

Government of Pakistan

National Vocational and Technical Training Commission

Prime Minister's Hunarmand Pakistan Program

"Skills for All"



Course Contents/ Lesson Plan

Course Title: Heavy Machine Operator

Duration: 6 Months

Revised Edition

Trainer Name	
Course Title	Heavy Machine Operator
Objectives and Expectations	<p>Employable skills and hands on practice for Heavy Machine Operator</p> <p>Course provides an opportunity to build a great career in the field of Heavy Machine Operator design, course start from basic level and then move towards the advance level. Starting from introduction of Heavy Machinery then move towards operations. This course will cover the different machines operations like Bulldozer, Motor Grader, Excavator, Wheel Loader and also th different checks of the engine.</p> <p><u>Main Expectations:</u></p> <p>In short, the course under reference should be delivered by professional instructors in such robust hands- on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion, where’s hands on practice are not valid than demonstration will be required through video contents/ project prototype.</p> <p>This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each individual trainee to prepare them for such market roles during/after the training.</p> <ol style="list-style-type: none"> 1. Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the management of the training Institute clearly labeling name, trade, session etc. so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document. 2. In order to materialize the main expectations, a special module on <u>Job</u>

Search & Entrepreneurial Skills has been included in the later part of this course (5th & 6th month) through which, the trainees will be made aware of the Job search techniques in the local as well as international job markets (Gulf countries). Awareness around the visa process and immigration laws of the most favored labor destination countries also forms a part of this module. Moreover, the trainees would also be encouraged to venture into self-employment and exposed to the main requirements in this regard. It is also expected that a sense of civic duties/roles and responsibilities will also be inculcated in the trainees to make them responsible citizens of the country.

3. A module on **Workplace Ethics** has also been included to highlight the importance of good and positive behavior at work place in the line with the best practices elsewhere in the world. An outline of such qualities has been given in the Appendix to this document. Its importance should be conveyed in a format that is attractive and interesting for the trainees such as through PPT slides +short video documentaries. Needless to say that if the training provider puts his heart and soul into these otherwise non-technical components, the image of Pakistani workforce would undergo a positive transformation in the local as well as international job markets.

In order to maintain interest and motivation of the trainees throughout the course, modern techniques such as:

- Motivational Lectures
- Success Stories
- Case Studies

These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).

Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem solving abilities of the trainees.

1. **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:

1. Clear Purpose to convey message to trainees effectively.
2. Personal Story to quote as an example to follow.
3. Trainees Fit so that the situation is actionable by trainees and not represent a just idealism.
4. 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.

5. 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 comprehensible 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:-

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

2. 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.

3. 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 classroom 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: -

1. A good quality trade specific documentary (At least 2-3 documentaries must be arranged by the training institute)
2. 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)
Entry level of trainees	<p>Since intake level is FA/FSC/DAE/Mechanical, the expectations from the trainees are:</p> <ul style="list-style-type: none"> • To have knowledge of Mechanical Field • Knowledge of Heavy Machinery • To have concept of Operations of Heavy Machinery
Learning Outcomes of the course	<p><u>By the end of this course, the trainees should be able to perform the following competencies:-</u></p> <p>Comply with Work Health and Safety Policies</p> <ul style="list-style-type: none"> • Work safely at work place • Communicate work health and safety (WHS) assess at work place • Minimize risks to personal safety at work place • Minimize risks to public safety <p>Obey the Workplace Policies and Procedures</p> <ul style="list-style-type: none"> • Obey the workplace personal appearance and hygiene • Follow work ethics • Demonstrate the work place behaviours • Communicate workplace policy & procedures • Review the implementation of workplace policy & procedures <p>Follow Basic Communication Skills (General)</p> <ul style="list-style-type: none"> • Adopt effective listening to skills • Develop nonverbal communication with peers • Prepare for Interview to get a job • Use communication platform at workplace • Identify communication barriers to improve interpersonal skills <p>Operate Computer Functions (General)</p> <ul style="list-style-type: none"> • Set up the computer for use • Organize files in folder • Shut down computer system <p>Identify Machine & its Attachments</p> <ul style="list-style-type: none"> • Identify machine and its sizes. • Identify components & attachments • Identify capacities & capabilities of machine • Identify basic tools and supplies associated with machines

- Maintain inventory of tools and equipment.

