

F.No. 4/1/2024-NTTM
Government of India
Ministry of Textiles

Udyog Bhawan, New Delhi
Dated: 15th April 2024

OFFICE MEMORANDUM

Subject: - Invitation of applications under General Guidelines for Skill Development and Training of Candidates in Technical Textiles- reg.

Applications are invited through email from eligible agencies (Textile Research Associations (TRAs)/ Centre of Excellence (COEs)/ Ministry of Textiles (MoT) Statutory Bodies/ Ministry of Textiles (MoT) Autonomous Bodies/ Public academic institutes involved with Textiles/Technical Textiles/ Institutes approved under NTTM's Education Guidelines Round 1/ Sector Skill Councils/ Focus Incubation Centers (FICs)/ Export Promotion Councils/ Associations/ Companies or any other eligible Organization under the General Guidelines for Skill Development and Training of Candidates in Technical Textiles of National Technical Textiles Mission (NTTM).

2. The detailed Guidelines on the subject has been made available in the public domain from 15th April 2024 onwards and will remain effective upto 15th April 2025, 2400 hrs. (both dates and time inclusive).

4. The Guidelines would target training of 50,000 individuals encompassing Undergraduate students, unskilled workers, professionals seeking upskilling or reskilling, and personnel engaged in the various application areas of technical textiles. The skill development and training cost proposed by participating agency (as per provisions mentioned in Guidelines) shall be jointly funded by the Ministry of Textiles and the trainee.

5. The interested eligible Implementing Agencies may submit their applications (Annexure-III of Guidelines) along with Letter of Empanelment (Annexure-II of Guidelines) via email to: dmd.nttm-textiles@nic.in for onward consideration of empanelment by the concerned Committee.

3. This issues with the approval of Competent Authority.

A handwritten signature in blue ink is written over a date stamp that reads "15.04.24". The signature appears to be "Sourav Mukherjee".

(Sourav Mukherjee)
Deputy Mission Director
National Technical Textiles Mission
Ministry of Textiles



वस्त्र मंत्रालय
MINISTRY OF
TEXTILES



General Guidelines for Skill Development and Training of Candidates in Technical Textiles

**Ministry of Textiles
National Technical Textiles
Mission (NTTM)**



वस्त्र मंत्रालय
MINISTRY OF
TEXTILES

General Guidelines for Skill Development and Training of Candidates in Technical Textiles

**Government of India
Ministry of Textiles
National Technical Textiles Mission (NTTM)**

Table of Contents

1.	Introduction.....	04
2.	Name and Objectives of the Scheme.....	04
3.	Scheme Phases.....	05
4.	Target Group and Eligible Implementing Agencies.....	05
5.	Funding Under the Scheme.....	06
6.	Procedure for Application.....	08
7.	Guidelines for Empaneled IAs.....	09
8.	Release of Grant.....	11
9.	Institutional Mechanism.....	11

Annexure-I: Segment-wise IAs and Skill Training Program Outline

Annexure-II: Letter for Empanelment

Annexure-III: Agency Details for Empanelment

Annexure-IV: CA Certified Expense / Utilization Certificate

Annexure-V: Training Progress Report

General Guidelines for Skill Development and Training of Candidates in Technical Textiles

National Technical Textiles Mission (NTTM), Ministry of Textiles

1. Introduction

Technical textiles account for 15% of overall Textiles and Apparel segment in India. The segment holds importance from employment and investment standpoint by providing direct employment to 4.75 lakh people and generated ~INR 25,790 crores of investment during 2018-19. Growth of technical textiles in India has gained momentum in the past five years. Indian Technical Textiles market stands at USD 24.3 billion in 2022-23, growing at a CAGR of 10% from 2019-22. India's exports of 207 technical textiles products grew to USD 2.5 billion in 2022-23 from USD 2.05 billion in 2020-21 registering a growth rate of 6.8%. In addition, 32 new technical textiles HSN codes have been notified by the Ministry in 2021-22.

The government further aims to accelerate the market growth in the range of 10-15% for next five years, making targeted skill development imperative. Aligning skill supply with market demand, ensuring workforce employability, and preparing for global opportunities are pivotal for this expanding sector and Ministry of Textiles recognizes skill development as a crucial factor in fostering the advancement of the technical textiles sector.

2. Name and Objectives of the Scheme

2.1 This scheme shall be known as "General Guidelines for Skill Development and Training of Candidates in Technical Textiles"

2.2 Objectives:

- (i) Establishment of reservoir of skilled individuals for recruitment in the industry
- (ii) Development of transferable skills adaptable across companies
- (iii) Formation of a robust knowledge and skill ecosystem
- (iv) Seamless integration of qualified professionals into diverse roles, promoting a dynamic and agile workforce
- (v) Fostering a culture of continuous learning within the organization promoting innovation and adaptability

2.3 The Scheme would target training of 50,000 individuals encompassing unskilled workers, professionals seeking upskilling or reskilling, and personnel engaged in the various application areas of technical textiles.

2.4 The scheme shall be valid on pilot basis for one (01) year from issue date of these guidelines.

3. Scheme Phases

The implementation of Scheme shall be in phased manner, covering various segments of technical textiles in two (02) phases basis the requirements of growing and strategically important segments.

Phase I: Agrotech, Buildtech, Geotech, Indutech, Meditech, Mobiltech and Protech

Phase II: Clothtech, Hometech, Oekotech, Sportech, and Packtech

4. Target Group and Eligible Implementing Agencies

The following table highlights the target groups for skilling and training under NTTM and the corresponding agencies that are eligible for implementing the skilling and training. Technical Textiles' segment wise eligibility of Implementing Agencies and target beneficiaries are detailed in Annexure I.

