Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister Hunarmand Pakistan Program

"Skills for All"

Course Contents/ Lesson Plan
Course Title: Textile Designing with CAD CAM
Duration: 6 Months

Course Title	Textile Designing with CAD CAM
Objective of Course	**Employable skills and hands on practice for Textile Design with CAD/CAM** The aim for the team of staff responsible for delivery of the advanced Textile Design and CAD/CAM curriculum is to provide knowledge and develop skills related to the Textile Design and CAD/CAM as per industrial requirements with job oriented approach. The course will allow participants to gain a comprehensive understanding of all the aspects. It will also develop the participant's ability to act in a professional and responsible manner. Teaching staff will provide the technical knowledge and abilities required to solve tasks and problems that are goal-oriented. They will use participant-centered, practically oriented methods. They will also develop a program of practical assessment that reflects the learning outcomes stated in the curriculum. Trainees of the Textile Design and CAD/CAM curriculum will also develop their willingness and ability as individuals to clarify issues, as well as think through and assess development opportunities. Teaching staff will also support trainees in developing characteristics such as self-reliance, reliability, responsibility, a sense of duty and a willingness and ability to criticize and accept criticism well and to adapt their future behavior accordingly. Teaching staff also use the Textile Design and CAD/CAM curriculum to address the development of professional competence. Trainees will acquire the ability to work in a professional environment. By the end of this course, the trainees should gain the following competencies: • Professionalism and Field Job Orientation • Occupational health and safety (OHS) precaution • Print Design Development • Repeats and Pattern Grids • Understanding of software • Color Theory • Develop Basic Blocks • Surface Embellishments and ornamentation • Knowledge of Basic Computer Operations and Manage System for CAD/CAM • Digitization of Basic Blocks • Grading of Basic Blocks • Problem solving skills

(i)   Motivational Lectures

The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture. To inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:

- Clear Purpose to convey message to trainees effectively.

- Personal Story to quote as an example to follow.

- Trainees Fit so that the situation is actionable by trainees and not represent a just idealism.

- Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity and spark the desire needed for trainees to want to learn more.

Impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for longer time without boredom and loss of interest because they can clearly see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

Motivational sessions can be organized on following topics or can be presented virtually; the links are mentioned in Annex-II.

- Work Ethics
- Problem Solving
- Communication

(ii) Success Stories

Another effective way of motivating the trainees is by means of Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation or by means of a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehendible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. Optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)

- Through an audio/ videotaped message (2-3 high quality videos must be arranged by the training institute)

It is expected that the training provider would collect relevant high quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.

 Suggestive structure and sequence of a sample success story and its various shapes can be seen at annexure III.

(iii) Case Studies

Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real life specific problem/situation and to explore the solutions.

In simple terms, the case study method of teaching uses a real life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes class room atmosphere interesting thus

	maintaining the trainee interest in training till the end of the course.
	Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies to be presented to the trainees. The trainer may adopt a power point presentation or video format for such case studies whichever is deemed suitable but it's important that only those cases are selected that are relevant and of a learning value.
	The Trainees should be required and supervised to carefully analyze the cases.
	For the purpose they must be encouraged to inquire and collect specific information / data, actively participate in the discussions and intended solutions of the problem / situation.
	Case studies can be implemented in the following ways: -
	i. A good quality trade specific documentary (At least 2-3 documentaries must be arranged by the training institute)
	ii. Health &Safety case studies (2 cases regarding safety and industrial accidents must be arranged by the training institute)
	Field visits(At least one visit to a trade specific major industry/ site must be arranged by the training institute)

