

MINUTES of meeting under NAVTTC regarding “Validation/ Qualification Review”
of DAE in “Mechanical Manufacturing and Automation Technology” (Non-
CBT&A), on Sino-Pak CCTE (2+1) mode; Joint Education, Dual Diploma
Programme, through MOU/ Agreement with Chinese College

Agenda Items:-

Sr. No.	Item(s)
1.	Validation and approval of the subject Curriculum furnished by ATIN NLC as finalized through joint deliberative meetings of Mechanical Engineering, Automation and Manufacturing experts of ATIN NLC with peer expert faculty members from Brother Chinese College (Jilin Vocational College of Industry & Technology):- • Detail of Participants from NAVTTC, TEVTA-Punjab, PSDA, ATIN NLC Mandra, NLC H/Q, Academia (University) and relevant Industry is listed below. • Understanding & Brief Presentation of the CCTE Model joint education dual diploma split education program as well as the detailed overview of collaboration/ curriculum development by the meeting convener (Manager Training Business Development & Plans HQ ATINs) • Briefing regarding salient of Diploma of Associate Engineer (DAE) 3-Year programme by Director (Cur.) TEVTA. • Formal presentation of subject-wise course contents of 3-Years curriculum • Discussion and Q&A session, along with minor refinements, (if required) • Consent and grant of approval by worthy validation/ Qualification Review committee members.

Date & Time: 25th September, 2023 (10:00 A.M to 5:00 pm)

Venue: HQ ATINs NLC, NLC Corporate Office, Herding Road, GHQ-Rawalpindi
Participants:-

1. Dr. Irfan Ahmed Gondal, Professor & Chairperson, National Skills University.
2. Mr. Mudassar Mehmood, General Manager, Green Tech. Glass Works Ltd (Joined Online).
3. Mr. Aazar Hammad, Manager (Admin.) Dada Enterprises Pvt. Ltd (Joined Online).
4. Engr. Arshad Akhtar Khilji, Principal, AITN NLC Mandra
5. Engr. Syed Muhammad Waqar ud Din, Director (Curriculum) P-TEVTA, Lahore
6. Engr. Amjad Ali, Manager Training Business Dev and Plans, HQ ATINs, NLC Corporate office GHQ, Rawalpindi (Convener)
7. Mr. Muhammad Asim, Dy. Director (SS&C) NAVTTC, Islamabad (Coordinator)

The meeting started with the recitation of the Holy Quran and welcoming remarks by the Director ATINs NLC, being the host. All the participants introduced themselves to each other. The representatives from NAVTTC, TEVTA-Punjab and NLC thanked the participants from Industry and Academia for their extended support and for visiting the venue for a just and noble TVET educational-related cause.

The Meeting Convener briefed the house regarding the main features of the CCTE Model Dual Diploma Split Education Programme, phases of collaboration with Chinese counterpart institutes as well as the detailed procedure of curriculum development. The benefits of this programme for Pakistani students in the context of international exposure, employment opportunities within Pakistan and abroad, practical training on hi-tech technology equipment at Chinese brother colleges and the importance of the Chinese language (which is a part of the curriculum) were also highlighted.

Director (Cur.) TEVTA furnished in-depth detail related to the salient of the DAE course curriculum and related characteristics for Compulsory, Related Studies, and Allied subjects as well as pure technology-specific subjects. Approval processing Mechanism was also introduced to the participants. He shared that the same curriculum has already been sent to the national forum of the Committee of Chairmen & Directors of Technical Education (CCDTE) Pakistan. A brief on the activities under a similar CCTE programme was also presented, for a better understanding of the participants.

Subsequent to the above, detailed scrutiny and deliberations were initiated by the worthy Convener/ facilitator of validation. Main subjects / Skill standards from 1st to 3rd year were discussed w.r.t contents & sub-contents' wise by the field-related validation expert of Industry & Academia.

Following **technical recommendations & suggestions** were made by the committee, were made by the committee, which were incorporated in the relevant sections while all other subjects/ skill standards have been found correct as per academic and industry requirements and were **approved by the committee**, along with compliant **Lab Equipment** and machinery (for 1st Two Years of study) and **Teachers/ Instructor Qualification:-**

1st Year

- i. In the subject MMAT 132 (Basic Electrical and Electronics) the topics related to Boolean Algebra have been added at serial 6 (6.1 & 6.2)

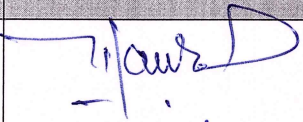
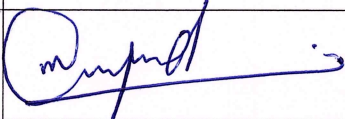
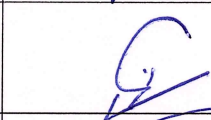
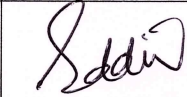
2nd Year & 3rd Year

- ii. No changes were made by the validation experts in the 2nd and 3rd-year subjects, however, the following were suggested.
 - a. **Interdisciplinary Collaboration.** As manufacturing integrated with automation is a multidisciplinary field, a collaboration with other relevant disciplines such as industrial engineering, data science and business management could enhance the curriculum's comprehensiveness. In this context, one subject related to Artificial intelligence (AI) may be added, when the course comes under the process of Curriculum revision.
 - b. **Case Study and Industry Integration.** Integrating more real-world case studies, involving professionals from the mechanical industry as guest lectures and industrial visits/ tours can provide the students with valuable insights and practical perspectives.

- c. **Continuous Evaluation.** Regularly assessing and updating the curriculum is crucial to keep it current. The curriculum should establish a process for ongoing evaluation and adaptation to ensure it remains relevant.

Other proposals are also being furnished as under:-

- The Skill Standards as per Industry requirements have been validated for the subject course, as annexed at "Annex-A"
- As a process of "Reverse Engg. regarding subject matter, NAVTTC may develop the formal detailed "Skill standards" for the same course, regarding future facilitation in the qualification framework.
- The subject-wise/course-wise "Question Bank" may be developed by the Qualification Review/validation committee field-related experts (Industry & Academia/ ATIN) after formal approval of this course, if desired by the quarter concerned.

Name	Designation	Signature
Dr. Irfan Ahmed Gondal,	Professor & Chairperson, National Skills University.	
Mr. Mudassar Mehmood,	General Manager, Green Tech. Glass Works Ltd.	
Mr. Aazar Hammad,	Manager (Admin.) Dada Enterprises Pvt. Ltd	
Engr. Arshad Akhtar Khilji,	Principal ATIN NLC Mandra	
Engr. Syed Waqar ud-Din	Director (Curriculum) P-EVTA, Lahore	
Mr. Muhammad Asim	Dy. Director (SS&C) NAVTTC, Islamabad --coordinator	
Engr. Amjed Ali	Manager Training Business Development & Plans (NLC), Rawalpindi (Convener)	

Occupations/ Job Positions of Graduates in the Industry/ Market

At the successful completion of the course, the students are expected to join the Manufacturing, Automotive, Aerospace and Energy sector-related industries as a:-

- Mechanical Workshop Assistant
- Manufacturing Technician
- Automation Technician
- Industrial Engineering Assistant
- PLC Technician
- Metrology Technician
- CNC Machine Operator
- Assistant Mechanical Design
- Quality Control Technician
- Materials and Heat Treatment Specialist
- CAD/CAM Technician/ Operator
- NC Machine Tool Operator
- Assistant Automation Engineer
- Production Supervisor
- Assistant Process Engineer
- Maintenance Technician
- Machinist
- Instrumentation and Control Technician