#	Target Group (TG)	Eligible Implementing Agencies (IAs)	Curriculum Development
TG-1	Under-graduate students in engineering, medicine, design, agriculture, aquaculture, sports & lifestyle, fashion technology	(i) TRAs (ii) CoEs of Technical Textiles (iii) MoT Statutory bodies such as NIFT (iv) MoT Autonomous bodies such as SVPISTM (v) Public academic institutes involved with Textiles/Technical Textiles such as IITs & NITs (i) 26 Institutes approved under NTTM's Education Guidelines (Round 1)	Course content aligning with the proposed course content outlined in the Annexure-I, incorporating suggested elements, and more as deemed appropriate.
TG-2	Unskilled persons prior to their employment in technical textiles manufacturing units	(ii) TRAs (iii) CoEs of Technical Textiles (iv) Sector Skill Councils such as Textile Sector Skill Council (TSSC), Construction Skill Development Council of India (CSDC) etc.	Course content aligning with NSQF. TRAs shall serve as Lead Agencies responsible for developing the courses in consultation with Textiles Committee (TC) and concerned sector skill council, such as Textile Sector Skill Council (TSSC), Construction Skill Development Council of India (CSDC), among others.
TG-3	Upskilling or reskilling of already	(i) TRAs (ii) COEs of Technical Textiles	Course content aligning with the proposed

#	Target Group (TG)	Eligible Implementing Agencies (IAs)	Curriculum Development
	employed technical manpower for skill level categories 5 and above	<ul style="list-style-type: none"> (iii) FICs (iv) Export Promotion Councils involved with textiles or technical textiles such as MATEXIL, AEPC (v) Technical Textiles related Industry Associations (vi) MoT Statutory bodies such as NIFT (vii) MoT Autonomous bodies such as SVPISM (viii) Public academic institutes involved with Textiles or Technical Textiles such as IITs and NITs (ix) Individual Companies involved in Textiles or Technical Textiles* (x) Collaboration of atleast 5 companies involved in Textiles or Technical Textiles** 	course content outlined in the Annexure-I, incorporating suggested elements, and more as deemed appropriate.
TG-4	Training and skilling of personnel employed in application areas of technical textiles e.g., paramedics, agriculture, railways/road, water resources, landfills, etc..	<ul style="list-style-type: none"> (i) TRAs (ii) COEs of Technical Textiles (iii) Technical Textiles User Ministry Bodies or Technical Textiles User Ministry related Academic/Training Institutes (iv) Public academic institutes involved with Textiles or Technical Textiles such as IITs and NITs 	Course content aligning with the proposed course content outlined in the Annexure-I, incorporating suggested elements, and more as deemed appropriate

TRAs – Textile Research Association, CoEs – Centre of Excellences, FIC - Focus Incubation Centre

*Note: * Individual company training its own employees; ** Atleast five (05) companies can collaborate, with one (01) company taking the lead for jointly developing course curriculum and providing training to their employees.*

5. Funding under the Scheme

5.1 Financial Assistance

5.1.1 The skill development and training cost proposed by participating agency shall be jointly funded by the Ministry of Textiles and the trainee.

5.1.2 Maximum amount that can be funded by Ministry of Textiles for skill development and training programs, as applicable to Implementing Agency conducting these programs for the relevant target group shall be as shown in detail at Para 5.2 of this document.

5.1.3 Ministry contribution shall cover the components such as mobilization of candidates, curriculum development, trainers' training, equipment, teaching aid, raw material, assessment cost, salary of trainers, and other components as per the Common Norms for Skill Development Schemes of Ministry of Skill Development and Entrepreneurship.

5.2 Assistance provision per candidate for different target group focused skill development programs

#	Target Group	Course Duration	MoT Contribution Per Trainee Upto (INR)	Trainee Contribution Upto (INR)	Total Candidates to be Trained under NTTM
TG-1	Under-graduate students in engineering, medicine, design, agriculture, aquaculture, sports & lifestyle, fashion technology	120 hours/ Max. 28 days	10,000	5,000	5,000
TG-2	Unskilled persons prior to their employment in technical textiles manufacturing units	300 hours/ Max. 70 days	20,000	5,000	15,000
TG-3	Upskilling or reskilling of already employed technical manpower for skill level categories 5 and above	60-120 hours/ Max. 14-28 days (Low-level & Mid-level Management)	10,000 (Eligible IAs other than individual Companies)	5,000* (Eligible IAs other than individual Companies)	15,000
		24 hours / Max. 4 days for CXOs	10,000	5,000	
TG-4	Training and skilling of personnel employed in application areas of technical textiles e.g., paramedics, agriculture, railways /road, water resources, landfills, etc.	60-120 hours/ Max. 14-28 days	10,000	5,000	15,000

Note: Each implementing agency, other than individual companies, can train maximum of 1,000 candidates in each target group in a financial year; Each individual company can train maximum of 100 employees or upto 25% of its employee strength in the corresponding category, whichever is lower in a financial year. * Company can also bear the cost of employee/trainee contribution.

6. Procedure for Application

6.1 Empanelment of Implementing Agencies (IAs)

6.1.1 The interested eligible Implementing Agencies may get empaneled by submitting the applications (Annexure-III) along with Letter of Empanelment (Annexure-II) via email to: dmd.nttm-textiles@nic.in.

6.1.2 Eligible IAs envisioning to conduct skilling and training programs shall be shortlisted by Skill Development Committee under NTTM, composition of which is detailed in Para 9.1 of this document. Empanelment of IAs shall be conveyed through an OM issued by Ministry of Textiles.

6.2 Proposal Submission and Review

6.2.1 Empaneled Implementing Agencies shall submit detailed proposal to Mission Directorate, NTTM at: dmd.nttm-textiles@nic.in

6.2.2 The proposal may include overview of training program, training location, course curriculum, details of target beneficiaries, batch size, trainee contributions and financial support sought from the Ministry, among others.

6.2.3 The course content for all the skill trainings shall be standardized to meet the market needs and have international curriculum mapping.

6.2.4 Certification by a minimum of five industry partners at the MD/CEO level, following a standard format shall be mandatory for the development of course content for all the skill trainings. This shall not be applicable in case of collaboration of atleast 5 companies involved in Textiles or Technical Textiles under target group 3 (as mentioned in Para 4 TG-3 (x) point)

6.2.5 Empaneled Implementing Agencies may partner with other bodies/organizations for better outreach and participation however sub-contracting is not allowed and fund disbursement under NTTM shall be to the primary partner.

6.2.6 The Skill Development Committee (SDC) of NTTM shall evaluate the proposals submitted by the Implementing Agencies (IAs) for suggesting the same to Empowered Programme Committee (EPC) as per the implementation mechanism of NTTM.

