

CUTTING AND SEWING MACHINE OPERATOR

COMPETENCY BASED CURRICULUM

(Duration: 1yr 03 months.)

APPRENTICESHIP TRAINING SCHEME (ATS)

NSQF LEVEL- 4



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SECTOR – APPAREL



GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

CUTTING AND SEWING MACHINE OPERATOR

(Revised in 2018)
APPRENTICESHIP TRAINING SCHEME (ATS)



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Developed By

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Directorate General of Training
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1.1 Apprenticeship Training Scheme under Apprentice Act 1961

The Apprentices Act, 1961 was enacted with the objective of regulating the programme of training of apprentices in the industry by utilizing the facilities available therein for imparting on-the-job training. The Act makes it obligatory for employers in specified industries to engage apprentices in designated trades to impart Apprenticeship Training on the job in industry to school leavers and person having National Trade Certificate (ITI pass-outs) issued by National Council for Vocational Training (NCVT) to develop skilled manpower for the industry. There are four categories of apprentices namely; **trade apprentice, graduate, technician and technician (vocational) apprentices.**

Qualifications and period of apprenticeship training of **trade apprentices** vary from trade to trade. The apprenticeship training for trade apprentices consists of basic training followed by practical training. At the end of the training, the apprentices are required to appear in a trade test conducted by NCVT and those successful in the trade tests are awarded the National Apprenticeship Certificate.

The period of apprenticeship training for graduate (engineers), technician (diploma holders and technician (vocational) apprentices is one year. Certificates are awarded on completion of training by the Department of Education, Ministry of Human Resource Development.

1.2 Changes in Industrial Scenario

Recently we have seen huge changes in the Indian industry. The Indian Industry registered an impressive growth during the last decade and half. The number of industries in India have increased manifold in the last fifteen years especially in services and manufacturing sectors. It has been realized that India would become a prosperous and a modern state by raising skill levels, including by engaging a larger proportion of apprentices, will be critical to success; as will stronger collaboration between industry and the trainees to ensure the supply of skilled workforce and drive development through employment. Various initiatives to build up an adequate infrastructure for rapid industrialization and improve the industrial scenario in India have been taken.

1.3 Reformation

The Apprentices Act, 1961 has been amended and brought into effect from 22nd December, 2014 to make it more responsive to industry and youth. Key amendments are as given below:

- Prescription of number of apprentices to be engaged at establishment level instead of trade-wise.
- Establishment can also engage apprentices in optional trades which are not designated, with the discretion of entry level qualification and syllabus.
- Scope has been extended also to non-engineering occupations.
- Establishments have been permitted to outsource basic training in an institute of their choice.
- The burden of compliance on industry has been reduced significantly.

2.1 GENERAL

Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers range of vocational training courses catering to the need of different sectors of economy/ Labour market. The vocational training programmes are delivered under aegis of National Council of Vocational Training (NCVT). Craftsman Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) are two pioneer programmes of NCVT for propagating vocational training.

