Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister Hunarmand Pakistan Program

"Skills for All"

Course Contents/ Lesson Plan

Course Title: CNC MACHINIST

Duration: 6 Months

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

Trainer Name	**MUHAMMAD HAMID**
Course Title	**CNC MACHINIST**
Objective of Course	This course is intended to provide sufficient theoretical knowledge and comprehensive skillset to build a great career in the field of computer numeric controlled (CNC) heavy machinery from setup to operation to produce parts and tools from metal, plastic or other materials. CNC machinists make adjustments to the machine to control speed, material feed and path of the cut, as well as make sure the machines are set up properly, working well, and producing quality product. CNC machinists may work on many different machines, or specialize on one complex machine. They are builders, fabricators, mechanics, craftsmen and quality assurance all wrapped into one. Course starts from introduction of CNC lathe operations, milling operation covering fundamental to advance level topics in heat treatment.

Learning Outcome of the Course	At the end of the course, the trainee must have attained the following competencies • Apply work health and safety practices • Identify and implement workplace policies and procedures • Perform CNC lathe operations • Perform CNC milling operations • Perform heat treatment • Communicate at workplace • Perform computer application 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	All national & multinational industries.
Job Opportunities	**Possible job opportunities available immediately and later in the future** CNC Machinist are employed in the manufacturing engineering and production sector especially in automobile, household goods,

	electrical and electronics appliances etc. Experienced CNC Machinist may advance through promotions with the same employer or by moving to more advanced positions with other employers. They can become: • Special Machine Operator • EDM machine operator • WIRE CUT machine operator • CNC machining center operator Some experienced CNC Machine achieve a highly respected level of salaries. There are good prospects for finding work both within Pakistan and abroad. The employment outlook in this occupation will be influenced by a wide variety of factors including: • Trends and events affecting overall employment (especially in the manufacturing industry) • Location in Pakistan • Employment turnover (work opportunities generated by people leaving existing positions) • Occupational growth (work opportunities resulting from the creation of new positions that never existed before) • Size of the industry Flexibility of the applicant (concerning location and schedule of work)
No of Students	25
Learning Place	Classroom / Workshop

Instructional Resources	• Multimedia, • White board • Board marker

Scheduled Week	Module Title	Learning Units	Remarks
Week 1	Introduction **& Motivational Lecture**	• **Motivational Lecture** • **Course Introduction** • **Success stories** • **Job market** • **Course Applications** • **Institute/work ethics** • Introduction to Ship machinist • Safety Measures • Safety Signs • Hazard at Workplace • Various machining processes	
Week 2	• Unit conversions • Machine Tools and Equipment **&** **Success stories**	• Measuring Conversion • Defect in measurement • Measuring tool & equipment • Scale, Vernier caliper, gauges, micro meter & dial indicator • Marking tool & equipment • Divider, caliper, punches, scriber and V block • Precision and non-precision	• **Task 1** • **Task 2** • **Task 3** • **Task 4** Details may be seen at Annexure-I

		tools	
Week 3	• Cutting tools • Striking tools • Gripping Tools **&** **Motivational Lecture**	• Cutting tools • Files, Hawk saw and chisels • Practical of chipping • Striking tool • Classification and types of Hammers • Griping tools • Vice, clamps and wrenches • Making of Square plate (100*100*8mm).	• **Task 5** • **Task 6** • **Task 7** • **Task 8** • **Task 9** • **Task 10** Details may be seen at Annexure-I
Week 4 **&** **Week 5**	• Thread • Taps & Dyes • Drill & Drill bits • Punches & Wrenches • Grinding • Carry out Bench Work **&** **Success stories**	**Thread** • Thread • Types of thread • Internal / External threading **Taps & Dyes** • Taps & dyes • Types of taps • Internal / External threading **Drill & Drill bits** • Drill and its types • Uses of drill bits **Punches & Wrenches** • Punches and Wrenches • Types of punches • Types of wrenches **Grinding** • Grinding process • Types of grinders	• **Task 11** • **Task 12** • **Task 13** • **Task 14** • **Task 15** • **Task 16** • **Task 17** • **Task 18** • **Task 19** **Monthly Test 1** Details may be seen at Annexure-I