6.2.7 The Empowered Programme Committee (EPC), under the chairmanship of Secretary, Textiles, constituted as per the Institutional Mechanism of the National Technical Textiles Mission (NTTM), shall be the final authority for approving the proposals of the participating agencies envisioning to conduct Technical Textiles' skill development and training programs.

6.3 Fund Disbursement

6.3.1 Post the approval of EPC, funds shall be disbursed against the approved proposals of empaneled implementing agencies, as per Para 5 and Para 8A/8B of this document.

6.3.2 EPC shall be the final deciding authority with regard to the quantum and type of funding assistance as well as any modification to the criteria as laid down in this document.

6.3.3 Release of funds to the Implementing Agency shall be subject to the fulfilment of terms and conditions as approved by the Empowered Programme Committee.

6.3.4 The empaneled Implementing Agency will have to follow the GFR procedure towards utilization of the funds and all claims shall be supported by the requisite documents such as Utilization Certificate & Expenditure Statement, Training Progress Report including Trainee details such as name, age, education, bank account details, trainee contribution – online deposit slip, biometric attendance, details of assessment of the trainees, certificates issued to trainees and other relevant data of trainees certified. Refer to Annexure IV and V for relevant formats.

6.3.5 The empaneled Implementing Agency shall declare that no grant has been undertaken by them from Central or State Government under any other scheme or from any other components of National Technical Textiles Mission (NTTM) except from skilling and training component within NTTM, for the costs involved.

6.4 Certification

After the assessment of the candidates and successful completion of training program, each participant shall receive a **certificate of completion** from Implementing Agency endorsing participant's ability or knowledge for the training undertaken. The certificate shall have mention of this Guidelines (name), National Technical Textiles Mission (NTTM), Ministry of Textiles.

7.A. Guidelines for Empaneled IAs, other than Companies

7.1 In order to create awareness amongst the targeted beneficiaries, the empaneled Implementing Agencies shall be required to ensure **branding and marketing** of the NTTM's skill development and training program through print/ electronic media, social media, awareness through camps/ melas and other forms of media.

7.2 The **selection process for identifying the trainees** shall be transparent and inclusive. The trainee must be a citizen of India possessing an Aadhaar Card (unless exempted under Aadhaar Act, 2016) with age over 17 years.

7.3 **Mandatory Aadhaar Enabled Biometric Attendance System** shall be adopted to ensure real time attendance of the trainers and the trainees.

7.4 The empaneled Implementing Agencies shall be responsible for **mobilization and selection of the trainees**, keeping in view the requirements of the industry and other stakeholders in a transparent manner by giving opportunity to all willing persons.

7.5 Each of the training centres shall be run by a qualified trainer and support staff. The **capacity of the trainers** shall be enhanced through a comprehensive Training of Trainers (ToT) Programme.

7.6 In order to enhance the effectiveness and quality, Implementing Agencies may consider inviting **top experts from industry and institutions** like IIMs, IITs, NITs and other premier institutes to deliver the training.

7.7 Ministry of Textiles through Mission Directorate, NTTM may depute officers to **oversee the training and assessment process** and conduct surprise visits for monitoring the process of training and assessment.

7.8 The quality of the skilling and training programs should be of **international/national standards** and should be commensurate with the program amount and its targeted objective.

7.B. Guidelines for Companies as Empaneled IAs

7.9 The guidelines mentioned in para 7.1 to 7.8 shall apply.

7.10 A single company can create course content and provide training in at-the-most two (02) segments of technical textiles.

7.11 The Ministry of Textiles shall reserve the rights to share the course curriculum created by the company(s) with third party for the purpose of awareness and benefits at larger scale.

7.12 The company(s) shall retain the employees trained under these guidelines of NTTM for atleast three (03) months post the completion of training provided.

7.13 Apart from the documents mentioned in the Para 6.3.4, the company(s) shall submit the details of the employee (trainee), including employee name, employee number/ID, employee employment period with the company, among other relevant details. The company(s) shall also maintain video recordings of the training sessions conducted.

8.A. Release of Grant for Empaneled IAs, other than Individual Companies

Instalment	Milestone	Ministry Funding
1st Instalment	First 50% of the approved grant after approval of the proposal by the Empowered Programme Committee (EPC)	50% of total Ministry Contribution
2nd Instalment	Remaining 50% of the approved grant on reimbursement basis after successful training completion and submission of relevant documents (mentioned in Para 6.3.4 of this document).	Remaining 50% of Ministry Contribution

Note: For example – – In case of training of one candidate under TG-2, INR 10,000 shall be disbursed to the Implementing Agency on the approval of the proposal by the Empowered Programme Committee (EPC). Balance INR 10,000 shall be reimbursed upon submission of the requisite documents such as Utilization Certificate, Expenditure Statement, Project Progress Report including Trainee details such as name, age, education, bank account details, trainee contribution – online deposit slip, biometric attendance and data of trainees certified among others, as mentioned in para 6.3.4.

8.B. Release of Grant for Individual Companies as Empaneled IAs

Instalment	Milestone	Ministry Funding
Single Instalment	100% approved grant (MOT Contribution) on reimbursement basis after three (03) months of successful training completion and submission of relevant documents (mentioned in Para 6.3.4 & 7.13 of this document).	100% of Ministry Contribution

9. Institutional Mechanism

9.1 Skill Development Committee, NTTM: The Skill Development Committee (SDC) under NTTM with following composition shall review and shortlist the interested IAs for empanelment and the evaluate the proposals submitted by empaneled IAs for suggesting to EPC for onward approval.

9.1.1 Composition of Skill Development Committee (SDC) under NTTM

- Joint Secretary (Incharge of NTTM), Ministry of Textiles- In Chair
- Representative from Ministry of Skill Development and Entrepreneurship- Member
- Director/DS, Internal Finance Wing (IFW), Ministry of Textiles- Member
- Joint Mission Director, NTTM, Ministry of Textiles- Member
- Deputy Mission Director, NTTM, Ministry of Textiles- Convenor

9.2 Empowered Programme Committee, NTTM: After the suggestions of Skill Development Committee, the Empowered Programme Committee (EPC) shall provide the final approval to the proposals of the empaneled Implementing Agencies (IAs). The composition of EPC has been mentioned in the Gazette Notification of NTTM, dated 19th March 2020.