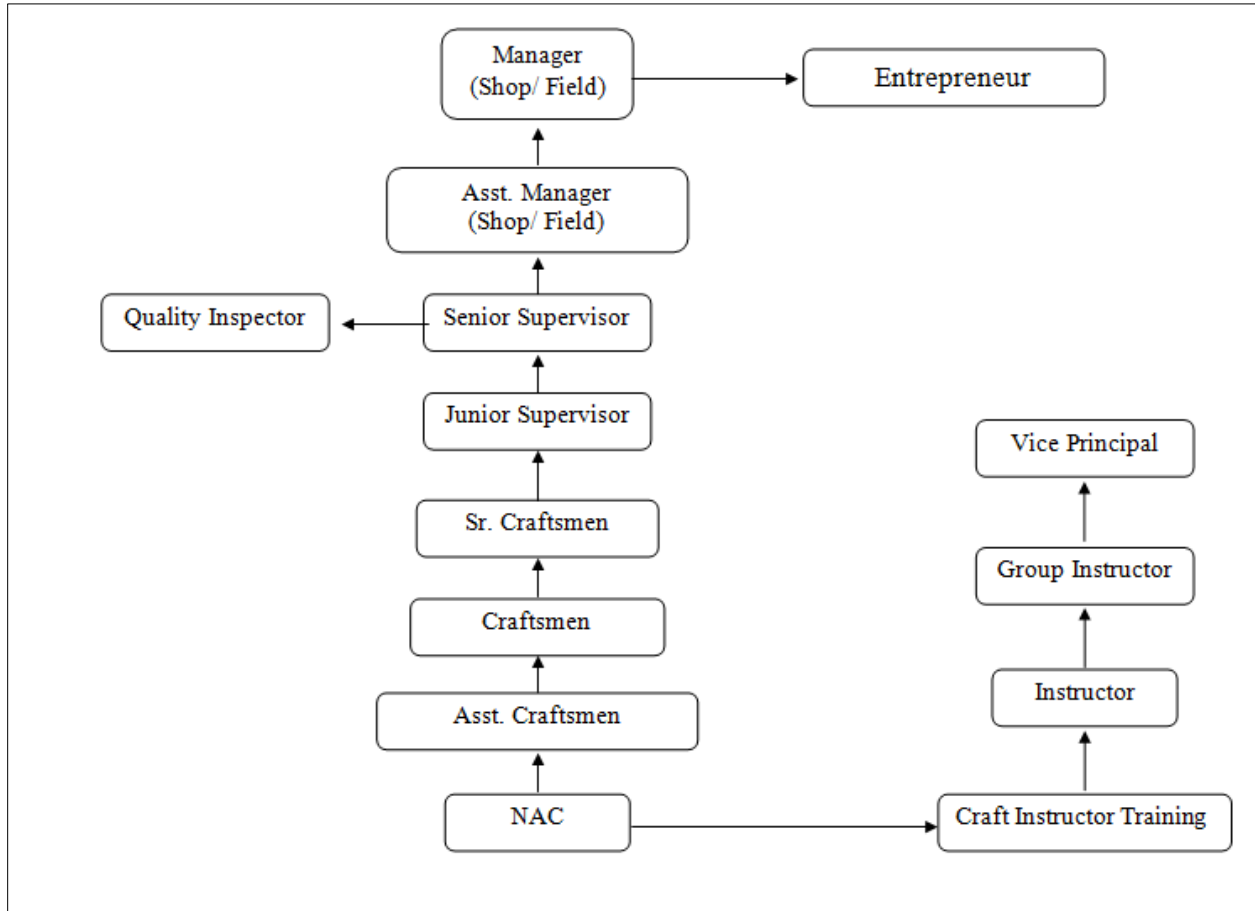
Cutting and Sewing Machine Operator trade under ATS is one of the most popular courses delivered nationwide through different industries. The course is of two years (02 Blocks) duration. It mainly consists of Domain area and Core area. In the Domain area Trade Theory & Practical impart professional - skills and knowledge, while Core area - and Employability Skills imparts requisite core skills & knowledge and life skills. After passing out the training programme, the trainee is being awarded National Apprenticeship Certificate (NAC) by NCVT having worldwide recognition.

Broadly candidates need to demonstrate that they are able to:

- Read & interpret technical parameters/document, plan and organize work processes, identify necessary materials and tools;
- Perform task with due consideration to safety rules, accident prevention regulations and environmental protection stipulations;
- Apply professional skill, knowledge, core skills & employability skills while performing jobs and solve problem during execution.
- Check the job/assembly as per drawing for functioning, identify and rectify errors in job/assembly.
- Document the technical parameters related to the task undertaken.

2.2 CAREER PROGRESSION PATHWAYS:

- Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs.
- Indicative pathways for vertical mobility.



2.3 COURSE STRUCTURE:

Table below depicts the distribution of training hours across various course elements during a period of one year (*Basic Training and On-Job Training*): -

Total training duration details: -

Time (in months)	1-3	4 - 15
Basic Training	Block– I	-----
Practical Training (On - job training)	----	Block – I

A. Basic Training

For 02 yrs. Course (Non-Engg.):- **Total 03 months:** 03 months in 1styr.only

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For 01 yr. Course (Non-Engg):- **Total 03 months:** 03 months in 1st yr.

S No.	Course Element	Total Notional Training Hours For 01 yr. course
1	Professional Skill (Trade Practical)	270
2	Professional Knowledge (Trade Theory)	120
3	Employability Skills	110
	Total (including Internal Assessment)	500

B. On-Job Training:-

For 01 yr. Course (Non-Engg.) :- (**Total 12 months**)

Notional Training Hours for On-Job Training: 2080 Hrs.

C. Total training hours:-

Duration	Basic Training	On-Job Training	Total
For 02 yrs. Course (Non-Engg.)	500 hrs.	3640 hrs.	4140 hrs.
For 01 yr. Course (Non-Engg.)	500 hrs.	2080 hrs.	2580 hrs.