		• Speed of grinding wheel **Carry out Bench Work** • filing • Drilling • Taping • Reaming	
Week 6	Tool design & setting **&** **Motivational Lecture**	• Right hand side tool • Left hand side tool • Knurling tool • V Shape tool • Round nose tool • Boring tool • Parting tool • Setting of tools in tool post	• **Task 20** Details may be seen at Annexure-I
Week 7	Develop Drawing and Design **&** **Success stories**	• Basic Technical Drawing • The Graphic Language and Design • Drafting Equipment and Supplies • Lettering style-single-stroke, gothic • Geometric Construction • Sketching • Multi view Projection • Dimensioning • Sectional Views	• **Task 21** • **Task 22** • **Task 23** Details may be seen at Annexure-I
Week 8	Perform Turning Operations **&**	• Training of lath turning • Knowledge of Turning Operation • Longitudinal and Transverse for	• **Task 24** • **Task 25** • **Task 26** • **Task 27**

	Motivational Lecture	Turning • Rules for choosing the cutting speed and feed • Calculate of cutting speed	• **Task 28** Details may be seen at Annexure-I
Week 9	Perform Turning Operations **&** **Success stories**	• Table for drilling, reaming and threading on a lath • Training of Grinding tools • Cutting Angle arc influenced • Toll Sharping	• **Task 29** • **Task 30** • **Task 31** • **Task 32** • **Task 33** **Monthly Test 2** Details may be seen at Annexure-I
Week 10 **&** **Week 11**	Perform Milling Operations **&** **Motivational Lecture**	• Training of Milling Machine • Knowledge of Milling Operation • Longitudinal and Transverse for Milling	• **Task 34** • **Task 35** • **Task 36** • **Task 37** • **Task 38** • **Task 39**
		• Training of Grinding Cutter • Cutting Angle arc influenced • Cutting Speed is influenced by • Rules for Choosing the Cutting Speed • Calculate of Cutting Speed and feed	• **Task 40** • **Task 41** • **Task 42** • **Task 43** • **Task 44** Details may be seen at Annexure-I

Week 12 **Week 13** **Week 14**	CAD Drawing and Design **&** **Success stories**	• Introduction to CAD CAM • Understanding and performing basic commands of CAD Software • Lines Command • Circle Command • Rectangle Command • Trimming command • Arc command, • polygon command • Chamfer Command • Fillet Command • Copy Command • Paste Command • mirror Command • Pattern Command • Offset Command • Rotate Command • Scaling commands.	• **Task 45** • **Task 46** • **Task 47** • **Task 48** • **Task 49** • **Task 50** • **Task 51** • **Task 52** • **Task 53** Details may be seen at Annexure-I
Week 15	**Mid-Term Assignment/Exam**		
Week 16 **&** **Week 17**	Perform CNC Milling Operations **&** **Motivational Lecture**	• Design and operation of a CNC milling machine • Geometric fundamentals • Machine motions • Relative tool motion • Direction of traverse • Coordinate system • Selection of program zero and	• **Task 54** • **Task 55** • **Task 56** • **Task 57** • **Task 58** Details may

		reference point • Absolute chain dimension: Example Exercises • Tool compensations • Tool compensation store • Program zero set • Tool call • Compensation on contour	be seen at Annexure-I

		• Approach command: Examples and Exercise
		• Programming fundamentals
		• Programming language
		• Programming procedure
		• Programming steps: Examples and Exercise
		• CNC Milling Machine
		• Operating of FANUC Control
		• Operating of DECKLE Control
		  • Complete instructions of CNC machines
		  • Complete instructions of control
		  • Executions of different program on CNC machines
		  • Communications (Executions of CNC programs from computer.
		  • Complete program generation instructions on computer	