Learning Outcome of the Course	By the end of this course, the trainees should gain the following competencies: • Professionalism and Field Job Orientation • Occupational health and safety (OHS) precaution • Print Design Development • Repeats and Pattern Grids • Understanding of software • Color Theory • Develop Basic Blocks • Surface Embellishments and ornamentation • Knowledge of Basic Computer Operations and Manage System for CAD/CAM • Digitization of Basic Blocks • Grading of Basic Blocks • Problem solving skills
Course Execution Plan	Total Duration of Course: **6 Months (26 Weeks)**
	Class Hours: **4 Hours per day**
	Theory: 20% Practical: 80%
	Weekly Hours: **20 Hours Per week**
	Total Contact Hours: **520 Hours**
Companies Offering Jobs in the respective trade	1. Freelancing 2. Textile Industries 3. Design Houses 4. Production units 5. Government and private Institutes conducting short courses
Job Opportunities	As we know Textile sector is the back bone of Pakistan, there is a high demand in the Textile industry for designers and CAD/CAM operators. Technology has come a long way since the early days of hand-drawn or Manual designing, Nowadays you will find Digital solutions for everything. This increase in learning and usage of Designing software and Gadgets has also created new opportunities for all to earn big and make a career out of this field. With the help of this course, we will be able to give technical trainings of Textile Design with CAD/CAM to our youth. There are also opportunities for start-up entrepreneurship due to the high demand in the market in following designated jobs; • Textile Designer • CAD/CAM Operator • Fashion Designer • Product developer

No of Students	(Anticipated Class size: 25 trainees)
Learning Place	Classroom / Lab
Instructional Resources	**Learning Material:** • https://sewguide.com/fabric-design-pattern-repeat/ • https://bagntell.wordpress.com/2016/12/19/working-with-fabric-pattern-repeats/ • http://blog.spoonflower.com/2019/03/the-secret-to-designing-stronger-surface-patterns/ • https://slideplayer.com/slide/3178456/ • https://www.google.com/search?biw=1366&bih=657&tbm=isch&sa=1&ei=fALGXJOjMJKDjLsP2aGC-AY&q=straight+print+repeat+grid&oq=straight+print+repeat+grid&gs_l=img.3...24423.31810..32737...2.0..3.4260.18319.1j1j1j0j1j1j0j1j0j4......1....1..gws-wiz-img.Y-ZX651xIGQ#imgrc=v9cJaXp_cPe9NM: • https://bagntell.wordpress.com/2016/12/19/working-with-fabric-pattern-repeats/ • www.youtube.com

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

Scheduled Week	Module Title	Learning Units	Remarks
Week 1	Introduction	• **Motivational Lecture** • **Course Introduction** • **Success stories** • **Job market** • **Course Applications** • **Institute/work ethics** • Introduction to Textile Design • Importance of software and digital designing • Types of printing technologies • Scope of Textile design and CAD/CAM • Types of Design • Understanding of Block • Understanding of Grading • Field Terminologies • To develop professionalism • Occupational health and safety (OHS) Precautions • Communication • Time management • Up-gradation • Team work • Security procedures • Safety measures at work area • To deal with emergency situation	
Week 2	Conduct research to select a theme	• Brainstorming through mind mapping • Research using different research sources • Primary research • Secondary research • Create research board on the selected theme • Create mood board with reference to research board • Create color board on the basis of selected theme • **Workplace ethics**	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 3	**Develop Surface Designs according to elements and**	• Elements and principles of design • Process of design development • Importance of color theory • use of color wheel • tints, tone and shade • Create motif design with reference to	• **Task-1** • **Task-2** • **Task-3**

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

	principles of design	research following elements and principles of design • Develop designs from the theme research	*Details may be seen at Annexure-I*
Week 4	**Perform Surface Pattern Repeats**	• Different types of surface pattern repeats • Grids • Types of Prints • Variation product to product • Apparel and upholstery print classification • Motif extraction and design development • Setting repeats • CAD print • Color variations • Rendering of surface repeat using different media • **Success story (***For further detail please see Annexure-II)*	• **Task-1** • **Task-2** • **Task-3** *Details may be seen at Annexure-I*
Week 5	**Perform full body measurement**	• Take full body measurement horizontally and vertically • Make measurement chart according to the measurements taken. • **Motivational Lecture(** *For further detail please see AnnexureIII)*	• **Task-1** *Details may be seen at Annexure-I*