Comply with Personal Health and Safety Guidelines

- Identify Personal Hazards at work place
- Apply personal protective and safety equipment (PPE)
- Comply with occupational safety and health (OSH)
- Dispose of hazardous waste/materials from the designated area

Communicate the Workplace Policy and Procedure

- Identify workplace communication procedures
- Communicate at workplace
- Draft Written Information
- Review Documents

Perform Basic Communication (Specific)

- Communicate in a team to achieve intended outcomes
- Follow Supervisor's instructions as per organizational SOPs
- Develop Generic communication skills at workplace

Perform Basic Computer Application (Specific)

- Create Word Documents
- Create Excel Documents
- Use internet for Browsing

Maintain Machine (with Engine Off)

- Inspect and Service of lubrication system
- Inspect and Service electrical system
- Inspect and Service hydraulic system
- Inspect and Service cooling system
- Inspect and Service of air intake system
- Inspect and Service of fuel system
- Inspect and Service of suspension system
- Inspect and Service of drive train
- Inspect and Service of braking system
- Inspect and Service of load bearing structure
- Inspect and Service of operator station/Cab
- Inspect Equipment safety
- Inspect and Service of attachments
- Inspect and Service of supporting pneumatic (Air-filled) system

Maintain Machine (with Engine Running)

- Monitor warning systems
- Warm up engine
- Cycle equipment functions
- Scheduled Maintenance Requirements
- Logbook

Park Machines

- Clean under carriage and attachments before parking
- Park equipment in appropriate location
- Shut down and secure equipment
- Housekeeping tasks
- Visual inspection

Apply Work Health and Safety Practices (WHS)

- Implement safe work practices at work place
- Participate in hazard assessment activities at a work place
- Follow emergency procedures at workplace
- Participate in OHS consultative processes

Identify and Implement Workplace Policy and Procedures

- Identify workplace policy & procedures
- Implement workplace policy & procedures
- Communicate workplace policy & procedures
- Review the implementation of workplace policy & procedures

Communicate at Workplace

- Communicate within the organization
- Communicate outside the organization
- Communicate effectively in workgroup
- Communicate in writing

Perform Computer Application Skills

- Prepare In-page documents as per required information
- Prepare Spreadsheets as per required information
- Use MS Office as per required information
- Perform computer graphics in basic applications
- Create Email account for communications

Manage Personal Finances

- Develop a personal budget
- Develop long term personal budget
- Identify ways to maximize future finances

Transport Machines

- Prepare to load machine and attachments
- Loading machine and attachments
- Securing machine and attachments
- Unload or assist with unloading machine and attachments
- Prepare rubber-tired machine for road travel
- Drive rubber-tired machine on public roads

Operate Bulldozer

- Operate controls
- Strip and stockpile surface materials
- Cut and fill material
- Create slopes
- Create ditches
- Spread ballast
- Rip dense materials
- Clear land
- Push scraper

Operate wheel Loader

- Install attachments
- Operate controls
- Dig, carry (tram) & stockpile materials
- Place and spread materials
- Backfill trenches & excavate
- Load trucks

Contribute to Work Related Health and Safety (WHS) Initiatives

- Contribute to initiate work-related health and safety measures
- Contribute to establish work-related health and safety measures
- Contribute to ensure legal requirements of WHS measures
- Contribute to review WHS measures
- Evaluate the organization's WHS system

Analyze Workplace Policy and Procedures

- Manage work timeframes
- Manage to convene meeting
- Decision making at workplace
- Set and meet own work priorities at instant
- Develop and maintain professional competence
- Follow and implement work safety requirements

Perform Advanced Communication

- Demonstrate professional skills
- Plan and Organize work
- Provide trainings at workplace

Develop Advance Computer Application Skills

- Manage Information System to complete a task
- Prepare Presentation using computers
- Use Microsoft Access to manage database
- Develop graphics for Design

Manage Human Resource Services

- Determine strategies for delivery of human resource services
- Manage the delivery of human resource services
- Evaluate human resource service delivery
- Manage integration of business ethics in human resource practices

