



THE MERU NATIONAL  
POLYTECHNIC  
*Technology for Innovation & Development*

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# Become a Competent Lathe Machine Operator

***A 21<sup>st</sup> Century must-have skill***

The demand for Lathe machine operators has increased within the manufacturing industry. The purpose of this course is to develop a range of skills and techniques necessary to become an effective machine operator, according to industry requirements. It will enable you to pursue a Machinist career path with greater employment and entrepreneurial skills

## **What you will learn:**

- How to use and maintain Hand and Portable tools
- How to calculate and Select Speeds and Feeds in Lathe Operations
- Produce threads using cutting tools
- Perform facing and turning
- Perform drilling and boring operations
- Perform taper turning operations both internal and external
- Perform knurling
- How to organize work area
- Personal and machine safety

## **Certificate in Mechanical Technology: Lathe Machine Operations from TVET**

At the end of 6-months you will receive a Certificate of Competency Level IV in Mechanical Technology: Lathe Machine Operations from TVET. The course is short: 3 months in the technical college; 3 months in an Industry for a skill relevant to industry.

## *Opportunities for employment*

Fertilizer plants	manufacturing industry	Chemical plants.
Pharmaceutical industry	Cement plants.	Oil refineries.
Automobile industry	Sugar Industries	Power plants.
Papers and board industry	Packaging Industry	Own workshop

## **A skill for the Big Four Agenda**

The Kenya government has identified four pillars that will grow the economy and improve the wellbeing of the citizens. The Big Four include: Food security, affordable housing, manufacturing, and affordable healthcare for all.

The ministry of education through TVET is actively promoting the realization of the government's Big 4 agenda to provide world class skills for irrigation, construction and maintenance of health facilities and manufacturing plants.

For example, affordable housing (prefabricated houses), agricultural machines, health equipment and manufacturing plants will all benefit from adequate Lathe Machine Operators.

## **Why study this course under the Competency Based Education and Training (CBET) Approach?**

CBET approach places emphasis on practical training with very little theoretical learning. This makes the course ideal for anyone who loves working with their hands. In addition:

- You will train on a specific skill & technology relevant to Industry
- Total duration of course is 6 months- 3 Months theory practice; 3 Months in an Industry
- Certification is nationally accepted while the Training is locally & globally recognized
- You have higher chances of self and formal employment – skilled laborers are in high demand locally and internationally

**Minimum requirement: KSCE grade D**

**Examining Body: TVET CDACC**

**What is CBET**

Competency-Based Education and Training (CBET) is a hands on training approach designed specifically to meet the demand of industry. Learning is based on specific skill and technology relevant to industry. The Industry works collaboratively with students and the Technical Institutions to match skill to industry needs.

### **Certification and Accreditation under CBET**

CBET is a globally accepted training principle. In Kenya, it was launched in March 2017 with the pilot level IV modularised CBET training program consisting of 3 months' theory at the selected institutions and 3 months' industry based training.

CBET approach will be implemented by Ministry of Education and its subordinated bodies such as TVETA and TVET CDACC. Occupational standards and curricula have been developed in select institutions for the January 2019 in the following courses:

- Instrumentation and Control
- Manual arc welding
- Mechanical technology: Lathe machine operations
- Heavy and Light Machinery