Annexure – I

Following is the Segment-wise IAs and Skill Training Program Outline:

Segment: Agrotextiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Agriculture - Aquaculture - Horticulture - Mechanical - Other relevant engineering courses	Undergraduate students	Agrotech 101	i. Introduction to Agrotextiles ii. Classification of Agrotextiles iii. Composition and construction of Agrotextiles iv. Manufacturing of Agrotextiles v. Testing and evaluation of Agrotextiles vi. Market scenario of Agrotextiles	120 hours/ Max. 28 days	1. SASMIRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	- Machine operator for Raschel Warp Knitting - Machine operator for Warp Beaming - Machine operator for Calmar's Warp Knitting Machines and Micro Slitters - Machine operator for Blown Film System - Machine operator for Circular Weaving - Machine operator for Needle Punch Nonwoven	10 th pass	Agrotech 102	i. Raw Material Categories ii. SOP of the process iii. Identification of machine parts & machine overview iv. Operations, handling & maintenance of machine v. Common machine breakdowns & handling procedures vi. Product quality in operations (including testing for lab personnel) viii. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. SASMIRA 2. Textile Sector Skill Council (TSSC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		- Machine Fitter for the above machine - Machine Supervisor for above machines - Testing & inspection personnel					
3a	Manpower for upskilling /reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile /Technical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/technical textile industry is desirable	Agrotech 103	i. Overview of Agrotextile ii. Specific product(s) covered under the training (Shade nets/ground covers/crop covers/bird protection nets/vermi bed/hail protection net/ pond liner etc.) iii. Manufacturing technology of specific products iv. Input materials v. Maintenance practices vi. Process & quality control techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas	60-120 hours/ Max. 14-28 days	1. SASMIRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles 3. Individual Companies involved in Textiles or Technical Textiles 4. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/ Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
3b	Manpower for upskilling /reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in Textile/Technical Textile industry is desirable	Agrotech 104	i. Overview of agrotextile ii. Products covered under agrotextile iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. SASMIRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of atleast 5 companies involved in Textiles or Technical Textiles
3c	Manpower for upskilling /reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as including Textile Technology, Chemical Engineering/	Agrotech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.)	24 hours / Max. 4 days for CXOs	1. SASMIRA 2. MATEXIL 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII

S. No.	Target Group	Target Beneficiary/ Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			Processing, Mechanical Engineering is desirable 2. MBA is desirable		v. Global supply chain overview		
4	Personnel Employed in Application Areas	Farmers, traders, suppliers, service providers, installation contractors, field engineers, entrepreneurs, government officials, training of trainers, students /academicians /researchers in related field.	-	Agrotech App 101	i. Product overview & standardization ii. Safe installation procedures iii. Product maintenance & upkeep guidelines	60-120 hours/ Max. 14-28 days	1. Indian Council of Agricultural Research (ICAR) 2. Krishi Vigyan Kendras (KVKs) 3. SASMIRA 4. Marine Products Export Development Authority (MPEDA) 5. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Agro Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Agro Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Geotextiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Civil engineering - Water resources engineering - Oceanography - Other relevant engineering courses	Undergraduate students	Geotech 101	i. Introduction to Geotextiles ii. Classification of Geotextiles iii. Composition and construction of Geotextiles iv. Manufacturing of Geotextiles v. Testing and evaluation of Geotextiles vi. Market scenario of Geotextiles	120 hours/ Max. 28 days	1. BTRA 2. ATIRA 3. IJIRA (Jute based Geotextiles) 4. NIFT 5. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	Fibre manufacturing: - Man-made fibre manufacturing operators - Yarn manufacturing: - Ring spinning machine operators - Melt spinning machine operators - Wet spinning machine operators - Gel Spinning machine operators - Carding machine	10 th pass	Geotech 102	i. Raw Material Categories ii. SOP of the process iii. Identification of machine parts & machine overview iv. Operations, handling & maintenance of machine v. Common machine breakdowns & handling procedures vi. Product quality in operations (including testing for lab personnel) viii. EHS (Employee, Health & Safety) regulations &	300 hours/ Max. 70 days	1. BTRA 2. ATIRA 3. IJIRA (Jute based Geotextiles) 4. Textile Sector Skill Council (TSSC) 5. Construction Skill Development Council of India (CSDC)

S. No.	Target Group	Target Beneficiary/ Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		<p>operators Post spinning activities: - Texturizing machine operators Warping machine operators</p> <p>Weaving: - Weaving machine operators (both heavy duty and narrow width) - Nonwoven machine operators - Needle punch non-woven machine operators - Hydroentangled nonwoven machine operators Knitting - Knitting machine operators - Processing / Finishing - Coating machine operators - Lamination machine operator - Composite making</p>			organizational requirements		

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		machine operators Chemical preparation by mixer for coating, Woven/dryer Testing & Inspection personnel					
3a	Manpower for upskilling/reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Technical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/technical textile industry is desirable	Geotech 103	i. Overview of geotextiles ii. Specific product(s) covered under the training (Geotextiles / Geogrids / Geonets/Geocell/Geobags/Geomembranes etc.) iii. Manufacturing technology of specific products iv. Input materials for woven/non-woven product v. Maintenance practices vi. Process & quality control techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas	60-120 hours/ Max. 14-28 days	1. BTRA 2. ATIRA 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. Individual Companies involved in Textiles or Technical Textiles 5. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/ Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
3b	Manpower for upskilling/ reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Geotech 104	i. Overview of geotextiles ii. Products covered under geotextiles iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. BTRA 2. ATIRA 3. NIFT 4. IITs, NITs & other public institutes involved in textiles or technical textiles 5. ITTA, FICCI, CII 6. Individual Companies involved in Textiles or Technical Textiles 7. Collaboration of at least 5 companies involved in Textiles or Technical Textiles
3c	Manpower for upskilling/ reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as Textile Technology, Chemical Engineering/ Processing,	Geotech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.)	24 hours / Max. 4 days for CXOs	1. BTRA 2. ATIRA 3. MATEXIL 4. IITs, NITs & other public institutes involved in textiles or technical textiles 5. ITTA, FICCI, CII

