



THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF INDUSTRY AND TRADE

**TANZANIA BUREAU OF STANDARDS (TBS)**



Member of the International Standardization (ISO), Codex Alimentarius Commission (WHO/FAO), Agent for ISO and other National Standards Bodies

## TRAINING COURSE ANNOUNCEMENT

### COURSE TITLE: UNCERTAINTY OF MEASUREMENTS FOR TESTING LABORATORIES

**Duration: Five (5) days (26<sup>th</sup> to 30<sup>th</sup> August, 2024)**

**Targeted participants:** Laboratory analysts, scientists, researchers, laboratory technicians, chemists, laboratory technologists and any other related professionals.

**Note:** Participant shall have knowledge on ISO/IEC 17025 standard requirements.

#### Course Outline

1. Concept of measurement uncertainty;
2. Measurement uncertainty as per ISO 17025;
3. Basic Statistics related to measurement uncertainty;
4. Measurement uncertainty approaches (GUM and NORDTEST); and
5. Application of measurement uncertainty in reporting of testing results.

#### Course presentation and methodology

Course will be presented in Swahili-English language. Also, the course will be delivered in mode of interactive tutor-led and trainee led, discussions, interaction sessions, and experience from trainees and group participation.

#### TBS HEADQUARTERS

Physical Address  
Tanzania Bureau of Standards  
Ubungu, Morogoro Road /  
Sam Nujoma Road  
P. O. Box 9524  
DAR ES SALAAM, TANZANIA  
Tel. No: +255 22 245 0298/  
+255 22 245 0206  
Telefax: +255 22 2450959  
Hotline: 0800110827  
E-mail: [info@tbs.go.tz](mailto:info@tbs.go.tz)  
Website: <http://www.tbs.go.tz>  
E-mail address for customer complaints:  
[complaints@tbs.go.tz](mailto:complaints@tbs.go.tz)  
Twitter: TBS\_Tanzania  
Instagram: tbs\_Viwango

#### TBS CENTRAL ZONE

Physical Address  
Kambarage Tower  
P.O. Box 2956  
DODOMA,  
TANZANIA  
Tel. No:  
+255 26 2520310

#### TBS LAKE ZONE

Physical Address  
NSSF Building,  
3<sup>rd</sup> Floor  
P.O. Box 1814  
MWANZA,  
TANZANIA  
Tel. No:  
+255 28 2501127

#### TBS NORTHERN ZONE

Physical Address  
NSSF Mafao House  
Building, 2<sup>nd</sup> Floor  
P.O. Box 2399  
ARUSHA,  
TANZANIA  
Tel. No:  
+255 27 2520143

#### TBS SOUTHERN HIGHLANDS ZONE

Physical Address  
NHIF Building,  
7<sup>th</sup> Floor  
P.O. Box 1674  
MBEYA,  
TANZANIA  
Tel No:  
+255 25 2502848

#### TBS SOUTHERN ZONE

Physical Address  
MTUWASA Building  
P. O. Box 1396  
MTWARA,  
TANZANIA  
Tel. No:  
+255 23 2334477

#### TBS WESTERN ZONE

Physical Address  
NSSF Building (Mafao  
House), 2<sup>nd</sup> Floor  
P. O. Box 1276  
KIGOMA,  
TANZANIA  
Tel. No:  
+255 28 2804023

## Benefits of the course

After completion of this course, candidates shall be able to:

- i. apply knowledge on identification of uncertainty sources;
- ii. estimate uncertainties of measurements in the laboratory;
- iii. identify the appropriate approach for evaluating measurement uncertainty; and
- iv. Apply knowledge on implementation of ISO/IEC 17025 requirements.

## Course requirements

Each student shall have calculator/laptop/iPad

## Course assessment and awards

Participant, who attends the course, participates group work, exercises, individual assignment and final test, and scores 60% and above of the final course evaluation awarded a certificate of successful completion. Otherwise, a participant who scores less than 60% of the final course evaluation awarded a certificate of attendance. In addition, the participant will be provided with training materials for further reference. Full attendance of participants is required during the course.

## Course fees

The course fee is TZS 500,000.00 per person for Tanzanians and USD 500 per person for foreigners, non-refundable. The fee shall cover tuition fee, stationeries, training materials, food and refreshments. Each applicant shall be responsible for his/her own travelling and accommodation expenses.