Develop Entrepreneurial Skills

- Develop a business plan
- Collect information regarding funding sources
- Develop a marketing plan
- Develop basic business communication skills

Operate Excavator

- Safety requirements
- Sets up equipment
- Install attachments
- Operate controls of Wheel Excavator
- Operate controls of Crawler Excavator
- Create slopes
- Build, excavate, and maintain haul roads and ramps
- Create mass excavation.
- Excavate trenches
- Excavate ditches
- Load trucks
- Cut and fills materials
- Stock piles materials
- Excavate and back fills trenches
- Hoist objects
- Clear land
- Demolish buildings and other structures
- Performance of machines

Operate Grader

- Operate controls
- Grading fundamentals
- Form and handle windrows
- Strip surface materials
- Cut and fill material
- Maintain access roads
- Create slopes
- Create ditches
- Create shouldering
- Form sub-Grade
- Finish grading

Course Execution Plan	<p>Total duration of course:6 months (26 Weeks)</p> <p>Class hours:4 hours per day</p> <p>Theory:20%</p> <p>Practical: 80%</p> <p>Weekly hours: 20 hours per week</p> <p>Total contact hours: 520hours</p>
Companies offering jobs in the respective trade	<ol style="list-style-type: none"> 1. Construction Sector 2. Industrial Sector 3. Supervisors
Job Opportunities/job titles	<ul style="list-style-type: none"> • Comply with Work Health and Safety Policies • Obey the Workplace Policies and Procedures • Follow Basic Communication Skills (General) • Operate Computer Functions (General) • Identify Machine & its Attachments • Comply with Personal Health and Safety Guidelines • Communicate the Workplace Policy and Procedure • Perform Basic Communication (Specific) • Perform Basic Computer Application (Specific) • Maintain Machine (with Engine Off) • Maintain Machine (with Engine Running) • Park Machines • Apply Work Health and Safety Practices (WHS) • Identify and Implement Workplace Policy and Procedures • Communicate at Workplace • Perform Computer Application Skills • Manage Personal Finances • Transport Machines • Operate Bulldozer • Operate wheel Loader • Contribute to Work Related Health and Safety (WHS) Initiatives • Analyze Workplace Policy and Procedures • Perform Advanced Communication • Develop Advance Computer Application Skills • Manage Human Resource Services • Develop Entrepreneurial Skills

	<ul style="list-style-type: none">• Operate Excavator• Operate Grader
No of Students	25
Learning Place	Classroom / Training Area
Instructional Resources	

MODULES

Scheduled Weeks	Module Title	Learning Units	Remarks
Week 1	<p>Comply with Work Health and Safety Policies</p> <p>Obey the Workplace Policies and Procedures</p> <p>& Motivational Lecture</p>	<p>Students are introduced to:</p> <p>Comply with Work Health and Safety Policies</p> <ul style="list-style-type: none"> • Work safely at work place • Communicate work health and safety (WHS) assess at work place • Minimize risks to personal safety at work place • Minimize risks to public safety <p>Obey the Workplace Policies and Procedures</p> <ul style="list-style-type: none"> • Obey the workplace personal appearance and hygiene • Follow work ethics • Demonstrate the work place behaviours • Communicate workplace policy & procedures • Review the implementation of workplace policy & procedures 	<p style="text-align: center;">Home Assignment</p> <ul style="list-style-type: none"> • Task 1 <p style="text-align: center;"><u>Details may be seen at Annexure-I</u></p>
Week 2	<p>Follow Basic Communication Skills (General)</p> <p>Operate Computer Functions (General)</p> <p>& Success stories</p>	<p>Students are introduced to:</p> <p>Follow Basic Communication Skills (General)</p> <ul style="list-style-type: none"> • Adopt effective listening to skills • Develop nonverbal communication with peers • Prepare for Interview to get a job • Use communication platform at workplace • Identify communication barriers to improve interpersonal skills <p>Operate Computer Functions (General)</p>	<ul style="list-style-type: none"> • Task 2 • Task 3 <p style="text-align: center;"><u>Details may be seen at Annexure-I</u></p>

