



Market-Driven Skilling Initiatives for Employment and Linkage with National Vocational Qualification Framework

MAW Skills Academy
MAW Earthmovers Pvt. Ltd.

Peer-to-Peer Learning Series

10 December 2020



In Collaboration with

Clear Horizon



INSTITUTE FOR INTEGRATED
DEVELOPMENT STUDIES



The Partnership

In Association with:



Citizen Prabidhik Shikshayala Pvt. Ltd.



Affiliation:



Membership:



Transnational Platform of Centres of Vocational Excellence for the
Manufacturing Sector

A Joint Initiative of :



Always looking
for a better way



Government of Nepal



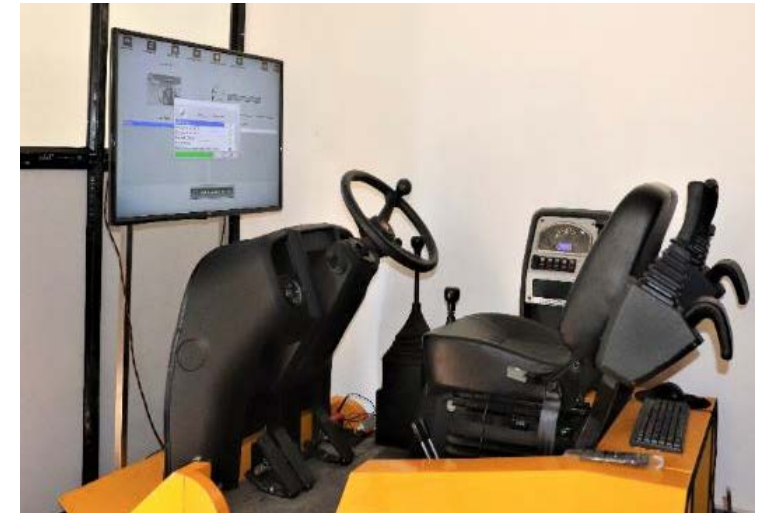
Skilling Approach



- **Investment model:** Co-investment from Ukaid Skills for Employment Programme सीप
- **Industry-led Skills Academy:** JCB brand and ensuring industry collaboration for demand-driven training, successful placements and certification
- **Fee based training:** 100% fees contribution from individual trainees or sponsorship

Training Delivery

- **Theory Sessions:** Imparting knowledge to the trainees, on facts, concepts or principles, attitudes, theories, problem solving abilities, soft skills
- **Simulator Based Training:** The training demonstration to make training effective and enhance training delivery
- **Practical Training:** Imparting hands-on practical training on *driving* and *general maintenance* skills to the trainees for excavators and backhoe loaders to enhance their employability
- **On-The-Job Training (Mechanics):** Real work and learning at the heavy equipment/construction industries



Industry aligned curriculum adapted to CTEVT

- **JCB Content:** JCB expert designed and industry aligned curriculum
- **Competency Based CTEVT Curriculum:** The curricula is adapted with CTEVT Competency Based Curriculum
- **Soft Skills:** Life skills (Communication, Self-Management, Safeguarding, Work Ethics, entrepreneurship skills, etc.)
- **Traffic Rules and Signals/Signs:** Collaboration with traffic police and sessions are delivered by traffic police on traffic rules, traffic signs and license trial information

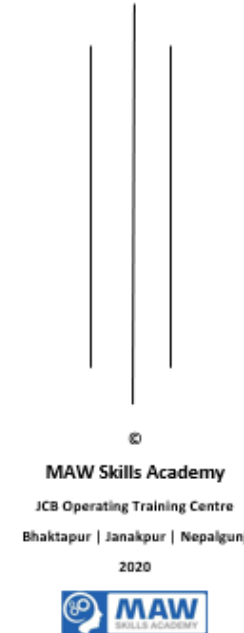


Industry aligned curriculum adapted to CTEVT - Curriculum

Curriculum contents

- | | |
|------------------------|-------------------------------|
| 1. Introduction | 11. Trainees & Trainers Ratio |
| 2. Objectives | 12. Trainer's Qualification |
| 3. Course Description | 13. Training Methods |
| 4. Course Structure | 14. Training Materials |
| 5. Training Duration | 15. Trainees Evaluation |
| 6. Target Group | 16. Course Evaluation |
| 7. Number of Trainees | 17. Certification |
| 8. Training Language | |
| 9. Training Attendance | |
| 10. Entrance Criteria | |

Backhoe Loader Operator Training Short Term Curricula



Task Analysis:

Task 1: Use of Safety Jackets and working Dress.