S. No.	Target Group	Target Beneficiary/ Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			Mechanical Engineering, Civil Engineering is desirable 2. MBA is desirable		v. Global supply chain overview		
4	Personnel Employed in Application Areas	- Traders, suppliers, service providers, installation contractors, field engineers, Junior Engineer (JE)/Senior Section Engineer (SSE)/Executive Engineers (EE)/Assistant (AE) in road/water /railway application areas, entrepreneurs, government officials, training of trainers, students/ academicians/researchers in related field.	-	Geotech App 101	i. Product overview & standardization ii. Safe installation procedures iii. Product maintenance & upkeep guidelines	60-120 hours/ Max. 14-28 days	1. Central Road Research Institute (CRRRI) 2. National Water Academy (NWA) 3. General Reserve Engineer Force (GREFF Centre), BRO 4. Indian Railways Institute of Civil Engineering 5. Indian Academy of Highway Engineers (IAHE) 6. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Geo Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Geo Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Protective Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Textile Design - Fashion Design - Fashion Technology - Other relevant engineering courses	Undergraduate students	Protech 101	i. Introduction to Protective textiles ii. Classification of Protective textiles iii. Composition, design and construction of Protective textiles iv. Manufacturing of Protective textiles v. Testing and evaluation of Protective textiles vi. Market scenario of Protective textiles	120 hours/ Max. 28 days	1. NITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	- Spinning operator for spinning high performance fibres and their blends - Loom operator for weaving high performance yarn like aramid, modacrylic, etc. - Dyeing machine operator for dyeing high performance fibre, yarn and fabric - Finishing machine operator for finishing high performance fibre,	10th pass	Protech 102	i. Raw Material Categories ii. SOP of the process iii. Identification of machine parts & machine overview iv. Operations, handling & maintenance of machine v. Common machine breakdowns & handling procedures vi. Product quality in operations (including testing for lab personnel), evaluation of FR textiles viii. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. NITRA 2. Textile Sector Skill Council (TSSC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		yarn and fabric - Quality control personnel's for Quality control of high performance material - Garment machine operators for garmenting protective garments like fire fighter suits, Extreme cold climate clothing, etc.					
3a	Manpower for upskilling/reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Technical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/technical textile industry is desirable	Protech 103	i. Overview of protective textiles ii. Specific product(s) covered under the training (High Altitude Clothing/Ballistic Protective Clothing - Bullet Proof Jackets (BPJs)/Ballistic Helmets/Fire Retardant Fabrics/Apparels/High Visibility Clothing/NBC Suits, CPC, Industrial Gloves & others etc.) iii. Manufacturing technology of specific products iv. Input materials v. Maintenance practices vi. Process & quality control techniques vii. Test methods, instruments used, standardization &	60-120 hours/ Max. 14-28 days	1. NITRA 2. Apparel Training & Design Centre (ATDC), under AEPC 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. Individual Companies involved in Textiles or Technical Textiles 5. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
					compliances viii. Overview of application areas		
3b	Manpower for upskilling/ reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Protech 104	i. Overview of protective textiles ii. Products covered under protective textiles iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. NITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of atleast 5 companies involved in Textiles or Technical Textiles
3c	Manpower for upskilling/ reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as Textile Technology, Chemical Engineering	Protech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms	24 hours / Max. 4 days for CXOs	1. NITRA 2. MATEXIL 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			/Processing, Mechanical Engineering is desirable 2. MBA is desirable		(FTAs, trade barriers etc.) v. Global supply chain overview		
4	Personnel Employed in Application Areas	Defense personnel, suppliers, service providers, designers, entrepreneurs, user government officials, training of trainers, students /academicians /researchers in related field.	-	Protech App 101	i. Product overview & standardization ii. Safe handling/usage procedures iii. Product maintenance & upkeep guidelines iv. Waste Disposal Management	60-120 hours/ Max. 14-28 days	1. Department of Defence Production 2. Defence Headquarters Training Institute (DHTI) 3. Terminal Ballistics Research Laboratory (TBRL) 4. IITs, NITs& other public institutes involved in textiles or technical textiles

Note: The Protective Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Protective Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Medical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Medicine - Material science - Bio-medical engineering - Biotechnology - Other relevant engineering courses	Undergraduate students	Meditech 101	i. Introduction to Medical textiles ii. Classification of Medical textiles iii. Composition, design and construction of Medical textiles iv. Manufacturing of Medical textiles v. Testing and evaluation of Medical textiles vi. Market scenario of Medical textiles	120 hours/ Max. 28 days	1. SITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	Machine operators of Spinning – Blowroom, carding, draw frame, ring frame, winding, packaging m/c Weaving – Airjet, water jet looms, high speed rapier looms, narrow loom Knitting – Warp knitting, high speed weft knitting m/c	10 th pass	Meditech 102	i. Raw Material Categories ii. SOP of the process iii. Identification of machine parts & machine overview iv. Operations, handling & maintenance of machine v. Common machine breakdowns & handling procedures vi. Product quality in operations (including testing for lab personnel) viii. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. SITRA 2. Textile Sector Skill Council (TSSC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		<p>Braiding – Radial braiding m/c, Spacer fabric m/c</p> <p>Bonding – Thermal bonding m/c, hook & loop fastener m/c</p> <p>Non-woven – Spun bond, melt blown, spun lace, needle punching m/c</p> <p>Finishing & Processing – Jet dyeing m/c, continuous pad drying m/c, CAD printing m/c, lamination & coating m/c</p> <p>Garmenting – Cutting m/c, Sewing m/c</p> <p>Testing & Inspection – Continuous inspection m/c, breathability tester (MVTR), tensile testers, tear tester, anti-microbial testing m/c,</p>					