		<ul style="list-style-type: none"> • Set up the computer for use • Organize files in folder • Shut down computer system 	
Week 3	Identify Machine & its Attachments And Motivational Lecture	Students are introduced to: Identify Machine & its Attachments <ul style="list-style-type: none"> • Identify machine and its sizes. • Identify components & attachments • Identify capacities & capabilities of machine • Identify basic tools and supplies associated with machines • Maintain inventory of tools and equipment. 	<ul style="list-style-type: none"> • Task 4 <p><i>Details may be seen at Annexure-I</i></p> <ul style="list-style-type: none"> • Monthly Test 1
Week 4	Comply with Personal Health and Safety Guidelines Communicate the Workplace Policy and Procedure And Success stories	Students are introduced to: Comply with Personal Health and Safety Guidelines <ul style="list-style-type: none"> • Identify Personal Hazards at work place • Apply personal protective and safety equipment (PPE) • Comply with occupational safety and health (OSH) • Dispose of hazardous waste/materials from the designated area Communicate the Workplace Policy and Procedure <ul style="list-style-type: none"> • Identify workplace communication procedures • Communicate at workplace • Draft Written Information • Review Documents 	<ul style="list-style-type: none"> • Task 5 • Task 6 <p><i>Details may be seen at Annexure-I</i></p>
Week 5	Perform Basic Communication (Specific) Perform Basic Computer Application	Students are introduced to: Perform Basic Communication (Specific) <ul style="list-style-type: none"> • Communicate in a team to achieve intended outcomes • Follow Supervisor's instructions as per organizational SOPs 	<ul style="list-style-type: none"> • Task 7 <p><i>Details may be seen at Annexure-I</i></p>

	<p>(Specific) & Motivational Lecture</p>	<ul style="list-style-type: none"> Develop Generic communication skills at workplace <p>Perform Basic Computer Application (Specific)</p> <ul style="list-style-type: none"> Create Word Documents Create Excel Documents Use internet for Browsing 	
Week 6	<p>Maintain Machine (with Engine Off) & Success stories</p>	<p>Students are introduced to: Maintain Machine (with Engine Off)</p> <ul style="list-style-type: none"> Inspect and Service of lubrication system Inspect and Service electrical system Inspect and Service hydraulic system Inspect and Service cooling system Inspect and Service of air intake system Inspect and Service of fuel system Inspect and Service of suspension system Inspect and Service of drive train Inspect and Service of braking system Inspect and Service of load bearing structure Inspect and Service of operator station/Cab Inspect Equipment safety Inspect and Service of attachments Inspect and Service of supporting pneumatic (Air-filled) system 	<ul style="list-style-type: none"> Task 8 Task 9 <p><i><u>Details may be seen at Annexure-I</u></i></p>
Week 7	<p>Maintain Machine (with Engine Running) And Motivational Lecture</p>	<p>Students are introduced to: Maintain Machine (with Engine Running)</p> <ul style="list-style-type: none"> Monitor warning systems Warm up engine Cycle equipment functions Scheduled Maintenance Requirements Logbook 	<ul style="list-style-type: none"> Task 10 Task 11 <p><i><u>Details may be seen at Annexure-I</u></i></p>
Week 8	<p>Park Machines</p>	<p>Students are introduced to: Park Machines</p> <ul style="list-style-type: none"> Clean under carriage and attachments 	<ul style="list-style-type: none"> Task 12 <p><i><u>Details may be seen at</u></i></p>

	And Success stories	<p>before parking</p> <ul style="list-style-type: none"> • Park equipment in appropriate location • Shut down and secure equipment • Housekeeping tasks • Visual inspection 	<u>Annexure-I</u>
Week 9	Apply Work Health and Safety Practices (WHS) &Motivational Lecture	<p>Students are introduced to:</p> Apply Work Health and Safety Practices (WHS) <ul style="list-style-type: none"> • Implement safe work practices at work place • Participate in hazard assessment activities at a work place • Follow emergency procedures at workplace • Participate in OHS consultative processes 	<ul style="list-style-type: none"> • Task 13 <p><u>Details may be seen at Annexure-I</u></p>
Week 10	Identify and Implement Workplace Policy and Procedures And Success stories	<p>Students are introduced to:</p> Identify and Implement Workplace Policy and Procedures <ul style="list-style-type: none"> • Identify workplace policy & procedures • Implement workplace policy & procedures • Communicate workplace policy & procedures • Review the implementation of workplace policy & procedures 	<ul style="list-style-type: none"> • Task 14 • Task 15 <p><u>Details may be seen at Annexure-I</u></p>
Week 11	Communicate at Workplace &Motivational Lecture	<p>Students are introduced to:</p> Communicate at Workplace <ul style="list-style-type: none"> • Identify workplace policy & procedures • Implement workplace policy & procedures • Communicate workplace policy & procedures • Review the implementation of workplace policy & procedures 	<ul style="list-style-type: none"> • Task 16 • Task 17 <p><u>Details may be seen at Annexure-I</u></p>
Week 12	Perform Computer	Students are introduced to:	<ul style="list-style-type: none"> • Task 18