S. N	Steps	Terminal Performance Objectives	Related Technical Knowledge
1.	Choosing Safety Jacket, Working dress for your size.	Given: Safety clothing and equipment Task: Wear safety jacket and working dress. Standard: *Should be able to choose appropriate working dress from given dress.	*Occupational health care information *Machine operating safety related information
2.	Check condition of chosen working dress		
3.	Wearing Dress	*Inspect the condition of chosen dress to make sure that all the tag button, zips are correct. *After inspection, the dress was applied correctly with all the buttons, zips.	
4.	Apply all Buttons, chains Correctly		

Tools, Equipment & Materials: Different sizes of safety jackets and working dress.
Safety and Precaution.

Task 2: Wearing Safety Helmet.

S. N	Steps	Terminal Performance Objectives	Related Technical Knowledge
1.	Choosing Safety Helmets for your size.	Given: Safety clothing and equipment Task: Wear safety Helmet Standard: *Should be able to choose appropriate Safety Helmet from given.	*Occupational health care information *Machine operating safety related information
2.	Check condition of chosen Safety Helmets.		
3.	Wearing Safety Helmets	*Inspect the condition of chosen Helmet to make sure that all the tie Cables are correct. *After inspection, the Helmet was applied correctly with all the Tie cables.	
4.	Apply Tie Cables Correctly		

Tools, Equipment and Materials: Different sizes of safety Helmets.
Safety and Precautions.

Industry aligned curriculum adapted to CTEVT - Course Structure

S. N	Module/Sub-Module	Nature	Theory (Hrs)	Practical (Hrs)	Total (Hrs)
1.	Introduction of Backhoe Loader	T+P	1	1	2
2.	Obeying Safety Measures	T+P	2	4	6
3.	Inspection of Machine				
	Sub-module 3.1 Daily Machine Inspection	T+P	2	10	12
	Sub-module 3.2 Machine Inspection After Engine Start	T+P	2	9	11
4.	Operating BHL	T+P			
	Sub-module 4.1 Operating Loader	T+P	3	45	48
	Sub-module 4.2 Operating Excavator	T+P	3	45	48
5.	Transporting of Machine	T+P	1	3	4
6.	General Maintenance of Machine	T+P	2	11	13
7.	Life Skills	T+P			
	Sub-module 7.1 Self-Management	T	3		3
	Sub-module 7.2 Safeguarding (SEAH)	T	3		3
	Sub-module 7.3 Communication Skills	T	6		6
	Sub-Module 7.4. Professional Development	T+P	3	3	6
8.	Entrepreneurship Development	T+P	8	20	28
T=Theory/P=Practical		T+P	37	153	190

Industry aligned curriculum adapted to CTEVT - OP Structure

- Occupation Title:
- Sector:
- Sub Sector:
- Level:
- Job Roles:
- Worker traits:
- Entry Requirements:
- Examination Requirement:
- Recommended Group Size:
- Duration/Time:
- Related Technical Knowledge:
- Tools and Equipment:
- Career Path:

Occupational Profile
Of
Backhoe Loader Junior Operator, L-1
(Sector: Mechanical Engineering Sub Sector: Construction Equipment)

(DACUM Workshop on 15 & 16 June 2016)
(Customized DACUM on 18th June 2016)
(Technical Sub Committee Meeting on 22nd June 2016)