2.4 ASSESSMENT & CERTIFICATION:

The trainee will be tested for his skill, knowledge and attitude during the period of course and at the end of the training programme as notified by Govt of India from time to time. The Employability skills will be tested in first two semesters only.

a) The **Internal assessment** during the period of training will be done by **Formative assessment method** by testing for assessment criteria listed against learning outcomes. The training institute have to maintain individual *trainee portfolio* as detailed in assessment guideline. The marks of internal assessment will be as per the template (Annexure – II).

b) The final assessment will be in the form of summative assessment method. The All India Trade Test for awarding NAC will be conducted by NCVT on completion of course as per guideline of Govt of India. The pattern and marking structure is being notified by govt of India from time to time. **The learning outcome and assessment criteria will be basis for setting question papers for final assessment. The examiner during final examination will also check**

individual trainee's profile as detailed in assessment guideline before giving marks for practical examination.

2.4.1 PASS REGULATION

The minimum pass percent for Practical is 60% & minimum pass percent for Theory subjects 40%. The candidate pass in each subject conducted under all India trade test.

2.4.2 ASSESSMENT GUIDELINE

Appropriate arrangements should be made to ensure that there will be no artificial barriers to assessment. The nature of special needs should be taken into account while undertaking assessment. Due consideration should be given while assessing for team work, avoidance/reduction of scrap/wastage and disposal of scarp/wastage as per procedure, behavioral attitude, sensitivity to environment and regularity in training. The sensitivity towards OSH and self-learning attitude are to be considered while assessing competency.

Assessment will be evidence based comprising the following:

- Job carried out in labs/workshop
- Record book/ daily diary
- Answer sheet of assessment
- Viva-voce
- Progress chart
- Attendance and punctuality
- Assignment
- Project work

Evidences of internal assessments are to be preserved until forthcoming semester examination for audit and verification by examination body. The following marking pattern to be adopted while assessing:

Performance Level	Evidence
(a) Weightage in the range of 60 -75% to be allotted during assessment	
For performance in this grade, the candidate with occasional guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of an acceptable standard of craftsmanship.	<ul style="list-style-type: none">• Demonstration of good skill in the use of hand tools, machine tools and workshop equipment• Below 70% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards.

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	<ul style="list-style-type: none"> • A fairly good level of neatness and consistency in the finish • Occasional support in completing the project/job.
<p>(b) Weightage in the range of above 75% - 90% to be allotted during assessment</p>	
<p>For this grade, the candidate, with little guidance and showing due regard for safety procedures and practices, has produced work which demonstrates attainment of a reasonable standard of craftsmanship.</p>	<ul style="list-style-type: none"> • Good skill levels in the use of hand tools, machine tools and workshop equipment • 70-80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards. • A good level of neatness and consistency in the finish • Little support in completing the project/job
<p>(c) Weightage in the range of above 90% to be allotted during assessment</p>	
<p>For performance in this grade, the candidate, with minimal or no support in organization and execution and with due regard for safety procedures and practices, has produced work which demonstrates attainment of a high standard of craftsmanship.</p>	<ul style="list-style-type: none"> • High skill levels in the use of hand tools, machine tools and workshop equipment • Above 80% tolerance dimension/accuracy achieved while undertaking different work with those demanded by the component/job/set standards. • A high level of neatness and consistency in the finish. • Minimal or no support in completing the project.

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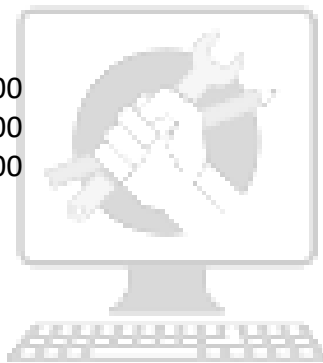
Brief description of Job roles:

To create skilled work force for Self Employment / Working in garment manufacturing Industry as –

- Sewing Machine Operator
- Assistant to Supervisor
- Running Tailoring Shop

Reference NCO:

- i) NCO-2015: 7531.0100
- ii) NCO-2015: 7532.0600
- iii) NCO-2015: 7532.0900



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4. NSQF LEVEL COMPLIANCE

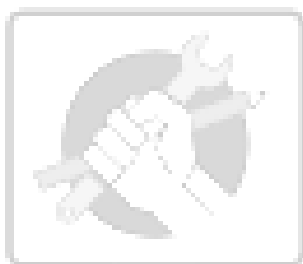
NSQF level for CUTTING AND SEWING MACHINE OPERATOR trade under ATS: **Level 4**

As per notification issued by Govt. of India dated- 27.12.2013 on National Skill Qualification Framework total 10 (Ten) Levels are defined.

Each level of the NSQF is associated with a set of descriptors made up of five outcome statements, which describe in general terms, the minimum knowledge, skills and attributes that a learner needs to acquire in order to be certified for that level.

Each level of the NSQF is described by a statement of learning outcomes in five domains, known as level descriptors. These five domains are:

- a. Process
- b. Professional knowledge,
- c. Professional skill,
- d. Core skill and
- e. Responsibility.



