> <p>Handling nervousness/ discomfort.</p> <p>Self awareness, Importance of Commitment, Ethics and Values, Ways to Motivate Oneself, Personal Goal setting and Employability Planning.</p> <p>Manners, Etiquettes, Dress code for an interview, Do's & Don'ts for an interview, Problem Solving, Confidence Building, Attitude.</p>
2.	I.T. Literacy	<p>Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer.</p> <p>Basics of Operating System, WINDOWS, The user interface of Windows OS, Create, Copy, Move and delete Files and Folders, Use of External memory like pen drive, CD, DVD etc, Use of Common applications.</p> <p>Basic operating of Word Processing, Creating, opening and closing Documents, use of shortcuts, Creating and Editing of Text, Formatting the Text, Insertion & creation of Tables. Printing document.</p> <p>Basics of Excel worksheet, understanding basic commands ,creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets</p> <p>Internet, Concept of Internet (Network of Networks),</p> <p>Meaning of World Wide Web (WWW), Web Browser, Web Site, Web page and Search Engines. Accessing the Internet using Web Browser, Downloading and Printing Web Pages, Opening an email account and use of email. Social media sites and its implication.</p> <p>Information Security and antivirus tools, Do's and Don'ts in Information Security,</p>

		Awareness of IT – ACT, types of cyber crimes.
3.	Entrepreneurship Skills	<p>Entrepreneurship vs. management, Entrepreneurial motivation. Performance & Record, Role & Function of Entrepreneur, Qualities of a good Entrepreneur, SWOT and Risk Analysis. Concept & application of PLC, Sales & distribution Management. Different Between Small Scale & Large Scale Business, Market Survey, Method of marketing, Publicity and advertisement, Marketing Mix.</p> <p>Preparation of Project. Role of Various Schemes and Institutes for self-employment i.e. DIC, SIDA, SISI, NSIC, SIDO, Idea for financing/ non financing support agencies to familiarizes with the Policies /Programmes & procedure & the available scheme.</p> <p>Project formation, Feasibility, Legal formalities i.e., Shop Act, Estimation & Costing, Investment procedure – Loan procurement – Banking Processes.</p>
4.	Productivity & Quality Tools	<p>Definition, Necessity, Meaning of GDP.</p> <p>Personal / Workman – Incentive, Production linked Bonus, Improvement in living standard. Industry Nation.</p> <p>Skills, Working Aids, Automation, Environment, Motivation. How improves or slows down.</p> <p>Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance.</p> <p>Meaning of quality, Quality characteristic. Definition, Advantage of small group activity, objectives of quality Circle, Roles and function of Quality Circles in Organization, Operation of Quality circle. Approaches to starting Quality Circles, Steps for continuation Quality Circles.</p> <p>Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.</p> <p>Purpose of Housekeeping, Practice of good Housekeeping. Basic quality tools with a few examples</p>