Week 6	**Construct basic blocks Part-1**	• Usage of tools and equipment for measurement and drafting
		 • Create basic blocks according to
		 • standard measurement
		 • Drafting and labelling of basic bodice blocks according to international standards:
		    ▪ Waist
		    ▪ Bust
		    ▪ Shoulder line
		    ▪ Center front
		    ▪ Center back
		    ▪ Size
		 • Pattern making terminologies
			• **Task-1**
			
			 • **Task-2**
			
			 Details may be seen at Annexure-I

Week 7	**Construct basic blocks Part-2**	• Basic bodice • Basic trouser • **Success story (***For further detail please see Annexure-II)*	• **Task-1** *Details may be seen at Annexure-I*
Week 8	**Construct basic blocks Part-3**	• Basic skirt • Basic sleeve **Workplace ethics**	• **Task-1** *Details may be seen at Annexure-I*
Week 9	**Create Pattern using Basic Block**	• Trace block on pattern sheet • Draw pattern according to garment design requirements and specified measurements • Complete final pattern which includes ease, seams and allowance for fabric behavior including consistency, shrinkage capacity and elasticity	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 10	**flat Screen and Rotary printing**	• Industrial printing technologies • Precautionary measures • Understanding Nature of fabric • Types of pigments • Fabric processing after printing • GSM • Screen exposing process **Motivational Lecture(** *For further detail please see Annexure III)*	• **Task-1** • **Task-2** • **Task-3** *Details may be seen at Annexure-I*
Week 11	**DTG printing**	• Direct to Garment printing • CAD processing • Heat transfer printing • Types of printers • Color variations • Sampling and strike off • **Success story (***For further detail please see Annexure-II)*	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*

Week 12	**Manual Printing Techniques Part-1**	• Block printing process • Stenciling • Fabric painting • Tie n dye **Motivational Lecture(** *For further detail please see Annexure III)*	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 13	**Manual Printing Techniques Part-2**	• Processes and application • Market research • Research board • Mood board • Product development • **Workplace ethics**	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 14	**Manual Printing Techniques Part-3**	• LATEST TRENDS • HEMTEX • Theme Finalization • **Success story (***For further detail please see Annexure-II)*	• **Task-1** • **Task-2** • **Task 23A** *Details may be seen at Annexure-I*
Week 15	**Mid-Term Assignment/Exam**		
Week 16	**Knowledge of computer hardware and software.**	• knowledge of the use of basic computer applications using fundamental components of a computer system • knowledge of basic computer operations including file saving, and data back up • knowledge of computer hardware types	• **Task-1** • **Task-26A** *Details may be seen at Annexure-I*

Week 17	**Knowledge of attaching CAD/CAM devices to computer system**	• Knowledge of methods of attaching CAD/CAM devices to computer. • Follow appropriate safety procedures when attaching CAD/CAM devices to the computer systems. • Troubleshoot different issues related to using CAD/CAM devices and drivers.	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 18	**Storage area for client record and Make annotations to pattern**	• Collect client details for creation of a storage area • Follow CAD/CAM Explorer requirements to create storage area for client • Input client details and save into created client storage area • Create marker annotations for different pattern type, model, and additional client order requirements • Stamp marker or piece to identify client and client pattern requirements using standard software coding • **Success story (**For further detail please see Annexure-II)	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 19	**Create notches in patterns and apply lay limits**	• Set parameters of notches according to tech pack • Make different type and size of notches on pattern according to client requirements • Apply notch type and size to pattern according to tech pack • Set lay limits according to single, double or tubular ply requirements • Identify the limits of piece placement on fabric • Save data to designated client storage area according to workplace procedures • **Workplace ethics**	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 20	**Digitizing procedure/ Operate digitizer to digitize the pattern**	• Ensure CAD/CAM software is installed and functioning correctly • Turn the digitizer equipment on • Check the equipment is working • Place pattern on the designated area on the digitizer according to the grain line • Ensure the pattern is not wrinkled or	• **Task-1** • **Task-2** • **Task-**