		• Preparation of program • Selection of tools • Clamping of jobs • Setting of zero point • Different contour exercise • Simulation of program on computer	
Week 18 **Week 19** **Week 20**	• Programming • Work - Offsets **&** **Success stories**	**Perform CNC Lathe Operations** • Complete instructions of CNC machines • Complete instructions of control • Executions of different program on CNC machines • Communications (Executions of CNC programs from computer) • CNC Lath Operation • Turning • Thread Cutting • Transfer of Program for Computer **Work - Offsets** • G54 through G59 • Setting Work - Offsets • Probe • Manually / Edge Finder • Procedure • Cautions / Safety	• **Task 59** • **Task 60** • **Task 61** • **Task 62** • **Task 63** • **Task 64** • **Task 65** • **Task 66** • **Task 67** • **Task 68** • **Task 69** • **Task 70** • **Task 71** Details may be seen at Annexure-I
Week 21	Employable Project/Assignment (6 weeks i.e. 21-26) in addition of	● Guidelines to the Trainees for selection of students employable project like final year project (FYP) ● Assign Independent project to each Trainee	

	regular classes. OR On job training (2 weeks)	● 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 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 **Week 23** **Week 24**	• Perform CNC Lathe Operations **&** **Motivational Lecture**	• Introduction to G & M Codes • Program Structure. • G01, G00, G90, G70, G94, G95, S, N, F, M, T • Point to point movement • Cutting with Z-height • Programming on CNC simulator • Profile Milling • Introduction to G-02 & G03 • Perform the Following Operations using codes G00, G01, G02, G03, G71 cycle, G74, G76 • Facing • Step Turning • Radius Cutting • Chamfering & Filleting Operation • Threading Operation • Drilling & Boring Operation	• **Task 72** • **Task 73** • **Task 74** • **Task 75** • **Task 76** • **Task 77** • **Task 78** Details may be seen at Annexure-I
Week 25 **And** **week 26**	• Develop entrepreneurial skills & Final Assessment **&** **Success stories**	• Job Market Searching • Self-employment • Freelancing sites • Introduction • Fundamentals of Business Development • Entrepreneurship • Startup Funding • Business Incubation and	• **Task 79** • **Task 80** • **Task 81** • **Task 82** • **Task 83** Details may be seen at Annexure-I

		Acceleration • Business Valuent Statement • Business Model Canvas • Sales and Marketing Strategies • How to Reach Customers and Engage • Stakeholders	

List of Machinery / Equipment

Sr. No	Name of item as per curriculum	Quantity physically available at the training location
1	Technical Drawing Board	25
2	Workshop Work Bench	20
3	Lath Machine	05
4	Milling Machine	05
5	Tool Grinder	04
6	CNC Milling Machine	02
7	CNC Lathe	02

8	Drilling	05

1. Software List

Sr. No	Software Name
1.	CAD
2.	MASTER CAM

2. Minimum Qualification of Teachers / Instructor

3. Supportive Notes

Teaching Learning Material

Books Name	Author
Workshop Technology (Vol-1)	W. Frei
Workshop Technology (Vol-2)	W. Frei

CNC machine Programing	Muhammad Hamid

Annexure-I:

Week	Task No.	Description
Week-2	Task-1	Measure the diameter of a small spherical or cylindrical Body with vernier caliper
	Task-2	Measure internal diameter and depth of the given beaker
	Task-3	Measure the diameter of a small spherical or cylindrical Body with micrometer.
	Task-4	Explore the types of turning tools and for what they are used.
Week-3	Task-5	Explore cutting tools and for what they are used.
	Task-6	Make use of cutting tools to perform a specific job.
	Task-7	Explore Striking tools and for what they are used.
	Task-8	Make use of Striking tools to perform a specific job.
	Task-9	Explore Gripping tools and for what they are used.
	Task-10	Make use of Gripping tool to perform a specific job.
Week-4 & Week-5	Task-11	Explore types of threads and for which purpose they are used.
	Task-12	Explore the difference between taps and dies.
	Task-13	Make use of taps and dies to produce thread inner side of hole and outer side of pipe.
	Task-14	Explore Drill and Drill bits.
	Task-15	Make use of drill and drill bits to produce a specific size of hole in any metal object.
	Task-16	Explore types of Punches and for what they are used.
	Task-17	Make use of wrenches to open or tight the screws.
	Task-18	Make use of grinding machine for Grinding, deburring and polishing workpieces to bring them to the desired shape and dimensions, in accordance with the design specifications
	Task-19	Explore the different process done in bench work.
Week-6	Task-20	Explore tools and their purpose which are used for design and setting.