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		anti-viral testing m/c, bacterial & fungal bioburden, ETO sterilization tester, gamma-sterilization testing m/c, UV irradiation, testing m/c for colourfastness to rubbing, washing, bleaching, dry cleaning & light Packaging – Stretch wrap m/c, vacuum packing m/c, gas purging m/c					
3a	Manpower for upskilling/reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Technical Textile industry is desirable 4. Diploma holders, with relevant	Meditech 103	i. Overview of medical textiles ii. Specific product(s) covered under the training (PPE coveralls, Masks, Surgical Drapes, Gowns & Shoe covers, Surgical Dressings, Compression garments, Disposable Medical Wipes etc.) iii. Manufacturing technology of specific products iv. Input materials for woven/non-woven product v. Maintenance practices vi. Process & quality control	60-120 hours/ Max. 14-28 days	1. SITRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles 3. Individual Companies involved in Textiles or Technical Textiles 4. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			experience in textile/technical textile industry is desirable		techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas		
3b	Manpower for upskilling/reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Meditech 104	i. Overview of medical textiles ii. Products covered under medical textiles iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. SITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of at least 5 companies involved in Textiles or Technical Textiles
3c	Manpower for upskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant	Meditech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles	24 hours / Max. 4 days for CXOs	1. SITRA 2. MATEXIL 3. IITs, NITs& other

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
	g/reskilling		discipline such as Textile Technology, Chemical Engineering /Processing, Textile & Polymer Technology is desirable 2. MBA is desirable		ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.) v. Global supply chain overview		public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII
4	Personnel Employed in Application Areas	Medical professionals, biotechnologist, biochemists, material scientists, textile & polymer technologists, user government officials, training of trainers, students/ academicians/researchers in related field.	-	Meditech App 101	i. Product overview & standardization ii. Safe handling and usage procedures iii. Product storage and disposal guidelines	60-120 hours/ Max. 14-28 days	1. SITRA 2. Sardar Vallabhbhai Patel International school of Textiles and Management (SVPISTM) 3. NIT-Jalandhar 4. Indian Council of Medical Research (ICMR) 5. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Medical Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Medical Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Building Textile

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Civil engineering - Mechanical engineering - Construction engineering - Other relevant engineering courses	Undergraduate students	Buildtech 101	i. Introduction to Building textiles ii. Classification of Building textiles iii. Composition, design and construction of Building textiles iv. Manufacturing of Building textiles v. Testing and evaluation of Building textiles vi. Market scenario of Building textiles	120 hours/ Max. 28 days	1. ATIRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	Yarn Manufacturing: Machine Operator & Supervisor for Blow room, Card and Preparatory Ring Spinning & Dref Spinning Winding Post Spinning: Machine Operator & Supervisor for TFO / Doubling Warping Weaving: Machine	10th pass	Buildtech 102	i. Raw Material Categories ii. SOP of the process iii. Identification of machine parts & machine overview iv. Operations, handling & maintenance of machine v. Common machine breakdowns & handling procedures vi. Product quality in operations (including testing for lab personnel) viii. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. ATIRA 2. Textile Sector Skill Council (TSSC) 3. Construction Skill Development Council (CSDC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		<p>Operator & Supervisor for Rapier Water jet Air jet Narrow width looms</p> <p>Braiding: Machine Operator & Supervisor for Developing Braided structures using Radial Braiding machine</p> <p>Smart Textile: Machine Operator & Supervisor for knowing about Smart textiles, classification, material to be used and application</p> <p>Lamination: Machine Operator & Supervisor for Laminated product development for canopies, tarpaulin, signage boards, awnings etc.</p> <p>Technical Testing: Machine Operator & Supervisor for Fibre, Yarn and Textile testing</p>					

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		Composites for building textiles: Pultrusion machine operator, Compression molding operator, Impregnation plant operator, Vacuum infusion and vacuum bagging process technician, Filament winding process technician, Composite repair technician, Composite testing machine operator and technician, Braiding machine operator					
3a	Manpower for upskilling/reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Techn	Buildtech 103	i. Overview of building textiles ii. Specific product(s) covered under the training (Acoustic Fabric, Architectural Membranes, Awnings and Canopy, Canvas Tarpaulin, HDPE Tarpaulin, Hoardings/Signages,	60-120 hours/ Max. 14-28 days	1. ATIRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles 3. Individual Companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			ical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/technical textile industry is desirable		Scaffolding Nets etc.) iii. Manufacturing technology of specific products iv. Input materials for woven/non-woven product v. Maintenance practices vi. Process & quality control techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas		4. Collaboration of at least 5 companies involved in Textiles or Technical Textiles
3b	Manpower for upskilling/reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Buildtech 104	i. Overview of building textiles ii. Products covered under building textiles iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government	60-120 hours/ Max. 14-28 days	1. ATIRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
					schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills		
3c	Manpower for upskilling/reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as Textile Technology, Chemical Engineering /Processing, Mechanical Engineering, Civil Engineering is desirable 2. MBA is desirable	Buildtech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.) v. Global supply chain overview	24 hours / Max. 4 days for CXOs	1. ATIRA 2. MATEXIL 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII
4	Personnel Employed in Application Areas	- Engineers, architects, designers, site developers, traders, suppliers, service providers, entrepreneurs, user government officials, training of	-	Buildtech App 101	i. Product overview & standardization ii. Safe installation/handling/usage procedures iii. Product maintenance & upkeep guidelines	60-120 hours/ Max. 14-28 days	1. Construction industry development council 2. National CPWD Academy 3. Bureau of Indian Standards

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		trainers, students/academicians /researchers in related field.					4. Building Materials & Technology Promotion Council (BMTPC) 5. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Building Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Building Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Industrial Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Civil engineering - Mechanical engineering - Industrial engineering - Other relevant engineering courses	Undergraduate students	Indutech 101	i. Introduction to Industrial textiles ii. Classification of Industrial textiles iii. Composition, design and construction of Industrial textiles iv. Manufacturing of Industrial textiles v. Testing and evaluation of Industrial textiles vi. Market scenario of Industrial textiles	120 hours/ Max. 28 days	1. ATIRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	Yarn Manufacturing: Machine Operator & Supervisor for Blow room, Card and Preparatory Ring Spinning & Dref Spinning Winding Post Spinning: Machine Operator & Supervisor for TFO / Doubling Warping Weaving: Machine Operator & Supervisor	10th pass	Indutech 102	i. Identification of machine parts & machine overview ii. Operations, handling & maintenance of machine iii. Health, safety and security procedures iv. Product quality in operations v. Common machine breakdowns & handling procedures vi. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. ATIRA 2. Textile Sector Skill Council (TSSC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		<p>for Rapier Water jet Air jet Narrow width looms Braiding: Machine Operator & Supervisor for Developing Braided structures using Radial Braiding machine Smart Textile: Machine Operator & Supervisor for knowing about Smart textiles, classification, material to be used and application Lamination: Machine Operator & Supervisor for Laminated product development for canopies, tarpaulin, signage boards, awnings etc. Technical Testing: Machine Operator & Supervisor for Fibre, Yarn and Textile testing Composites for industrial textiles: Pultrusion machine operator, Compression molding operator,</p>					