		creased before placing on the digitizer. • Use different function keys from the menu and cursor to digitize pattern. • Ensure all points of the pattern are marked using the cursor. • Return the cursor to its prescribed holder at the conclusion of the digitizing procedure.	**32A** *Details may be seen at Annexure-I*
Week 21	**Employable Project/Assignment (6 weeks (i.e 21-26) in addition of regular classes.**	• Guidelines to the Trainees for selection of students employable project like final year project (FYP) • Assign Independent project to each Trainee • A project based on trainee's aptitude and acquired skills. • Designed by keeping in view the emerging trends in the local market as well as across the globe. • The project idea may be based on Entrepreneur. • Leading to the successful employment. • The duration of the project will be 6 weeks • Ideas may be generated via different sites such as: • https://1000projects.org/ • https://nevonprojects.com/ • https://www.freestudentprojects.com/ • https://technofizi.net/best-computer-science-and-engineering-cse-project-topics-ideas-for-students/ • Final viva/assessment will be conducted on project assignments. • At the end of session the project will be presented in skills competition • The skill competition will be conducted on zonal, regional and National level. • The project will be presented in front of Industrialists for commercialization • The best business idea will be placed in NAVTTC business incubation center for commercialization. -- **OR** • On job training for 2 weeks: • Aims to provide 2 weeks industrial training to the Trainees as part of	• **Task-1** • **Task-2** • **Taks-3** *Details may be seen at Annexure-I*

		overall training program • Ideal for the manufacturing trades • As an alternate to the projects that involve expensive equipment • Focuses on increasing Trainee's motivation, productivity, efficiency and quick learning approach.	
Week 22	**Pattern Grading Part-1**	• Set user environment • Read and interpret the relevant size charts • Input dimensions into rule table for sizes required according to tech pack • Complete rule table by inputting all required sizes • Complete the rule table by inserting values of x and y axes according to tech pack • **Motivational Lecture(** *For further detail please see Annexure III)*	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 23	**Pattern Grading Part-2**	• Select required digitized pattern piece for grading. • Apply appropriate rule table to show grading using function key • **Success story (***For further detail please see Annexure-II)*	• **Task-1** *Details may be seen at Annexure-I*
Week 24	**Pattern Grading Part-3**	• Use command 'Show Nest All' from menu to view graded piece • Verify applied grading and adjust variances as required • Use 'Export Rule' command to check all rules have been applied correctly to all parts • Save graded pattern to designated storage area according to workplace procedures	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*

Week 25	**Final Project and Exhibition**	• Digital print design for apparel • Print design for upholstery • Coordinates • **Motivational Lecture(** *For further detail please see Annexure III*)	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*
Week 26	**Entrepreneurship and Final Assessment in project**	• Job Market Searching Self-employment • Freelancing sites • Introduction • Fundamentals of Business Development • Entrepreneurship • Startup Funding • Business Incubation and Acceleration • Business Value Statement • Business Model Canvas • Sales and Marketing Strategies • How to Reach Customers and Engage CxOs • Stakeholders Power Grid • RACI Model, SWOT Analysis, PEST Analysis • SMART Objectives • OKRs • Cost Management (OPEX, CAPEX, ROCE • etc.) Final Assessment	• **Task-1** • **Task-2** *Details may be seen at Annexure-I*

List of Machinery / Equipment

Sr. No	Name of item as per curriculum	Quantity physically available at the training location
1.	**Accessories/Devices** 1. Sketch books 2. Stationary items (paper, pencil/pen)	**One each per candidates** **(Anticipated Class size: 25 trainees)**

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

	3. Paint Brushes 4. Coloring medium 5. Computer with internet 6. Print media 7. Color palette 8. Water container 9. Compass 10. Drafting pencils 11. Scale 12. Set square 13. Measuring Tape 14. Measuring scale 15. Japanese scale 16. French curve - 17. clutch pencil 18. paper scissors 19. paper cutter 20. cutting matt 21. Pattern sheets 22. clutch pencil leads 23. paper cutter blades 24. tracing paper 25. masking tape	
2.	Text book(s)/Manuals for this course	25 copies per class
3.	working table,	5
4.	Scanner	1
5.	Color Printer	1
6.	Multimedia Projector	1
7.	Internet Connection	Available on every PC
8	• CDs Rewriteable • Photocopy Papers • Plastic files • Pattern Sheets • Tracing Papers	1 each student 100 sheets each
9	Wires, data cables, power plugs, power supply	For every PC

Software List

Sr. No	Software Name
1.	Microsoft® Office
2.	Microsoft® Windows 8 or above
3.	Latest CAD/CAM Software, Electra
4.	Adobe Photoshop

Minimum Qualification of Teachers / Instructor

The qualification of teachers / instructor of this course should be minimum of masters in Computer science/ Electronics/ Telecommunication with minimum 5 years of development experience in relevant trade.