DACUM Panel

- Ms. Sangita Gautam, UCEP Nepal, Sanathimi, Bhaktapur
- Mr. Om Prakash Yadav, MT Construction, Pepsicola, Kathmandu
- Mr. Gajendra Shrestha, Bhairav Construction, Newroad, Kathmandu
- Mr. Brijay Bista, Shankarapur, Santhi, Nuwakot, Kathmandu
- Mr. Jitendra Bahadur Septhia, Nepal Police, Nuwakot, Kathmandu
- Mr. Bharat Shrestha, Department of Water Indus Prevention, Pulchowk, Lalpur
- Mr. Ranjan Sainju, R.R. Construction, Jagati, Bhaktapur
- Mr. Nabin Prasad, Heavy Equipment Division, Kathmandu
- Mr. Dinesh Bista, Shankarapur, Shanti, Construction, Gorkha
- Mr. Dilli Raj Khadka, Nischal Construction, Gorkha
- Mr. Ramesh Dang, Shiva Parbat, Construction, Karsaur, Bhaktapur
- Mr. Gopal Kumar, Kumar Orthomix, Construction, Karsaur, Bhaktapur

DACUM Coordinator
Mr. Tulu K.C., Sr. Skill Testing Officer, NSTB, Bhaktapur

DACUM Facilitator/Co-facilitator
Mr. Suresh Maharjan, Skill Testing Officer, NSTB, Bhaktapur
Mr. Mukunda Prasad Mainali, Skill Testing Assistant, NSTB, Sanathimi, Bhaktapur

Verification Panel

- Mr. Ramesh Sander Sawai, Maita Ita Bhatta, Udaying, Bhaktapur, Bhaktapur
- Mr. Sagar Lama, Universal Construction, Gorkha, Lalpur
- Mr. Kumar Shrestha, Yuva Construction, Jagati, Kathmandu
- Mr. Bed Bahadur Thakur, Salamba Kaveri, Sanathimi, Bhaktapur
- Ms. Sangita Gautam, UCEP Nepal, Sanathimi, Bhaktapur
- Mr. Nabin Prasad, Heavy Equipment Division, Kathmandu
- Mr. Bharat Shrestha, Department of Water Indus Prevention, Pulchowk, Lalpur
- Mr. Satya Narayan Sawai, Sanswoti Mata, Construction, Paudhaka, Bhaktapur
- Mr. Deepak Pahari, Kumar Orthomix, Karsaur, Bhaktapur