	Application Skills &Success stories	Perform Computer Application Skills <ul style="list-style-type: none"> • Prepare In-page documents as per required information • Prepare Spreadsheets as per required information • Use MS Office as per required information • Perform computer graphics in basic applications • Create Email account for communications 	<i><u>Details may be seen at Annexure-I</u></i>
Week 13	Midterm		
Week 14	Manage Personal Finances &Success stories	Students are introduced to: Manage Personal Finances <ul style="list-style-type: none"> • Develop a personal budget • Develop long term personal budget • Identify ways to maximize future finances 	<ul style="list-style-type: none"> • Home Assignment • Task 19 • Task 20 <i><u>Details may be seen at Annexure-I</u></i>
Week 15	Transport Machines &Motivational Lecture	Students are introduced to: Transport Machines <ul style="list-style-type: none"> • Prepare to load machine and attachments • Loading machine and attachments • Securing machine and attachments • Unload or assist with unloading machine and attachments • Prepare rubber-tired machine for road travel • Drive rubber-tired machine on public roads 	<ul style="list-style-type: none"> • Task 21 • Task 22 <i><u>Details may be seen at Annexure-I</u></i>
Week 16	Operate Bulldozer	Students are introduced to: Operate Bulldozer	<ul style="list-style-type: none"> • Task 23 • Task 24 • Task 25

	&Success stories	<ul style="list-style-type: none"> • Operate controls • Strip and stockpile surface materials • Cut and fill material • Create slopes • Create ditches • Spread ballast • Rip dense materials • Clear land • Push scraper 	<i><u>Details may be seen at Annexure-I</u></i>
Week 17	Operate wheel Loader &Motivational Lecture	<p>Students are introduced to: Operate wheel Loader</p> <ul style="list-style-type: none"> • Install attachments • Operate controls • Dig, carry (tram) & stockpile materials • Place and spread materials • Backfill trenches & excavate • Load trucks 	<ul style="list-style-type: none"> • Task 26 • Task 27 • Task 28 <i><u>Details may be seen at Annexure-I</u></i>
Week 18	Contribute to Work Related Health and Safety (WHS) Initiatives & Success stories	<p>Students are introduced to: Contribute to Work Related Health and Safety (WHS) Initiatives</p> <ul style="list-style-type: none"> • Contribute to initiate work-related health and safety measures • Contribute to establish work-related health and safety measures • Contribute to ensure legal requirements of WHS measures • Contribute to review WHS measures • Evaluate the organization's WHS system 	<ul style="list-style-type: none"> • Task29 <i><u>Details may be seen at Annexure-I</u></i> <ul style="list-style-type: none"> • Monthly Test 5
Week 19	On job training (2 weeks)	<p>On job training for 2 weeks:</p> <ul style="list-style-type: none"> • 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 20	Analyze Workplace Policy and Procedures Perform Advanced Communication &Motivational Lecture	Students are introduced to: Analyze Workplace Policy and Procedures <ul style="list-style-type: none"> • Manage work timeframes • Manage to convene meeting • Decision making at workplace • Set and meet own work priorities at instant • Develop and maintain professional competence • Follow and implement work safety requirements Perform Advanced Communication <ul style="list-style-type: none"> • Demonstrate professional skills • Plan and Organize work • Provide trainings at workplace 	<ul style="list-style-type: none"> • Task 30 • Task 31 <i><u>Details may be seen at Annexure-I</u></i>
Week 21	Develop Advance Computer Application Skills &Motivational Lecture	Students are introduced to: Develop Advance Computer Application Skills <ul style="list-style-type: none"> • Manage Information System to complete a task • Prepare Presentation using computers • Use Microsoft Access to manage database • Develop graphics for Design 	<ul style="list-style-type: none"> • Task 32 <i><u>Details may be seen at Annexure-I</u></i>
Week 22	Manage Human Resource Services &Success stories	Students are introduced to: Manage Human Resource Services <ul style="list-style-type: none"> • Determine strategies for delivery of human resource services • Manage the delivery of human resource services • Evaluate human resource service delivery • Manage integration of business ethics in human resource practices 	<ul style="list-style-type: none"> • Task 33 <i><u>Details may be seen at Annexure-I</u></i>