The Broad Learning outcome of Cutting and Sewing Machine Operatortrade under ATS mostly matches with the Level descriptor at Level- 4.

The NSQF level-4 descriptor is given below:

LEVEL	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
Level 4	Work in familiar, predictable, routine, situation of clear choice.	Factual knowledge of field of knowledge or study	Recall and demonstrate practical skill, routine and repetitive in narrow range of application, using appropriate rule and tool, using quality concepts	Language to communicate written or oral, with required clarity, skill to basic Arithmetic and algebraic principles, basic understanding of social political and natural environment.	Responsibility for own work and learning.

5. GENERAL INFORMATION

Name of the Trade	Cutting and Sewing Machine Operator
NCO - 2015	7531.0100, 7532.0600, 7532.0900
NSQF Level	Level – 4
Duration of Apprenticeship Training (Basic Training + On-Job Training)	3 months+ One year (01 Block of 15 month duration).
Duration of Basic Training	a) Block –I : 3 months Total duration of Basic Training: 3 months
Duration of On-Job Training	a) Block –I: 12 months Total duration of Practical Training: 12 months
Entry Qualification	Passed 8th class examination or its equivalent
Selection of Apprenticeship	The apprentices will be selected as per Apprenticeship Act amended time to time.
Instructors Qualification for Basic Training	As per ITI instructors qualifications as amended time to time for the specific trade.
Infrastructure for basic training	As per related trade of ITI.
Examination	The internal examination/ assessment will be held on completion of each block. Final examination for all subjects will be held at the end of course and same will be conducted by NCVT.
Rebate to Ex-ITI Trainees	03 months
CTS trades eligible for Tailor (Men) Apprenticeship	1. Sewing Machine Operator

Note:

- Industry may impart training as per above time schedule for different block, however this is not fixed. The industry may adjust the duration of training considering the fact that all the components under the syllabus must be covered. However the flexibility should be given keeping in view that no safety aspects is compromised.
- For imparting Basic Training the industry to tie-up with ITIs having such specific trade and affiliated to NCVT.

6.1 GENERIC LEARNING OUTCOME

The following are minimum broad Common Occupational Skills/ Generic Learning Outcome after completion of the Cutting and Sewing Machine Operator course of 01 years duration under ATS.

Block I:-

1. Recognize & comply safe working practices, environment regulation and housekeeping.
2. Select and ascertain measuring instrument and measure dimension of components and record data.
3. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
4. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
5. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
6. Plan and organize the work related to the occupation.

6.2 SPECIFIC LEARNING OUTCOME

Block – I

1. Practice and understand precautions to be followed while working in fitting jobs.
2. Prepare different types of documentation as per industrial need by different methods of recording information.
3. Perform sewing machine operation.
4. Dismantling and assembling of sewing machine.
5. Checking of functions and oiling of sewing machines
6. Using of scissors, tracing wheels etc.
7. Knowledge of trade terminology.
8. Using of L T Scale.
9. Simple drafting, making of different type of paper pattern.
10. Identification and handling of fabrics and texture.
11. Preparation of sample pieces of stitches and sample making using all types of stitches.
12. Selection of colour combination.
13. Pressing of cotton garments, Terene garments and silk garments.

NOTE: Learning outcomes are reflection of total competencies of a trainee and assessment will be carried out as per assessment criteria.

7. LEARNING OUTCOME WITH ASSESSMENT CRITERIA

GENERIC LEARNING OUTCOME	
LEARNING OUTCOMES	ASSESSMENT CRITERIA
1. Recognize & comply safe working practices, environment regulation and housekeeping.	1. 1. Follow and maintain procedures to achieve a safe working environment in line with occupational health and safety regulations and requirements.
	1. 2. Recognize and report all unsafe situations according to site policy.
	1. 3. Identify and take necessary precautions on fire and safety hazards and report according to site policy and procedures.
	1. 4. Identify, handle and store / dispose off dangerous/unsalvageable goods and substances according to site policy and procedures following safety regulations and requirements.
	1. 5. Identify and observe site policies and procedures in regard to illness or accident.
	1. 6. Identify safety alarms accurately.
	1. 7. Report supervisor/ Competent of authority in the event of accident or sickness of any staff and record accident details correctly according to site accident/injury procedures.
	1. 8. Identify and observe site evacuation procedures according to site policy.
	1. 9. Identify Personal Protective Equipment (PPE) and use the same as per related working environment.
	1. 10. Identify basic first aid and use them under different circumstances.
	1. 11. Identify different fire extinguisher and use the same as per requirement.
	1. 12. Identify environmental pollution & contribute to avoidance of same.
	1. 13. Take opportunities to use energy and materials in an environmentally friendly manner
	1. 14. Avoid waste and dispose waste as per procedure
	1. 15. Recognize different components of 5S and apply the same in the working environment.
2. Select and ascertain measuring instrument and measure dimension of components and record	4.1 Select appropriate measuring instruments such as micrometers, verniercalipers, dial gauge, bevel protector and height gauge (as per tool list).
	4.2 Ascertain the functionality & correctness of the

