



THE UNITED REPUBLIC OF TANZANIA  
MINISTRY OF INVESTMENT, INDUSTRY AND  
TRADE  
**TANZANIA BUREAU OF STANDARDS (TBS)**



ISO 9001:2015 Certified

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 MICROBIOLOGY LABORATORIES

**Duration: Five working days (21<sup>st</sup> to 25<sup>th</sup> November, 2022)**

**Target participants:** Laboratory analysts, scientists, researchers, laboratory technicians, microbiologists, laboratory technologists and any other related professionals

#### Course outline:

- Standards requirements;
- Uncertainty of measurements concept and significance;
- Uncertainty sources, types and estimation process;
- Quantification of measurement uncertainty; and
- Use of uncertainty in reporting test results.

#### Course presentation and methodology:

The course will be presented in Swahili or English languages. The course will be delivered in interactive tutor-led and trainee-led discussions, experience from trainees and group participation.

#### Benefits of the course

After successful completion of this course, participants will be able to:

- differentiate types of uncertainty (Type A and Type B);
- identify uncertainty contributors;
- estimate uncertainties of measurement in the laboratory; and
- prepare uncertainty budget.

#### 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  
Website: http://www.tbs.go.tz  
E-mail address for customer complaints:  
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

All Correspondence should be addressed to the **DIRECTOR GENERAL**

**Course requirements:** Each participant shall have a laptop.

**Course assessment and awards:**

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

**Course fee:**

The course fee is **TZS 500,000/- 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) as early as possible since the maximum number of participants required is twenty-five (25) and provide the following information:

- i) Full name of applicant;
- ii) Region and district of applicant;
- iii) Nation of the applicant for foreigners;
- iv) Contact (physical address/P. O. Box) of applicant;
- v) Phone number and email address of applicant; and
- vi) Organization name, contact (physical address/P. O. Box), region and district (if any).

**For enquiries contact us through cell phone No. +255 733 700447.**

**Mode of payment**

The course fee shall be paid in full and once fourteen (14) days prior to the date of training. Government bill will be issued to applicant.

**Postponement and cancellation of training**

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.

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E-mail address for customer complaints:  
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## Training venue

The training will be conducted at Test House 5<sup>th</sup> Floor Wing A at TBS Headquarters, Ubungo Area, Morogoro Road/Sam Nujoma Road, Dar es Salaam.

Issued by;

**Gladness H. Kaseka**  
**Public Relations and Marketing Manager**



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