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		Impregnation plant operator, Vacuum infusion and vacuum bagging process technician, Filament winding process technician, Composite repair technician, Composite testing machine operator and technician, Braiding machine operator					
3a	Manpower for upskilling /reskilling	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Technical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/techni	Indutech 103	i. Overview of industrial textiles ii. Specific product(s) covered under the training (Conveyor Belts & Drive Belts/Industrial Filtration Textiles/Textiles for Acoustics/Decatising Cloth and Bolting Cloth/Industrial Wipes/ Awning /Architectural Membrane /Composites etc.) iii. Manufacturing technology of specific products iv. Input materials for woven/non-woven product v. Maintenance practices	60-120 hours/ Max. 14-28 days	1. ATIRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles 3. Individual Companies involved in Textiles or Technical Textiles 4. Collaboration of at least 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			cal textile industry is desirable		vi. Process & quality control techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas		
3b	Manpower for upskilling/reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Indutech 104	i. Overview of segment ii. Products covered under the segment iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. ATIRA 2. NIFT 3. IITs, NITs& other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of atleast 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
3c	Manpower for upskilling/reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as Textile Technology, Chemical Engineering /Processing, Mechanical Engineering is desirable 2. MBA is desirable	Indutech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.) v. Global supply chain overview	24 hours / Max. 4 days for CXOs	1. ATIRA 2. MATEXIL 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII
4	Personnel Employed in Application Areas	Field engineers, service providers, suppliers, contractors, users, entrepreneurs, training of trainers, students/academicians/researchers in related field.	-	Indutech App 101	i. Product overview & standardization ii. Safe handling and usage procedures iii. Product maintenance & upkeep guidelines	60-120 hours/ Max. 14-28 days	1. ATIRA 2. BTRA 3. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Industrial Textiles skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Industrial Textiles skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Segment: Mobiltech

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
1	Undergraduate Students	Undergraduate students in: - Civil engineering - Mechanical engineering - Industrial engineering - Other relevant engineering courses	Undergraduate students	Mobiltech 101	i. Introduction to Mobiltech ii. Classification of Mobiltech iii. Composition, design and construction of Mobiltech iv. Manufacturing of Mobiltech v. Testing and evaluation of Mobiltech vi. Market scenario of Mobiltech	120 hours/ Max. 28 days	1. NITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles & 26 institutes approved under NTTM's education guidelines (round 1)
2	Unskilled Persons	Machine operators: Weaving – Narrow loom Knitting – Warp knitting, high speed weft knitting m/c Braiding – Radial braiding machine, spacer fabric m/c Bonding – Thermal bonding m/c, hook & loop fastener m/c Non-woven – Spun bond,	10th pass	Mobiltech 102	i. Identification of machine parts & machine overview ii. Operations, handling & maintenance of machine iii. Health, safety and security procedures iv. Product quality in operations v. Common machine breakdowns & handling procedures vi. EHS (Employee, Health & Safety) regulations & organizational requirements	300 hours/ Max. 70 days	1. NITRA 2. Textile Sector Skill Council (TSSC)

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
		<p>melt blown, spun lace, needle punching m/c</p> <p>Finishing & Processing – Lamination & coating m/c, finishing automotive textiles for water repellence, flame retardancy and stain resistance properties</p> <p>Testing & Inspection – Filtration tester, breathability tester (MVTR), tensile testers, tear tester, functional test, snagging, fog test, colourfastness to rubbing, washing, bleaching, dry cleaning & light, International Automotive Task Force (AITF) norms</p> <p>Packaging – Stretch wrap m/c, vacuum packing m/c</p>					

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
3a	Manpower for upskilling /reskillin g	Jobber, Supervisor, Floor Manager, Quality Control/Assurance personnel, Sr. Executive, Dy. Manager	<ol style="list-style-type: none"> 1. ITI technician (jobber) 2. Bachelor's degree in any field 3. Experience in Textile/Technical Textile industry is desirable 4. Diploma holders, with relevant experience in textile/technical textile industry is desirable 	Mobiltech 103	<ol style="list-style-type: none"> i. Overview of mobiltech ii. Specific product(s) covered under the training (Airbags (TT component)/ Automotive Interior Carpets/Car Body Covers/Helmets (TT component)/ Insulation Felts (TT component)/ Seat Belt Webbing/Seat Cover Fabrics, Tyre Cord Fabric etc.) iii. Manufacturing technology of specific products iv. Input materials for woven/non-woven product v. Maintenance practices vi. Process & quality control techniques vii. Test methods, instruments used, standardization & compliances viii. Overview of application areas 	60-120 hours/ Max. 14-28 days	<ol style="list-style-type: none"> 1. NITRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles 3. Individual Companies involved in Textiles or Technical Textiles 4. Collaboration of atleast 5 companies involved in Textiles or Technical Textiles