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data.	instrument. 4.3 Measure dimension of the components & record data to analyse the with given drawing/measurement.
3. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.	5.1 Explain the concept of productivity and quality tools and apply during execution of job. 5.2 Understand the basic concept of labour welfare legislation and adhere to responsibilities and remain sensitive towards such laws. 5.3 Knows benefits guaranteed under various acts
4. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.	6.1 Explain the concept of energy conservation, global warming, pollution and utilize the available recourses optimally & remain sensitive to avoid environment pollution. 6.2 Dispose waste following standard procedure.
5. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.	7. 1. Explain personnel finance and entrepreneurship. 7. 2. Explain 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. 7. 3. Prepare Project report to become an entrepreneur for submission to financial institutions.
6. Plan and organize the work related to the occupation.	8. 1. Use documents, drawings and recognize hazards in the work site. 8. 2. Plan workplace/ assembly location with due consideration to operational stipulation 8. 3. Communicate effectively with others and plan project tasks 8. 4. Assign roles and responsibilities of the co-trainees for execution of the task effectively and monitor the same.
SPECIFIC OUTCOME	
<u>Block-I</u>	
<p><i>Assessment Criteria i.e. the standard of performance, for each specific learning outcome mentioned under Block – I(section: 10) must ensure that the trainee works in familiar, predictable, routine, situation of clear choice. Assessment criteria should broadly cover the aspect of Planning (Identify, ascertain, etc.); Execution apply factual knowledge of field of</i></p>	

knowledge, recall and demonstrate practical skill during performing the work in routine and repetitive in narrow range of application, using appropriate rule and tool, complying with basic arithmetic and algebraic principles and language to communicate in written or oral with required clarity; **Checking/ Testing** to ensure functionality during the assessment of each outcome. The assessments parameters must also ascertain that the candidate is responsible for his/her own work and learning.



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BASIC TRAINING (Block – I)**Duration: (03) Three Months**

Week No.	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
1.	<p>1. Safety: - its importance, classification, personal, general, workshop and job safety. Occupational health and safety.</p> <p>2. Basic injury prevention, Basic first aid, Hazard identification and avoidance, safety signs for Danger, Warning, caution & personal safety message.</p> <p>3. Importance of housekeeping & good shop floor practices.</p> <p>4. Disposal procedure of waste materials like fabric thread waste, etc.</p> <p>5. Fire & safety: Use of Fire extinguishers.</p>	<p>Importance of safety and general precautions observed in the industry/shop floor. All necessary guidance to be provided to the new comers to become familiar with the working of Institute system including stores procedures.</p> <p>Introduction of First aid. Safety attitude development of the trainee by educating him to use Personal Protective Equipment (PPE).</p> <p>Response to emergencies eg; power failure, fire, and system failure. Accidents- Definition types and causes. First-Aid, nature and causes of injury and utilization of first-aid.</p> <p>Introduction to 5S concept & its application. Fire: - Types, causes and prevention methods. Fire Extinguisher, its types. Global warming its causes and remedies. Industrial Waste its types, sources and waste Management.</p>
2.	2. Familiarization with the organization	<p>Introduction</p> <ul style="list-style-type: none"> ➤ Trade, ➤ its utility & Scope ➤ Job Prospects
3.	<p>7. Operation of sewing machine.</p> <p>8. Dismantling of sewing parts of machine.</p> <p>9. Assembling of sewing parts of machine.</p> <p>10. Adjustment of its parts.</p> <p>11. Checking of proper functions.</p>	<p>Introduction to Sewing Machine:</p> <ul style="list-style-type: none"> ➤ Machine Operation ➤ Different parts of machine and their Functions. ➤ Proper maintenance and