Week-7	Task-21	Explore the tools used for geometric construction
	Task-22	Make multi view projection of and object, illustrate proper dimensioning
	Task-23	Make sectional view of a simple object to show internal detail.
Week-8	Task-24	Explore Types of turning operations and for what they are used
	Task-25	Make conical surface through tapered turning.
	Task-26	Make ball shape on the work piece through spherical turning
	Task-27	Perform turning operation on metal workpiece using Longitudinal feed and cross feed movement.
	Task-28	Calculate of cutting speed for a given specific job.
Week-9	Task-29	Explore lath machine cutting tools and for what they are used.
	Task-30	Perform drilling operation in mild steel workpiece to make hole of specific size of hole using lathe machine
	Task-31	Perform Reaming operation for finishing the hole using lathe machine
	Task-32	Grind and sharp the lathe tool as per requirement.
	Task-33	Explore the effect of side cutting edge angle, when to increase and when to decrease.
Week-10 & Week-11	Task-34	Explore the types of milling machine and for what they are used
	Task-35	Perform Plain Milling Operation
	Task-36	Perform Face Milling Operation
	Task-37	Perform End Milling Operation
	Task-38	Perform For Milling Operation
	Task-39	Perform T-slot Milling Operation
	Task-40	Perform Side Milling Operation
	Task-41	Perform Gear Milling Operation
	Task-42	Perform Straddle Milling Operation
	Task-43	Perform Grooves Milling Operation
	Task-44	Perform Gang Milling Operation

Week-13	Task-45	Create a free hand sketches of given objects
&	Task-46	Created 2D objects with given measurements.
Week-14	Task-47	Created 2D X-Section at specified point with given measurements.
	Task-48	Created 2D elevation of specified side with given measurements.
	Task-49	Saved AutoCAD drawing files in different file formats (e.g. DWG, PDF, JPG).
	Task-50	Edited 2D Objects to meet set standards.
	Task-51	Used appropriate command and tools to develop 2D drawings.
	Task-52	Developed 2D Drawing with given project specification and measurements.
	Task-53	Plot drawing on scale according to required size and orientation
Week-15		**Midterm**
Week-16	Task-54	Explore different parts of CNC machining center, CNC turning center their functions & types.
Week-17	Task-55	Design a CAD model
	Task-56	Convert the CAD model into a CNC program
	Task-57	Setup the CNC milling machine
	Task-58	Execute the milling operation
Week-18	Task-59	Demonstrate the different Lathe operations on CNC Lathe Machine
Week-19	Task-60	Make / apply Program for Facing Turning and Chamfering
Week-20	Task-61	Make Program for Step Turning and Taper Turning
	Task-62	Make Program for Step Turning and Drilling
	Task-63	Make Program for Step Turning, Threading And Grooving
	Task-64	Make Program for Circular Pocketing
	Task-65	Make Program for Rectangular Pocketing
	Task-66	Make Program for Rectangular and Circular Pocketing
	Task-67	Make Program for Square, Rectangular and Circular Pocketing

	Task-68	Make Program for Linear Interpolation
	Task-69	Make Program for Circular Interpolation
	Task-70	Make Program for Mirroring
	Task-71	Set G54 thru G59 work offsets
Week-21		**Project week**
Week-22	Task-72	Explore G code and M codes for CNC and for what they are used
Week-23	Task-73	Perform Facing operation using G code.
Week-24	Task-74	Perform step turning using G code.
	Task-75	Perform Radius cutting using G code.
	Task-76	Perform Chamfering & Filleting Operation using G code
	Task-77	Perform Threading Operation using G code.
	Task-78	Perform Drilling and Boring operation using G code
Week-25	Task-79	Analyze job in local market
Week-26	Task-80	Build your CV as per job demand
	Task-81	Analyze job demand in international country.
	Task-82	Apply for job in abroad.
	Task-83	Analyze customer demand

Annexure-II:

What is freelancing and how you can make money online - BBCURDU

https://www.youtube.com/watch?v=9jCJN3Ff0kA

What Is the Role of Good Manners in the Workplace? By Qasim Ali Shah | In Urdu

https://www.youtube.com/watch?v=Qi6Xn7yKIlQ

Hisham Sarwar Motivational Story | Pakistani Freelancer

https://www.youtube.com/watch?v=CHm_BH7xAXk

21 Yr Old Pakistani Fiverr Millionaire | 25-35 Lakhs a Month Income | Interview

https://www.youtube.com/watch?v=9WrmYYhr7S0

Success Story of a 23 Year - Old SEO Expert | How This Business Works | Urdu Hindi Punjabi

https://www.youtube.com/watch?v=tIQ0CWgszI0

Failure to Millionaire - How to Make Money Online | Fiverr Superhero Aaliyaan Success Story

https://www.youtube.com/watch?v=d1hocXWSpus

Annexure-III

SUGGESTIVE FORMAT AND SEQUENCE ORDER OF MOTIVATIONAL LECTURE.

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 on various team activities, gameplay sessions, pitch preparation, and other sessions, giving insights on the nature of communication and teamwork taking place and how both learning outcomes and the student experience can be improved in the future.

Session- 1 (Communication):

Please find below an 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 to communication skills • Team to collaborate on an activity sheet developing their communication, teamwork, and problem-solving • Gain an understanding of participants' own communication skills rating at the start of the program

Activity:	Participant Time	Teacher Time	Mentor Time
Intro Attend and contribute to the scheduled.			
Understand good communication skills and how it works.			
Understand what good			

communication skills mean			
Understand what skills are important for good communication skills			

Key learning outcomes:	**Resources:**	**Enterprise skills developed:**
• Understand the communication skills and how it works. • Understand what communication skills mean • 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 for 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 presentation 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 program 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: 30 minutes	MENTOR: Explain to the whole team that you will now be planning how to collaborate for the first and second collaborative Team Activities that will take place outside of the session. There will not be another session until the next session so this step is required because communicating and making decisions outside of a session requires a different strategy that must be agreed upon 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 the 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 the opportunity for anyone to ask any remaining questions. **Instructor:** Facilitate the wrap-up of the session. A quick reminder of what is

	coming up next and when the next session will be.

Motivational Lectures and Success Stories (Course Outlines)

Sr #	Topic title	Contents	Theme
1	**Success stories**	1. Story of Skill worker who get good job. 2. Entrepreneur /self-business 3. Freelancer	1. Family Background 2. How to get Training 3. How to get job 4. Success trait **5.** Few word of advice for youth
2	**Motivational Lectures**	1. Soft skills 2. work Ethics 3. Personality Grooming	**Good Habits** • Punctuality • Honesty • Positive attitude **Interpersonal skills** • Determinant • Consistent • Welling worker • Team work • Initiative • Hardworking • Creative • Enthusiastic • Goal oriented • Self-motivated • Communication • Loyalty

MOTIVATIONAL LECTURES LINKS.

TOPIC	SPEAKER	LINK
How to Face Problems In Life	**Qasim Ali Shah**	**https://www.youtube.com/watch?v=OrQte08Ml90**
Just Control Your Emotions	**Qasim Ali Shah**	**https://www.youtube.com/watch?v=JzFs__yJt-w**
How to Communicate Effectively	**Qasim Ali Shah**	**https://www.youtube.com/watch?v=PhHAQEGehKc**

Your ATTITUDE is Everything	**Tony Robbins Les Brown David Goggins Jocko Willink Wayne Dyer Eckart Tolle**	**https://www.youtube.com/watch?v=5fS3rj6elFg**
Control Your EMOTIONS	**Jim Rohn Les Brown TD Jakes Tony Robbins**	**https://www.youtube.com/watch?v=chn86sH0O5U**
Defeat Fear, Build Confidence	**Shaykh Atif Ahmed**	**https://www.youtube.com/watch?v=s10dzfbozd4**
Wisdom of the Eagle	**Learn Kurooji**	**https://www.youtube.com/watch?v=bEU7V5rJTtw**
The Power of ATTITUDE	**Titan Man**	**https://www.youtube.com/watch?v=r8LJ5X2ejqU**
STOP WASTING TIME	**Arnold Schwarzenegger**	**https://www.youtube.com/watch?v=kzSBrJmXqdg**
Risk of Success	**Denzel Washington**	**https://www.youtube.com/watch?v=tbnzAVRZ9Xc**