<p>Week 23</p>	<p>Develop Entrepreneurial Skills</p> <p>&Motivational Lecture</p>	<p>Students are introduced to:</p> <p>Develop Entrepreneurial Skills</p> <ul style="list-style-type: none"> • Develop a business plan • Collect information regarding funding sources • Develop a marketing plan • Develop basic business communication skills 	<p>• Task 34</p> <p><i><u>Details may be seen at Annexure-I</u></i></p>
<p>Week 24</p>	<p>Operate Excavator &Success stories</p>	<p>Students are introduced to:</p> <p>Operate Excavator</p> <ul style="list-style-type: none"> • Safety requirements • Sets up equipment • Install attachments • Operate controls of Wheel Excavator • Operate controls of Crawler Excavator • Create slopes • Build, excavate, and maintain haul roads and ramps • Create mass excavation. • Excavate trenches • Excavate ditches • Load trucks • Cut and fills materials • Stock piles materials • Excavate and back fills trenches • Hoist objects • Clear land • Demolish buildings and other structures • Performance of machines 	<ul style="list-style-type: none"> • Task 35 • Task 36 <p><i><u>Details may be seen at Annexure-I</u></i></p>
<p>Week 25</p>	<p>Operate Grader &Motivational Lecture</p>	<p>Students are introduced to:</p> <p>Operate Grader</p> <ul style="list-style-type: none"> • Operate controls • Grading fundamentals • Form and handle windrows • Strip surface materials • Cut and fill material • Maintain access roads 	<ul style="list-style-type: none"> • Task 37 • Task 38 <p><i><u>Details may be seen at Annexure-I</u></i></p>

		<ul style="list-style-type: none"> • Create slopes • Create ditches • Create shouldering • Form sub-Grade • Finish grading • Clear snow and ice 	
Week 26	Plan Work &Success stories	<p>Students are introduced to:</p> <p>Plan Work</p> <ul style="list-style-type: none"> • Site hazards • Work procedures • Symbols and markings • Survey markers, construction grades, and stakes • Drawings and plans • Environmental concerns with site personnel • Grades and stakes • Grade checking devices • Review job specifications and safety considerations with site personnel 	<ul style="list-style-type: none"> • Task 39 • Task 40 <p><i><u>Details may be seen at Annexure-I</u></i></p>

Week	Task No.	Description
Week-1	Task-1	Explore Work Health and Safety Policies according to construction sector
Week-2	Task-2	Follow Basic Communication Skills related to heavy machinery
	Task-3	Operate Computer Functions related to heavy machinery
Week-3	Task-4	Identify Machines and Its attachments
Week-4	Task-5	Explore Personal Health and Safety Guidelines
	Task-6	Demonstrate the Workplace Policy and Procedure
Week-5	Task-7	Operate Basic Computer Application
Week-6	Task-8	Inspect and Service cooling system
	Task-9	Inspect and Service of lubrication system
Week-7	Task-10	Check Warm up engine
	Task-11	Check Logbook
Week-8	Task-12	Perform Visual inspection of machine
Week-9	Task-13	Follow emergency procedures at workplace
Week-10	Task-14	Identify workplace policy & procedures
	Task-15	Communicate workplace policy & procedures
Week-11	Task-16	Communicate within the organization
	Task-17	Communicate outside the organization
Week-12	Task-18	Create Email account for communications
Week-13		Midterm
Week-14	Task-19	Develop a personal budget
	Task-20	Identify ways to maximize future finances
Week-15	Task-21	Prepare to load machine and attachments
	Task-22	Prepare rubber-tired machine for road travel
Week-16	Task-23	Cut and fill material
	Task-24	Create slopes
	Task-25	Clear land
Week-17	Task-26	Place and spread materials
	Task-27	Backfill trenches & excavate
	Task-28	Load trucks
Week-18	Task-29	Contribute to review WHS measures
Week-19		Project week
Week-20	Task-30	Follow and implement work safety requirements
	Task-31	Plan and Organize work
Week-21	Task-32	Manage Information System to complete a task
Week-22	Task-33	Evaluate human resource service delivery
Week-23	Task-34	Develop a marketing plan