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	12. Practice of cleaning and oiling of machine.	Oiling ➤ Safety precautions
3.	13. Practice in using Different Scissors Shapper, L Scale, Art Curve, Tracing wheel Thimble etc.	Trade related Tools, their importance, usage and safety ➤ Measuring Tools ➤ Drafting Tools ➤ Marking Tools ➤ Cutting Tools ➤ Sewing Tools ➤ Finishing Tools
4.	14. Practice in using proper Terms.	Trade Terminology:- Specific terms used in drafting, cutting & stitching
5.	Practice in using tape 15. Taking measurement 16. Sequencing of Measurement. 17. Use of L scale.	Measurement Taking:- Use of tape for measurement - Proper / correct measurement taking, Precautions - Use of L scale for measurement - Sequence of measurement
6.	18. Simple drafting 19. Pattern making 20. Paper pattern cutting	Drafting / Pattern Making:- - Need for drafting and pattern making - Method of preparing draft - Preparing pattern cutting
7	21. Identification of fabrics and texture 22. Handling of Fabrics	Fabric Fundamentals 23. Brief idea about fibers 24. Types of Fabrics 25. Selection of Needle and thread according to fabric types
8	23. Preparation of sample pieces of stitches	Basic Stitching:- - Hand stitches - Machine stitches - Decorative stitches
	24. Making Samples of pieces using all Construction skills.	Stitching Skills:- - Knowledge about:

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9&10		- Seams, Darts, Tucks, flares, plackets, pockets, necklines, hem, collars & cuff Pleats, Buttons Hole, Buttons Hooks and, Eye, Titch buttons
11	25. Practicals in selection of colour combination (contrast & harmony)	Colour concept:- Colour combination for buttons, thread & cloth
12	26. Pressing of: - Cotton garments - Terene garments - Silk garments - Packing of various garments (folding). 27. Tailor marks - Fittings & alterations - New garments from old fabric / garments	Finishing & pressing of Garments:- Correct Method of pressing different garments according to fabric and folding of garments. Precautions while pressing & finishing Fitting Of Garments:- Principals of fitting .Common fitting problem & how to remedy them Removing Of Stains:- Classification of stains .Means of stains removing & stain removing equipment
13	Assessment/Examination 03days	

NOTE: -

More emphasis to be given on video/real-life pictures during theoretical classes. Some real-life pictures/videos of related industry operations may be shown to the trainees to give a feel of Industry and their future assignment.

9.1 EMPLOYABILITY SKILLS

(DURATION: - 110 HRS.)

Block – I (Duration – 55 hrs.)	
1. English Literacy Duration : 20 Hrs. Marks : 09	
Pronunciation	Accentuation (mode of pronunciation) on simple words, Diction (use of word and speech)
Functional Grammar	Transformation of sentences, Voice change, Change of tense, Spellings.
Reading	Reading and understanding simple sentences about self, work and environment
Writing	Construction of simple sentences Writing simple English
Speaking / Spoken English	Speaking with preparation on self, on family, on friends/ classmates, on know, picture reading gain confidence through role-playing and discussions on current happening job description, asking about someone's job habitual actions. Cardinal (fundamental) numbers ordinal numbers. 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.
2. I.T. Literacy Duration : 20 Hrs. Marks : 09	
Basics of Computer	Introduction, Computer and its applications, Hardware and peripherals, Switching on-Starting and shutting down of computer.
Computer Operating System	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.
Word processing and Worksheet	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. Basics of Excel worksheet, understanding basic commands, creating simple worksheets, understanding sample worksheets, use of simple formulas and functions, Printing of simple excel sheets.

Computer Networking and Internet	<p>Basic of computer Networks (using real life examples), Definitions of Local Area Network (LAN), Wide Area Network (WAN), Internet, Concept of Internet (Network of Networks), 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, Awareness of IT - ACT, types of cyber crimes.</p>
<p>3. Communication Skills</p>	
<p>Duration : 15 Hrs. Marks : 07</p>	
Introduction to Communication Skills	<p>Communication and its importance</p> <p>Principles of Effective communication</p> <p>Types of communication - verbal, non verbal, written, email, talking on phone.</p> <p>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>
Listening Skills	<p>Listening-hearing and listening, effective listening, barriers to effective listening guidelines for effective listening.</p> <p>Triple- A Listening - Attitude, Attention & Adjustment.</p> <p>Active Listening Skills.</p>
Motivational Training	<p>Characteristics Essential to Achieving Success.</p> <p>The Power of Positive Attitude.</p> <p>Self awareness</p> <p>Importance of Commitment</p> <p>Ethics and Values</p> <p>Ways to Motivate Oneself</p> <p>Personal Goal setting and Employability Planning.</p>
Facing Interviews	<p>Manners, Etiquettes, Dress code for an interview</p> <p>Do's & Don'ts for an interview.</p>
Behavioral Skills	<p>Problem Solving</p> <p>Confidence Building</p> <p>Attitude</p>
<p>4. Entrepreneurship Skills</p>	
<p>Duration : 15 Hrs. Marks : 06</p>	
Concept of Entrepreneurship	<p>Entrepreneur - Entrepreneurship - Enterprises:-Conceptual issue</p> <p>Entrepreneurship vs. management, Entrepreneurial motivation.</p>