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Technical Sub-Committee

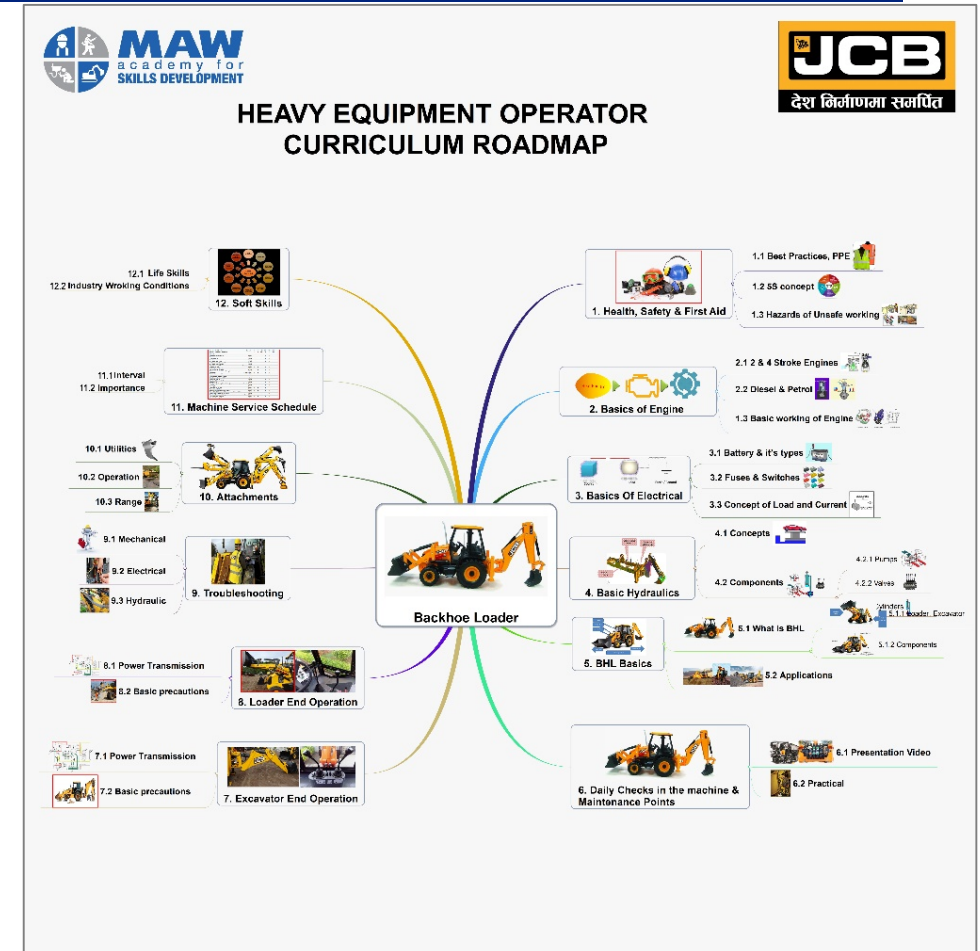
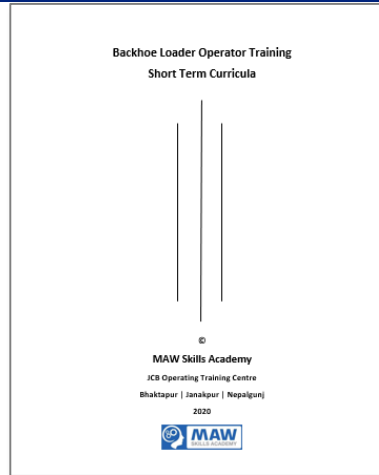
- Dr. Bishnu Bahadur Shah, Coordinator, Construction Equipment Technical Sub Committee, NSTB, Bhaktapur
- Mr. Yam Bahadur, Director, NSTB, Bhaktapur
- Dr. Rajan Mas Shrestha, Member, Mechanical Training Center, Paudhaka, Lalpur
- Dr. Babu Ram Gurung, Member, Construction Equipment Training & Service Center (P) Ltd, Dabachowk, Kathmandu
- Dr. Man Raj Regmi, Member, Teyo Nepal (P) Ltd, Beldhi, Kathmandu
- Mr. Tulu K.C., Member Secretary, Construction Equipment TSC, NSTB, Bhaktapur
- Mr. Suresh Maharjan, Member, Skill Testing Officer, NSTB, Bhaktapur

Council For Technical Education and Vocational Training
NATIONAL SKILL TESTING BOARD
Madyapur Thimi 17, Sanathimi, Bhaktapur
Nepal
(NSTB approval date)

Example of Job Role/Duty: **Inspect Worksite**

A1. Apply Personal Protective Equipment			A2. Mark Worksite			A3. Identify Potential Site Hazards			A4. Place Safety Symbol		
Task rating			Task rating			Task rating			Task rating		
Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency	Importance	Difficulty	Frequency
3	1	3	3	2	1	3	3	1	3	2	2
A5. Perform Reporting											
Task rating											
Importance	Difficulty	Frequency									
3	1	3									