Annexure-IV

SUCCESS STORY

S. No	Key Information	Detail/Description
1.	**Self & Family background**	**Danyal Saleem,** who lives in Mirpur (AJK), is an example of how hard work and perseverance can reap rich rewards when bidding for projects online. The graphic designer works exclusively on an online freelancing platform and has earned, on average, **US$20,000** per month for the past several months. But this isn't a story of overnight success – Danyal has had to work hard to differentiate himself and stay true to his goal. It was a full year later, in May 2017, when Danyal finally decided to jump in. He signed up for one of the numerous sites that connect designers or coders with people or companies that have small projects, like designing a logo or building a website. He had already started a small business to help pay for his college education, so he was nervous and apprehensive about the decision. "I gave myself two or three months at most. If I didn't succeed, then I would go back to running the business as it was showing potential," he says. **If at first, you don't succeed, try try again**
2.	**How he came on board NAVTTC Training / or got trained through any other source**	Certification in graphic designing from STEPS (NAVTTC partner institute)

3.	**Post-training activities**	**Danyal's** area of expertise is in **graphic design**. In his first month using Fiverr, he pitched mostly for projects centered around logo designing. But it wasn't so simple. In the first few weeks, he didn't hear back from even a single client, despite pitching for dozens of projects. "I needed to understand what worked, so I read blogs, participated in forums, and analyzed profiles of successful freelancers. It was an uphill struggle, but I didn't want to give up," he explains. Danyal says he understands why clients would be apprehensive giving projects to untested freelancers. They have hundreds of options to choose from, he explains, and to give a project to someone with no experience requires a strong leap of faith. A slow stream of projects started to come Danyal's way. Within a few months, he was landing an average of a hundred projects every month, with a large number of repeat clients. He also expanded the range of his professional services, branching out from logo design to business cards, banners, Facebook cover pages, letterheads, and stationery. But he's had to face his fair share of challenges too. The shoddy state of internet infrastructure in his city, Mirpur, threatened to derail his freelancing career. "Sometimes I haven't had connectivity for two days straight," he explains. "That's unthinkable for someone who makes his livelihood on the internet."
4.	**Message to others** **(under training)**	Take the training opportunity seriously Impose self-discipline and ensure regularity Make Hard work pays in the end so be always ready for the same.

Note: Success story is a source of motivation for the trainees and can be presented in several ways/forms in a NAVTTC skill development course as under: -

1. To call a passed out successful trainee of the institute. He will narrate his success story to the trainees in his own words and meet trainees as well.
2. To see and listen to a recorded video/clip (5 to 7 minutes) showing a successful trainee Audio-video recording that has to cover the above-mentioned points.*****
3. The teacher displays the picture of a successful trainee (name, trade, institute, organization, job, earning, etc) and narrates his/her story in the teacher's own motivational words.

***** *The online success stories of renowned professional can also be obtained from* ***Annex-II***

Annexure-V:

Workplace/Institute Ethics Guide

Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue, or value to strengthen character and individual abilities. It is a set of values-centered on the importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for student success:

1. **Attendance:**
   Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.
2. **Character:**
   Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.
3. **Team Work:**
   The ability to get along with others including those you don't necessarily like. The ability to carry your weight and help others who are struggling. Recognize when to speak up with an idea and when to compromise by blend ideas together.
4. **Appearance:**
   Dress for success set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are can last a lifetime
5. **Attitude:**
   Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems, and procedures in light of changing responsibilities.

6. **Productivity:**

   Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your work, do things the best you know-how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

7. **Organizational Skills:**

   Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Take an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

8. **Communication:**

   Written communication, being able to correctly write reports and memos. Verbal communications, being able to communicate one on one or to a group.

9. **Cooperation:**

   Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing work situations and the application of new or different skills.

10. **Respect:**

    Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept, and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions, and suggestions.