	Performance & Record, Role & Function of entrepreneurs in relation to the enterprise & relation to the economy, Source of business ideas, Entrepreneurial opportunities, The process of setting up a business.
Project Preparation & Marketing analysis	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.
Institutions Support	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.
Investment Procurement	Project formation, Feasibility, Legal formalities i.e., Shop Act, Estimation & Costing, Investment procedure - Loan procurement - Banking Processes.
5. Productivity	
Duration: 10 Hrs. Marks : 05	
Benefits	Personal / Workman - Incentive, Production linked Bonus, Improvement in living standard.
Affecting Factors	Skills, Working Aids, Automation, Environment, Motivation - How improves or slows down.
Comparison with developed countries	Comparative productivity in developed countries (viz. Germany, Japan and Australia) in selected industries e.g. Manufacturing, Steel, Mining, Construction etc. Living standards of those countries, wages.
Personal Finance Management	Banking processes, Handling ATM, KYC registration, safe cash handling, Personal risk and Insurance.
6. Occupational Safety, Health and Environment Education	
Duration: 15 Hrs. Marks : 06	
Safety & Health	Introduction to Occupational Safety and Health importance of safety and health at workplace.
Occupational Hazards	Basic Hazards, Chemical Hazards, Vibroacoustic Hazards, Mechanical Hazards, Electrical Hazards, Thermal Hazards. Occupational health, Occupational hygienic, Occupational Diseases/ Disorders & its prevention.
Accident & safety	Basic principles for protective equipment. Accident Prevention techniques - control of accidents and safety measures.

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First Aid	Care of injured & Sick at the workplaces, First-Aid & Transportation of sick person.
Basic Provisions	Idea of basic provision legislation of India. safety, health, welfare under legislative of India.
Ecosystem	Introduction to Environment. Relationship between Society and Environment, Ecosystem and Factors causing imbalance.
Pollution	Pollution and pollutants including liquid, gaseous, solid and hazardous waste.
Energy Conservation	Conservation of Energy, re-use and recycle.
Global warming	Global warming, climate change and Ozone layer depletion.
Ground Water	Hydrological cycle, ground and surface water, Conservation and Harvesting of water.
Environment	Right attitude towards environment, Maintenance of in -house environment.
7. Labour Welfare Legislation	
Duration: 05 Hrs. Marks : 03	
Welfare Acts	Benefits guaranteed under various acts- Factories Act, Apprenticeship Act, Employees State Insurance Act (ESI), Payment Wages Act, Employees Provident Fund Act, The Workmen's compensation Act.
8. Quality Tools	
Duration: 10 Hrs. Marks : 05	
Quality Consciousness	Meaning of quality, Quality characteristic.
Quality Circles	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.
Quality Management System	Idea of ISO 9000 and BIS systems and its importance in maintaining qualities.
House Keeping	Purpose of House-keeping, Practice of good Housekeeping.
Quality Tools	Basic quality tools with a few examples.

9.2 EMPLOYABILITY SKILLS

(DURATION: - 110 HRS.)

TOOLS & EQUIPMENTS FOR EMPLOYABILITY SKILLS		
Sl. No.	Name of the Equipment	Quantity
1.	Computer (PC) with latest configurations and Internet connection with standard operating system and standard word processor and worksheet software	10 Nos.
2.	UPS - 500VA	10 Nos.
3.	Scanner cum Printer	1 No.
4.	Computer Tables	10 Nos.
5.	Computer Chairs	20 Nos.
6.	LCD Projector	1 No.
7.	White Board 1200mm x 900mm	1 No.

Note: - Above Tools & Equipments not required, if Computer LAB is available in the institute.

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10. DETAILS OF COMPETENCIES (ON-JOB TRAINING)

The **competencies/ specific outcomes** on completion of On-Job Training are detailed below: -

Block – I

1. Practice and understand precautions to be followed while working in Cutting and sewing machine handling jobs.
2. Prepare different types of documentation as per industrial need by different methods of recording information.
7. Recognize & comply safe working practices, environment regulation and housekeeping.
8. Select and ascertain measuring instrument and measure dimension of components and record data.
9. Explain the concept in productivity, quality tools, and labour welfare legislation and apply such in day to day work to improve productivity & quality.
10. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources.
11. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth.
12. Plan and organize the work related to the occupation.
13. Perform sewing machine operation.
14. Dismantling and assembling of sewing machine.
15. Checking of functions and oiling of sewing machines
16. Using of scissors, tracing wheels etc.
17. Knowledge of trade terminology.
18. Using of L T Scale.
19. Simple drafting, making of different type of paper pattern.
20. Identification and handling of fabrics and texture.
21. Preparation of sample pieces of stiches and sample making using all types of stiches.
22. Selection of colour combination.
23. Pressing of cotton garments, Terene garments and silk garments.