Industry aligned curriculum adapted to CTEVT: Training Package

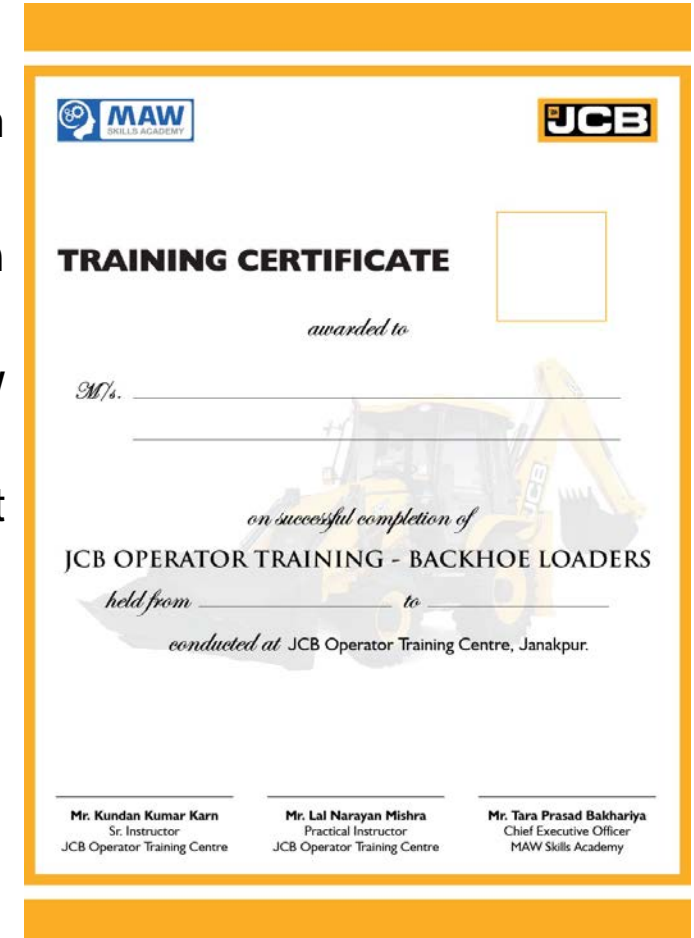
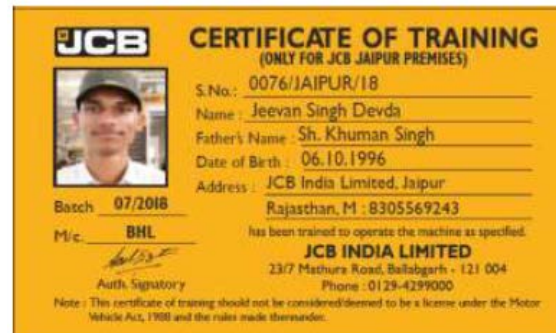


Industry aligned curriculum adapted to CTEVT – OP/NOSS L 1

- **OP/NOSS of NSTB:** Contents are aligned with OP/NOSS developed by NSTB/NVQF
- **Synergy with NSTB-NVQS:** Drafted MOU among NSTB-NVQS, MEPL and UKaid SEP for piloting in development functional analysis mapping, development of competency standard on Heavy Equipment trade linking with NVQF – **Under discussion**
- **Skill Test from NSTB:** Interested graduates can apply for skill test on Heavy Equipment trade of Level 1 from NSTB

Evaluation & Certification

- **Regular** observation by Trainers
- **Three** internal evaluation on each module and **one** final evaluation (both theory and practical)
- Trainee must obtain **40%** and **60%** in **theory** and **practical** in **each module** respectively
- Trainees are provided with **International JCB Certificate** and the MAW Skills Academy Certificate based on result of final evaluation
- It is pre-condition for the graduates to have **driving license** from Transport Management Office/Government of Nepal for getting employment.



Industry Collaboration–Industrial Advisory Committee

MAW Skills Academy has formed an Industrial Advisory Committee; not only for the job placement of our graduates but also for:

- Placing our students for On-the-Job Training (OJT) and Apprenticeship Training
- Creating awareness of the skills in demand and new and emerging job roles
- Developing training labs, sharing knowledge, conducting training of trainers, industry visit of trainers, helping in creating curriculum as per job role and assessment of trainees



Gopal Kumar Agrawal -
Chairperson

Vice President (Finance) - MAW
Group and CEO - MAW
Earhmoovers



Chiranjibi Shah - Member

CEO - Yamaha



Vishal Gadia - Member

Executive Director - MAW
Engineering



Raunak Agarwal - Member

Executive Director - Skoda



Tara Prasad Bakhariya -
Member Secretary

CEO - MAW Skills Academy

FOR ADDITIONAL INFORMATION ON MAW SKILLS ACADEMY ACTIVITIES



Thank You

For more information:

Tara Prasad Bakhariya | Chief Executive Officer

MAW Skills Academy

Email: tara.bakhariya@mawnepal.com