Week-24	Task-35	Load trucks
	Task-36	Cut and fills materials
Week-25	Task-37	Create shouldering
	Task-38	Form sub-Grade
Week-26	Task-39	Identify Site hazards
	Task-40	Apply Symbols and markings

Heavy Machinery Operator

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=Qi6Xn7yKIIQ>

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:
<ul style="list-style-type: none"> 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	• Podium	• Communication	

<p>communication skills and how it works.</p> <ul style="list-style-type: none"> • Understand what communication skills mean • Understand what skills are important for communication skills 	<ul style="list-style-type: none"> • Projector • Computer • Flip Chart • Marker 	<ul style="list-style-type: none"> • Self Confidence • Teamwork
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Schedule	Mentor Should do
<p>Welcome: 5 min</p>	<p>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.</p>
<p>Icebreaker: 10 min</p>	<p>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.</p>
<p>Introduction & Onboarding: 20mins</p>	<p>Provide a brief introduction of the qualification to the class and play the “Onboarding Video or Presentation”. In your introduction cover the following:</p> <ol style="list-style-type: none"> 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.

<p>Team Activity Planning: 30 minutes</p>	<p>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.</p> <ul style="list-style-type: none"> • “IDENTIFY ENTREPRENEURS” TEAM ACTIVITY • “BRAINSTORMING SOCIAL PROBLEMS” TEAM ACTIVITY” <p><i>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.</i></p> <p>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.</p> <p>Type up notes for their strategy if this is helpful - it can be included underneath the Team Contract.</p>
<p>Session Close: 5 minutes</p>	<p>MENTOR: Close the session with the opportunity for anyone to ask any remaining questions.</p> <p>Instructor: Facilitate the wrap-up of the session. A quick reminder of what is coming up next and when the next session will be.</p>

Motivational Lectures and Success Stories (Course Outlines)

Sr #	Topic title	Contents	Theme
1	Success stories	<ol style="list-style-type: none"> 1. Story of Skill worker who get good job. 2. Entrepreneur /self-business 3. Freelancer 	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 1. Soft skills 2. work Ethics 3. Personality Grooming 	<p>Good Habits</p> <ul style="list-style-type: none"> • Punctuality • Honesty • Positive attitude <p>Interpersonal skills</p> <ul style="list-style-type: none"> • Determinant • Consistent • Welling worker • Team work • Initiative • Hardworking • Creative • Enthusiastic • Goal oriented • Self-motivated • Communication • Loyalty

MOTIVATIONAL LECTURES LINKS.

<u>TOPIC</u>	<u>SPEAKER</u>	<u>LINK</u>
How to Face Problems In Life	Qasim Ali Shah	https://www.youtube.com/watch?v=OrQte08MI90
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	https://www.youtube.com/watch?v=5fS3rj6eIFg

	Wayne Dyer Eckart Tolle	
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	<p>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.</p> <p>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</p>

		<p>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.</p> <p>If at first, you don't succeed, try try again</p>
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	<p>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.</p> <p>"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.</p> <p>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.</p> <p>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.</p> <p>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."</p>

4	Success Traits	Success Traits (characteristics) Good Habits <ul style="list-style-type: none"> • Punctuality • Honesty • Positive attitude Interpersonal skills <ul style="list-style-type: none"> • Determinant • Consistent • Welling worker • Team work • Initiative • Hardworking • Creative • Enthusiastic • Goal oriented • Self-motivated • Communication • Loyalty
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*

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.