

1. INTRODUCTION

Bridge engineering is knowledge of analyzing, designing, and rating of load carrying capacity of bridges including construction of all bridge structural elements. The bridge structural elements include: deck slabs, beams, trusses, arches, Box girders, movable superstructures, cable stays and suspension wires, pylons, abutments, piers, piles, etc.

A four (4) days' course being proposed will provide engineers with practical experience and interactive discussion platform to support individuals in understanding the key issues of bridge design using MIDAS Civil bridge design software. It will also provide participants with knowledge on how to apply traffic loads on bridges and provide good reports to their Clients.

2. COURSE OUTLINE

The Course will be conducted through lectures, hands on MIDAS Civil bridge software, discussion platform with other bridge engineers and practical case study. The details of topics to be covered are shown here under:

(a) Bridge Design Considerations

- Essential factors for Bridge design
- Component of Bridge structures
- Investigations and Data collection requirements
- Bridge types
- Guidance for selections of bridge span length

(b) Bridge Loading

- Application of different bridge loadings
- Traffic loads
- Application of loads on slab, T-beam Reinforced Concrete bridges, Composite Bridges,

(c) Use of Midas Bridge Civil Design Software

- Introduction of Bridge design software.
- Use of Wizard to design all type of bridges.

3. COURSE OBJECTIVE

The objective is to equip bridge engineers with a thorough understanding how to use MIDAS bridge design software to simply design different type of bridge and different type of bridge elements such as Box Culverts, Slab, T-Beam Reinforced concrete bridges, composite and pre-stressed bridges. The training will also enable bridge engineers to design bridges using software wizard.

4. COURSE REQUIREMENTS

Course participants will be required to come with Laptop, Laptop charger, Mouse, etc.

5. COURSE CONTENTS

The course will enable the participants to execute the following:

- Confidently carry out the structural analysis of bridges.
- Correctly apply the traffic loads
- Correctly prepare bridge design reports
- Grasp the bridge design requirements
- Reduce time of executing the design assignments
- Confidently review and approve submitted designs
- Develop a link between engineers

This is a user-friendly course for greater confidence and improving knowledge in bridge design.

Participants will be provided with:

- Temporary training license for all participants.
- Step by step Training tutorial PDF copy in electronic format.

6. AWARD

- Midas official training certificates upon successful completion of the course.
- The course is accredited by Engineers Registration Board with **32 Professional Development Units (PDUs)**.

7. WHO SHOULD ATTEND

- The course is suitable to all civil engineers and structural engineers working in both public and private sectors.
- It is also suitable for SEAP engineers.
- Consultancy
- Technical Managers
- Project Management Units

8. COURSE FACILITATOR

Eng. EMMANUEL M. N. MSUMBA is a Registered Consulting Engineer (CEng No. 398) and member of Institution of Engineers. He has worked as Bridge Design Engineer, for over thirty (30) years at Ministry of Works and TANROADS HQ.

9. COURSE FEE

Participation fee is 700,000 for Member, and 750,000 for Non-members, virtual 250,000.

Mode of payments:

- Cheque payable to **The Institution of Engineers Tanzania**.
- Cash deposit or fund Transfer (TISS) to the CRDB Bank A/C No. 01J1042971100, Tower Branch and Swift Code (CORUTZTZ).
✚ Please send your proof of payment to WhatsApp No(s) 0738-133778, 0755-024369, 0742-319694 or email(s): institutionofengineerstz@gmail.com
cc: trainings@iet.or.tz

The fee will cover Lunch, Health break, Accreditation fee, Venue hiring, Facilitator and softcopy of Certificate of Training.

10. VENUE, DATES AND TIMING

- Venue:** Flomi Hotel, Morogoro
- Dates:** June 12 - 15, 2023
- Timing:** 0900 - 1600
- Confirmation by:** June 7, 2023

TENTATIVE TIME TABLE

TIME	ACTIVITY/TOPIC
DAY 1 12/06/2023	
0800-0830	HEALTH BREAK
0830-1300	Installation and Introduction of MIDAS Bridge Design Software
1300-1330	LUNCH BREAK
1330-1530	Modelling and Design of 3D Box Culverts
DAY 2 13/06/2023	
0800-0830	HEALTH BREAK
0830 - 1300	Modelling and Traffic Loading of RC Girder Bridge
1300-1330	LUNCH BREAK
1330-1530	Analysis and Report Preparation of RC Girder Bridge.
DAY 3 14/06/2023	
0800-0830	HEALTH BREAK
0830 - 1300	Modelling of PSC I-Girder concrete composite bridge using PSC Wizard option
1300-1330	LUNCH BREAK
1330-1530	Tendon Definition & Loss Calculation
DAY 4 15/06/2023	
0800-0830	HEALTH BREAK
0830 - 1300	Composite Bridge and Foundation Design
1300-1330	LUNCH BREAK
1330 - 1500	Design of Bridge Foundation (Pier, Pier Cap, Pile Cap, Piles, etc.)
1500 - 1510	Closing

REGISTRATION FORM

BRIDGE DESIGN TECHNIQUES Using MIDAS Civil Bridge Design Software

JUNE 12 -15, 2023

FLOMI HOTEL - MOROGORO

PERSONAL PARTICULARS

Name: _____

Designation/Position _____

Organization: _____

Address: _____

Tel/Mob: _____

E-mail: _____

Please send us your registration form to:
Executive Director,
Institution of Engineers Tanzania,
Office Accommodation Scheme (OAS) building,
6th Floor, CRDB, Azikiwe Street, P.O. Box 2938,
Mob: 255 755 024369, 255 745 552420,
255 688 346868, WhatsApp 255 738 133778
DAR ES SALAAM, TANZANIA
Email: trainings@iet.or.tz,
institutionofengineerstz@gmail.com,
Website: www.iet.or.tz

ANNOUNCEMENT

OF

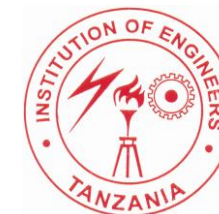
**A PROFESSIONAL
DEVELOPMENT COURSE**

ON

BRIDGE DESIGN TECHNIQUES

**Using MIDAS Civil
Bridge Design
Software**

32 PDUs



Date: June 12 -15, 2023
Venue: Flomi Hotel
MOROGORO