Note:

1. Industry must ensure that above mentioned competencies are achieved by the trainees during their on job training.
2. In addition to above competencies/ outcomes industry may impart additional training relevant to the specific industry.

INFRASTRUCTURE FOR PROFESSIONAL SKILL & PROFESSIONAL KNOWLEDGE

CUTTING AND SEWING MACHINE OPERATOR			
LIST OF TOOLS AND EQUIPMENT for Basic Training (For 16 Apprentices)			
A. TRAINEES TOOL KIT (For each additional unit trainees tool kit Sl. 1-18 is required additionally)			
Sl. no.	Name of the Tool & Equipments	Specification	Quantity
1.	Measuring Tape	150 cm	17 nos.
2.	Seam Ripper		17 nos.
3.	Thimble		17 nos.
4.	Drafting Card Scale(set of six scales)		17 nos.
5.	Tailors Square		17 nos.
6.	French Curve Set		17 nos.
7.	Thread Cutter		17 nos.
8.	Scale Plastic	24''	17 nos.
9.	Paper Cutter		04 nos.
10.	Loop turner		17 nos.
11.	Pencil		17 nos.
12.	Eraser		17 nos.
13.	Sharpener		17 nos.
14.	Bobbin Case		17 nos.
15.	Bobbin		17 nos.
16.	Note Book		17 nos.
17.	Nose Mask		17 nos.
18.	Magnetic Tweezers		As per requirement
19.	Machine Needles		As per requirement

Cutting and Sewing Machine Operator

20.	Hand Needles		As per requirement
21.	Brown Paper		As per requirement
22.	Drafting Pins		As per requirement
23.	Tailors Chalk		As per requirement
B : INSTRUMENTS & GENERAL SHOP OUTFIT			
24.	Pressing table		2
25.	Blanket for padding as pressing table		4
26.	Electric automatic iron		2
27.	Electric automatic steam press		2
28.	Scissor	25 cm	17
29.	Scissor	25 cm (right hand)	17
30.	Scissor	25 cm (left hand)	05
31.	Pinking shear		17
32.	Tailors square		17
33.	Leg shaper		17
34.	Garment hanger (steel/wooden)		As per requirement
35.	Drafting table		
36.	Table sharpner		01
37.	Stools with adjustable height (one for each machine) or chair with low back rest		16
38.	Pattern punch		04
39.	Pattern notcher		04
40.	Pattern hanging hook		04
41.	Dummies ladies		04
42.	Stand for hanging dresses		01
43.	Instructor table		01
44.	Instructor chair		01
45.	Steel almirah		02
46.	White board with accessories		02
47.	Display board covered with glass		04

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48.	Waste bin		17
49.	Screw driver set		05
50.	Duplex board		02
51.	Pigeon hole almirah 10 lockers for trainees		02
52.	Locks for above pigeon hole		20
53.	Wall clock		As per requirement
54.	Calculator desk type		01
55.	Machine attachments		As per requirement
56.	Rubber mat		As per requirement
57.	sprayer		As per requirement
58.	Air conditioner unit 2 ton capacity with stabilizers		As per requirement
C : GENERAL MACHINERY INSTALLATIONS			
1.	Single needle lock stitch industrial model		16 Nos.
2.	Over lock machine 3 thread		02 no.
3.	Over lock machine 5 thread		01 nos.
4.	Button hole machine		01 no.
5.	Button Fixing Machine		01set
6.	Zigzag Multi Purpose Machine		01set
7.	Round Knife Cutting Machine		

ANNEXURE-II

FORMAT FOR INTERNAL ASSESSMENT

Name & Address of the Assessor :						Year of Enrollment :								
Name & Address of ITI (Govt./Pvt.) :						Date of Assessment :								
Name & Address of the Industry :						Assessment location: Industry / ITI								
Trade Name :			Semester:			Duration of the Trade/course:								
Learning Outcome:														
Sl. No	Maximum Marks (Total 100 Marks)		15	5	10	5	10	10	5	10	15	15	Total internal assessment Marks	Result (Y/N)
	Candidate Name	Father's/Mother's Name	Safety consciousness	Workplace hygiene	Attendance/ Punctuality	Ability to follow Manuals/ Written instructions	Application of Knowledge	Skills to handle tools & equipment	Economical use of materials	Speed in doing work	Quality in workmanship	VIVA		
1														
2														