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
3b	Manpower for upskilling/reskilling	General Managers/Plant Managers/Production Manager	1. Bachelor's degree in any field 2. Diploma in textile technology and textile engineering is desirable 3. Experience in textile/technical Textile industry is desirable	Mobiltech 104	i. Overview of segment ii. Products covered under the segment iii. Global best practices review in manufacturing/production vi. Supply chain overview - Raw material to Finished product v. Standardization, compliances and product/process certification wrt international bodies vi. Review of Government schemes & promotion initiatives for the segment vii. Problem identification and solving viii. Strategic Planning skills	60-120 hours/ Max. 14-28 days	1. NITRA 2. NIFT 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII 5. Individual Companies involved in Textiles or Technical Textiles 6. Collaboration of at least 5 companies involved in Textiles or Technical Textiles
3c	Manpower for upskilling/reskilling	Senior Management & CXOs	1. Bachelor's Degree in a relevant discipline such as Textile Technology, Chemical Engineering /Processing,	Mobiltech 105	i. Overview of all 12 Verticals/Segments of Technical Textiles ii. Production, Market size & Emerging Technologies iii. Concept of HS Code & its Significance in trade iv. Export/Import policies, trends, regulatory reforms (FTAs, trade barriers etc.)	24 hours / Max. 4 days for CXOs	1. NITRA 2. MATEXIL 3. IITs, NITs & other public institutes involved in textiles or technical textiles 4. ITTA, FICCI, CII

S. No.	Target Group	Target Beneficiary/Job roles	Eligibility	Training Category Name	Course Content	Duration	Implementing Agency
			Mechanical Engineering is desirable 2. MBA is desirable		v. Global supply chain overview		
4	Personnel Employed in Application Areas	Field engineers, service providers, suppliers, contractors, users, entrepreneurs, training of trainers, students/academicians/researchers in related field.	-	Mobiltech App 101	i. Product overview & standardization ii. Safe handling and usage procedures iii. Product maintenance & upkeep guidelines	60-120 hours/ Max. 14-28 days	1. NITRA 2. IITs, NITs & other public institutes involved in textiles or technical textiles

Note: The Mobiltech skilling & training courses must encompass the above outlined course content however Implementing Agencies have the flexibility to incorporate additional elements in consultation with industry and experts. Also, global best practises some of which are already highlighted in Section 5 – Global Case Studies of this report may be integrated in the Mobiltech skilling & training programs; Few hours in the trainings curriculum to be allocated towards related soft skill development

Annexure -II

Letter for Empanelment

To,
Deputy Mission Director
National Technical Textiles Mission, Ministry of Textiles
Udyog Bhawan
Rafi Ahmed Kidwai Marg
New Delhi - 110001

Location: <>

Date:<>

Dear Sir/Madam,

We, the undersigned, offer to be selected as an Empaneled Implementing Agency for providing skill training in accordance with your 'General Guidelines for Skill Development and Training of Candidates in Technical Textiles' under National Technical Textiles Mission, Ministry of Textiles, Government of India, dated [Insert Date]. We have appended the requisite details of our organization with this application.

We hereby declare that all the information and statements made in the online application are true and accept that any misinterpretation contained in it may lead to our disqualification.

We understand you are not bound to accept any application you receive.

Yours sincerely,

Authorized signature (in full and details):

Name and Title of Signatory:

Name of Firm/entity:

Address:

Annexure - III

Agency Details for Empanelment

Training Category Name(s): (Refer to Annexure I)

[Provide here a brief description of the background and organization of your organization].

1. Name of Organization
2. Address with Telephone, Fax & E-mail etc.
 - (a) Registered Office
 - (b) Head Office
3. Details of Registration (Please indicate all details including incorporation)
4. PAN/TIN Number
5. Year of Establishment
6. Type of Organization
7. Profile of Organization
 - (a) Organizational Structure
 - (b) Organization Chart
 - (c) Division for various activities, if exists
 - (d) Professional Capabilities
 - (i) The Team, Field operations & Strengths
 - (ii) Infrastructure available
 - (iii) Geographical Reach
9. List of offices in various cities/states
 - (a) SI. No.
 - (b) Location/City
 - (c) Contact Person with Address
10. Experience of skilling- course development in textile sector (including technical textiles in specific)
11. Experience of imparting trainings in textile sector (including technical textiles in specific)
12. Availability of training infrastructure
13. Annual Turnover for last three years (along with attachments of Audited Balance sheets and Income statements)

(Attach documentary evidence wherever possible)

Annexure- IV

CA CERTIFIED EXPENSE / UTILIZATION CERTIFICATE

(To be given on organization's letter head)

Place:

Date:

Deputy Mission Director
National Technical Textiles Mission
Ministry of Textiles
Udyog Bhawan
Rafi Ahmed Kidwai Marg
New Delhi - 110011

Ref:(Organization)....., reimbursement of INR for the skilling and training programmes organized under National Technical Textiles Mission, Ministry of Textiles

Dear Sir,

With reference to the aforesaid reimbursement,, (the organization) having our Registered Office at..... hereby certify that:

I/We have incurred an expense of INR for the skilling and training programmes organized on (date(s)) for number of trainees under National Technical Textiles Mission, Ministry of Textiles.

I/We hereby solemnly certify that the particulars stated above are true and correct to the best of my/our knowledge and belief.

I/We fully understand that any submission made in this certificate if proved incorrect or false, will render me/us liable to face any penal action or other consequences as may be prescribed in the law or otherwise warranted.

Thanking you and with regards,

(By Selected Organization)

Authorize Signature & Seal of the
company.....
Name.....
Designation.....
Company Name.....
Address.....

(By Chartered Accountant)

Signature & Seal of the
CA.....
Name of the CA.....
Designation.....
Name of the CA Firm.....
Registration Number.....

Annexure - V

Training Progress Report

1. Target Group in which Trainee belong
2. Training Category Name
3. Training Programme Name and IA
4. Trainee's Name
5. Trainee's Contact Details
 - a. Address
 - b. Phone
 - c. Email
2. Trainee's Education (Highest)
3. Student(s) Aadhar Card/Any other Government Document
4. Trainee's Current Employment Status
5. Trainee's Organization name (if applicable)
6. Trainee/employee number/ID (if applicable)
7. Trainee/employee employment period with the current company, where training has been provided (if applicable)
8. Trainee's Course/Department and Institute (if applicable)
9. Details of Expert(s) providing the training
 - a. Name & Designation
 - b. Email
 - c. Mobile No
10. Biometric Attendance for Training Programme
11. Training Location
12. Trainee Contribution in Training Fees (attach online deposit receipt)
13. Trainee Assessment status and remarks
14. Training Certificate provided (Yes/No)
15. Any other details/information relevant to the Trainee/
Training

(Add similar sections for multiple Trainees)

(Attach documentary evidence wherever possible)