Supportive Notes

Teaching Learning Material

Books Name	Author
CAD CAM Notes	James H Earl
AutoCAD	Dessualt
CAD CAM II Handbook	Hassan Jawad, Training Department Gujranwala Tools Dies and Moulds Center
CNC Programming Handbook	Mujahid Gillani, Training Department Gujranwala Tools Dies and Moulds Center

Tasks For Certificate in (Auto Cad Textile)

Task No.	Task	Description	Week
1	**Create board on given theme**	• Brainstorming through mind mapping • Research using different research sources • Primary research • Secondary research • Create research board on the selected theme	**Week -2**
2	**Create color board on selected theme**	• Create mood board with reference to research board Create color board on the basis of selected theme	
3	**Initiate process of design development**	• Elements and principles of design • Process of design development	**Week -3**
4	**Use of color wheel**	• Importance of color theory • use of color wheel • tints, tone and shade	
5	**Create Motif design with reference of given elements**	• Create motif design with reference to research following elements and principles of design • Develop designs from the theme research	

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

Task No.	Task	Description	Week
6	**Define types of surface pattern & prints**	• Different types of surface pattern repeats • Grids • Types of Prints • Variation product to product	**Week -4**
7	**Create CAD print with color variation**	• Apparel and upholstery print classification • Motif extraction and design development • Setting repeats • CAD print • Color variations	
8	**Create Rendering using given media**	• Rendering of surface repeat using different media	
9	**Take body measurement & make measurement chart**	• Take full body measurement horizontally and vertically • Make measurement chart according to the measurements taken.	**Week-5**
10	**Create basic blocks on standards**	• Usage of tools and equipment for measurement and drafting • Create basic blocks according to standard measurement	**Week-6**

11	**Draft & lable blocks on international standards**	• Drafting and labelling of basic bodice blocks according to international standards:
		  ▪ Waist
		  ▪ Bust
		  ▪ Shoulder line
		  ▪ Center front
		  ▪ Center back
		  ▪ Size
		  ▪ Pattern making terminologies	

12	**Create basic bodice & Trouser**	• Basic bodice • Basic trouser	**Week-7**

Task No.	Task	Description	Week
13	**Create skirt & sleeves**	▪ Basic skirt • Basic sleeve	**Week-8**
14	**Draw a pattern according to given measurement**	• Trace block on pattern sheet • Draw pattern according to garment design requirements and specified measurements	**Week-9**
15	**Make final pattern with all parameters**	• Complete final pattern which includes ease, seams and allowance for fabric behavior including consistency, shrinkage capacity and elasticity .	
16	**Use printing technologies**	• Industrial printing technologies • Precautionary measures	
17	**Understand nature of fabric**	• Understanding Nature of fabric	**Week-10**
18	**Perform screen exposing process**	• Types of pigments • Fabric processing after printing • GSM Screen exposing process	
19	**Perform garment & Heat transfer printing**	• Direct to Garment printing • CAD processing • Heat transfer printing	**Week-11**

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

Task No.	Task	Description	Week
20	**Perform sampling & strike off**	. Types of printers - Color variations Sampling and strike off	
21	**Perform block printing & stenciling**	- Block printing process - Stenciling	**Week-12**
22	**Perform fabric printing**	- Fabric painting - Tie n dye	
		Processes and application	**Week-13**
23	**Understand mood board**	- Market research - Research board - Mood board Product development	
23A	**Build your CV**	Download professional CV template from any good site (https://www.coolfreecv.com or relevant) - Add Personal Information - Add Educational details - Add Experience/Portfolio - Add contact details/profile links	**Week-14**
24	**Identify latest trends**	. LATEST TRENDS	
25	**Understand finalization of theme**	HEMTEX Theme Finalization	
26		knowledge of the use of basic computer applications using fundamental components of a	**Week-16**