## Mode of application

Interested applicants are advised to apply for the course through email [researchandtraining@tbs.go.tz](mailto:researchandtraining@tbs.go.tz) and provide the following information:

- i. Full name of applicant;
- ii. Region and district of applicant;
- iii. Contact (physical address/P. O. Box) of applicant;

---

### TBS HEADQUARTERS

Physical Address  
Tanzania Bureau of Standards  
Ubungu, Morogoro Road /  
Sam Nujoma Road  
P. O. Box 9524  
DAR ES SALAAM, TANZANIA  
Tel. No: +255 22 245 0298/  
+255 22 245 0206  
Telefax: +255 22 2450959  
Hotline: 0800110827  
E-mail: [info@tbs.go.tz](mailto:info@tbs.go.tz)  
Website: <http://www.tbs.go.tz>  
E-mail address for customer complaints:  
[complaints@tbs.go.tz](mailto:complaints@tbs.go.tz)  
Twitter: TBS\_Tanzania  
Instagram: tbs\_Viwango

### TBS CENTRAL ZONE

Physical Address  
Kambarage Tower  
P.O. Box 2956  
DODOMA,  
TANZANIA  
Tel. No:  
+255 26 2520310

### TBS LAKE ZONE

Physical Address  
NSSF Building,  
3<sup>rd</sup> Floor  
P.O. Box 1814  
MWANZA,  
TANZANIA  
Tel. No:  
+255 28 2501127

### TBS NORTHERN ZONE

Physical Address  
NSSF Mafao House  
Building, 2<sup>nd</sup> Floor  
P.O. Box 2399  
ARUSHA,  
TANZANIA  
Tel. No:  
+255 27 2520143

### TBS SOUTHERN HIGHLANDS ZONE

Physical Address  
NHIF Building,  
7<sup>th</sup> Floor  
P.O. Box 1674  
MBEYA,  
TANZANIA  
Tel No:  
+255 25 2502848

### TBS SOUTHERN ZONE

Physical Address  
MTUWASA Building  
P. O. Box 1396  
MTWARA,  
TANZANIA  
Tel. No:  
+255 23 2334477

### TBS WESTERN ZONE

Physical Address  
NSSF Building (Mafao  
House), 2<sup>nd</sup> Floor  
P. O. Box 1276  
KIGOMA,  
TANZANIA  
Tel. No:  
+255 28 2804023

- iv. Phone number and email address of applicant; and
- v. Organization name, TIN number, contact (physical address/P. O. Box), region and district (if any).

### Mode of payment

Course fees shall be paid in full prior to the date of training. Government bill will be issued to applicant.

### Postponement and cancellation of training course

If a participant fails to attend the training for any reason, the paid course fee will not be refunded. In case the Bureau postpones the training, the applicant will be informed ten (10) days before commencement of the training course together with re-scheduled date.

### Training venue

The training will be conducted at TBS Headquarters, Ubungo Area, Morogoro Road/ Sam Nujoma Road, Dar es Salaam.

For enquiries, contact us through cell phone **No. +255 733 700447 from Monday to Friday (08h00 -16h00).**

Issued by:

**Gladness H. Kaseka**

**Public Relations and Marketing Manager**

#### TBS HEADQUARTERS

Physical Address  
Tanzania Bureau of Standards  
Ubungo, Morogoro Road /  
Sam Nujoma Road  
P. O. Box 9524  
DAR ES SALAAM, TANZANIA  
Tel. No: +255 22 245 0298/  
+255 22 245 0206  
Telefax: +255 22 2450959  
Hotline: 0800110827  
E-mail: [info@tbs.go.tz](mailto:info@tbs.go.tz)  
Website: <http://www.tbs.go.tz>  
E-mail address for customer complaints:  
[complaints@tbs.go.tz](mailto:complaints@tbs.go.tz)  
Twitter: TBS\_Tanzania  
Instagram: tbs\_Viwango

#### TBS CENTRAL ZONE

Physical Address  
Kambarage Tower  
P.O. Box 2956  
DODOMA,  
TANZANIA  
Tel. No:  
+255 26 2520310

#### TBS LAKE ZONE

Physical Address  
NSSF Building,  
3<sup>rd</sup> Floor  
P.O. Box 1814  
MWANZA,  
TANZANIA  
Tel. No:  
+255 28 2501127

#### TBS NORTHERN ZONE

Physical Address  
NSSF Mafao House  
Building, 2<sup>nd</sup> Floor  
P.O. Box 2399  
ARUSHA,  
TANZANIA  
Tel. No:  
+255 27 2520143

#### TBS SOUTHERN HIGHLANDS ZONE

Physical Address  
NHIF Building,  
7<sup>th</sup> Floor  
P.O. Box 1674  
MBEYA,  
TANZANIA  
Tel No:  
+255 25 2502848

#### TBS SOUTHERN ZONE

Physical Address  
MTUWASA Building  
P. O. Box 1396  
MTWARA,  
TANZANIA  
Tel. No:  
+255 23 2334477

#### TBS WESTERN ZONE

Physical Address  
NSSF Building (Mafao  
House), 2<sup>nd</sup> Floor  
P. O. Box 1276  
KIGOMA,  
TANZANIA  
Tel. No:  
+255 28 2804023