Task No.	Task	Description	Week
	Understand computer Application	computer system • knowledge of basic computer operations including file saving, and data back up • knowledge of computer hardware types	
26A	**Create an account profile on Fiverr (at least two gigs) and Upwork**	Create an account by following these steps: **Step 1:** Personal Info **Step 2:** Professional Info **Step 3:** Linked Accounts **Step 4:** Account Security	
27	**Understand methods of attachment & safety procedure**	• Knowledge of methods of attaching CAD/CAM devices to computer. • Follow appropriate safety procedures when attaching CAD/CAM devices to the computer systems.	**Week-17**
28	**Perform trouble shooting**	Troubleshoot different issues related to using CAD/CAM devices and drivers	
29	**Understand storage area & explore its requirements**	• Collect client details for creation of a storage area • Follow CAD/CAM Explorer requirements to create storage area for client • Input client details and save into created client storage area	**Week-18**
30	**Create Marker annotations**	• Create marker annotations for different pattern type, model, and additional client order requirements Stamp marker or piece to identify client and client pattern requirements using standard software coding	

Task No.	Task	Description	Week
31	**Make parameters of notches according to given requirements**	• Set parameters of notches according to tech pack • Make different type and size of notches on pattern according to client requirements • Apply notch type and size to pattern according to tech pack	**Week-19**
32	**Set Lay limits according to the requirement**	• Set lay limits according to single, double or tubular ply requirements • Identify the limits of piece placement on fabric Save data to designated client storage area according to workplace procedures	

32A	**How to search and apply for jobs in atleast two labour market place countries (KSA, UAE etc.)**	• Browse the following website and create account on each website
		  ▪ Bayt.com – The Middle East Leading Job Site
		  ▪ Monster Gulf – The International Job Portal
		  ▪ Gulf Talent – Jobs in Dubai and Middle East
		• Find the handy 'search' option at the top of your homepage to search for the jobs that best suit your skills.
		• Select the job type from the first 'Job Type' drop-down menu, next, select the location from the second drop-down menu.
		• Enter any keywords you want to use to find suitable job vacancies.
		• On the results page you can search for part-time jobs only, full time jobs only, employers only or agencies only. Tick the boxes as appropriate to your search.
		• Search for jobs by:
			Week-20 onwards
			
			Week-21

Task No.	Task	Description	Week
		- Company - Category - Location - All jobs - Agency - Industry	
33	**Ensure CAD software work correctly with Digitizer equipment**	- Ensure CAD/CAM software is installed and functioning correctly - Turn the digitizer equipment on - Check the equipment is working	
34	**Perform given pattern On Digitizer equipment**	- Place pattern on the designated area on the digitizer according to the grain line - Ensure the pattern is not wrinkled or creased before placing on the digitizer. - Use different function keys from the menu and cursor to digitize pattern. - Ensure all points of the pattern are marked using the cursor. Return the cursor to its prescribed holder at the conclusion of the digitizing procedure.	
35	**Set, read & interpret Relevant size chart**	- Set user environment - Read and interpret the relevant size charts - Input dimensions into rule table for sizes required according to tech pack	**Week-22**
36	**Complete rule table as per given values**	- Complete rule table by inputting all required sizes - Complete the rule table by inserting values of x and	

Task No.	Task	Description	Week
		y axes according to tech pack	
37	**Select digitized pattern applying appropriate rule table**	• Select required digitized pattern piece for grading. • Apply appropriate rule table to show grading using function key	**Week-23**
38	**Adjust variances & verify grading**	• Use command 'Show Nest All' from menu to view graded piece • Verify applied grading and adjust variances as required	**Week-24**
39	**Apply Export rule**	• Use 'Export Rule' command to check all rules have been applied correctly to all parts Save graded pattern to designated storage area according to workplace procedures	

	How to search and apply for jobs in at least two labor marketplace countries (KSA, UAE, etc.)	• Browse the following website and create an account on each website
		  ▪ Bayt.com – The Middle East Leading Job Site
		  ▪ Monster Gulf – The International Job Portal
		  ▪ Gulf Talent – Jobs in Dubai and the Middle East
		• Find the handy 'search' option at the top of your homepage to search for the jobs that best suit your skills.
		• Select the job type from the first 'Job Type' drop-down menu, next, select the location from the second drop-down menu.
		• Enter any keywords you want to use to find suitable job vacancies.
		• On the results page you can search for part-time jobs only, full-time jobs only, employers only, or agencies only. Tick the boxes as appropriate to your search.	

Task No.	Task	Description	Week

		• Search for jobs by:
		  ▪ Company
		  ▪ Category
		  ▪ Location
		  ▪ All jobs
		  ▪ Agency
		  ▪ Industry	

40	**Create digital print design**	• Digital print design for apparel	**Week-25**
41	**Perform print design for upholstery**	• Print design for upholstery • Coordinates	

SUCCESS STORY-1 (CAD-CAM Operator Textile)

S. No	Key Information	Detail/Description
1.	**Self & Family background**	- Salman Tahir - Middle class Family. - Intermdiate & CAD designing course - Financial hardships etc
2.	**How he came on board NAVTTC Training/ or got trained through any other source**	- Information about course, apply and selection - Course duration, trade selection - Attendance, active participation, monthly tests, interest in lab work.
3.	**Post training activities**	- After Intermediate he is searching job in any specialized field of his trade. Then he realize he has a passion in designing - Through free lancing he has generate reasonable capital to start his own Design house.. - The clients are local & international & last year company generate 60,000 USD - After a long journey of strive his life is going good .
nter4.	**Message to others (under training)**	- Impose self-discipline and ensure regularity - Make Hard work pays in the end so be always ready for the same. - Take the training opportunity seriously

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

SUCCESS STORY-2

S. No	Key Information	Detail/Description
1.	**Self & Family background**	• Zeeshan zafar • Poor Family. • Bachelor & CAD Textile designing course • Financial hardships etc
2.	**How he came on board NAVTTC Training/ or got trained through any other source**	• Course duration, trade selection • Attendance, active participation, monthly tests, interest in lab work. • Information about course, apply and selection
3.	**Post training activities**	• During studies he started working on Textile designing as a free lancer, and with great hard work he make his market value. • After 5 years he joined Gul Ahmed. • Now he is doing his job & free lance work both, & earn money USD 70000 • Now he is well settled.
nter4.	**Message to others (under training)**	• Make Hard work pays in the end so be always ready for the same. • Impose self-discipline and ensure regularity • Take the training opportunity seriously

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

SUCCESS STORY-3

S. No	Key Information	Detail/Description
1.	**Self & Family background**	- Sarwar karim - Middle class Family. - Matric & Textile designing course - Financial Weak
2.	**How he came on board NAVTTC Training/ or got trained through any other source**	- Information about course, apply and selection - Course duration, trade selection - Attendance, active participation, monthly tests, interest in lab work
3.	**Post training activities**	- He is very passionate in his work, but weak finantial position he was unable to purchase computer, so he got computer on installment & pay installment from his earning. - He worked in 3 organizations at different positions & learned a lot.Finally he decided to set his own work - Now he is working as an Entreprenuer & earn money USD 4500 - Now he is well settled.
nter4.	**Message to others (under training)**	- Make Hard work pays in the end so be always ready for the same. - Impose self-discipline and ensure regularity - Take the training opportunity seriously

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

Motivational Lecture Template

Mentor

Mentors are provided an observation checklist form to evaluate and share their observational feedback on how students within each team engage and collaborate in a learning environment. The checklist is provided at two different points: Once towards the end of the course. The checklists are an opportunity for mentors to share their unique perspective on group dynamics based off various team activities, gameplay sessions, pitch preparation and other sessions, giving insights on the nature of communication and teamwork taking place and how the both learning outcomes and the student experience can be improved in the future.

Session- 1 (Communication):

Please find below and overview of the activities taking place Session plan that will support your delivery and an overview of this session's activity.

Session- 1 OVERVIEW			
Aims and Objectives:			
- To introduce the communication skills and how it will work - Get to know mentor and team - build rapport and develop a strong sense of a team - Provide an introduction of communication skills - Team to collaborate on an activity sheet developing their communication, teamwork and problem solving - Gain understanding of participants' own communication skills rating at the start of the programme			

Activity:	Participant Time	Teacher Time	Mentor Time
Intro Attend and contribute to the scheduled.			
Understand the good communication skills and how it works.			
Understand what good communication skills means			
Understand what skills are important for good communication skills			
Key learning outcomes:	**Resources:**		**Enterprise skills developed:**

Plot no. 38, Kirthar Road, H-9 Islamabad
051-9044250

☐☐Understand the communication skills and how it works. ☐☐Understand what communication skills means ☐☐Understand what skills are important for communication skills	• Podium • Projector • Computer • Flip Chart • Marker	☐Communication ☐Self Confidence☐ ☐Teamwork

Schedule	Mentor Should do
Welcome: **5 min**	Short welcome and ask the **Mentor** to introduce him/herself. Provide a brief welcome to the qualification to the class. Note for Instructor: Throughout this session, please monitor the session to ensure nothing inappropriate is being happened.
Icebreaker: **10 min**	Start your session by delivering an icebreaker, this will enable you and your team to start to build rapport and create a team presence for the tasks ahead. The icebreaker below should work well at introductions and encouraging communication, but feel free to use others if you think they are more appropriate. It is important to encourage young people to get to know each other and build strong team links during the first hour; this will help to increase their motivation and communication throughout the sessions.
Introduction & Onboarding: **20mins**	Provide a brief introduction of the qualification to the class and play the "Onboarding Video or Presentation". In your introduction cover the following: 1. Explanation of the programme and structure. (Kamyab jawan Program) 2. How you will use your communication skills in your professional life. 3. Key contacts and key information – e.g. role of teacher, mentor and SEED. Policies and procedures (user agreements and "contact us" section). Everyone to go to the Group Rules tab at the top of their screen, read out the rules and ask everyone to verbally agree. Ensure that the consequences are clear for using the platform outside of hours. (9am-8pm) 4. What is up next for the next 2 weeks ahead so young people know what to expect (see pages 5-7 for an overview of the challenge). Allow young people to ask any questions about the session topic.
Team Activity Planning:	MENTOR: Explain to the whole team that you will now be

30 minutes	planning how to collaborate for the first and second collaborative Team Activity that will take place outside of the session. There will not be another session until next session so this step is required because communicating and making decisions outside of a session requires a different strategy that must be agreed so that everyone knows what they are doing for this activity and how. • "IDENTIFY ENTREPRENEURS" TEAM ACTIVITY • "BRAINSTORMING SOCIAL PROBLEMS" TEAM ACTIVITY" *As a team, collaborate on a creative brainstorm on social problems in your community. Vote on the areas you feel most passionate about as a team, then write down what change you would like to see happen.* Make sure the teams have the opportunity to talk about how they want to work as a team through the activities e.g. when they want to complete the activities, how to communicate, the role of the project manager etc. Make sure you allocate each young person a specific week that they are project manager for the weekly activities and make a note of this. Type up notes for their strategy if this is helpful - it can be included underneath the Team Contract.
Session Close: **5 minutes**	**MENTOR:** Close the session with opportunity for anyone to ask any remaining questions. **Instructor:** Facilitate the wrap-up of the session. Quick reminder of what is coming up next and when the next session will be.

Motivational lectures & success story   Links

S.No.	LINK	Topics
01.	https://www.youtube.com/watch?v=GsG5kj5sgOU	Team Building
02.	https://www.youtube.com/results?search_query=ethics+lecture+in+urdu	Ethics
03.	https://study.com/academy/lesson/advantages-of-cad-cam-in-textiles.html	Advantage of CAD in Textile
04.	https://www.youtube.com/watch?v=CGJFM8Jtu5Q	Success story