

# TEKLA STRUCTURE FOUNDATION PREPARATORY COURSE

*IN PREPARATION FOR THE FREE TEKLA STRUCTURE  
CERTIFICATION BY TRIMBLE*

The Tekla Structure Foundation Level preparatory course is specially designed to prepare students for the Tekla Structure Foundation Certification Assessment. This preparatory course is only offered to student who has at least completed and passed ATBD3242 Digital Transformation with BIM at diploma level or BTCM1083 Digital Transformation with BIM at degree level.

## *Learning Outcomes*



Demonstrate basic  
BIM collaboration  
and interoperability  
tools in TEKLA  
Structure



Produce basic  
modelling for steel  
and concrete  
structure  
elements.



Produce basic  
detailing and  
numbering for steel  
and concrete  
structure elements.



Produce basic  
drawings and  
reports for project  
coordination using  
TEKLA Structure.

## *Why You Should be a Certified User?*

Tekla's Professional Certification is an industry-recognised credential that can improve students' curriculum vitae and enhance employability. In addition, Tekla's Professional Certification provides reliable validation of skills and knowledge.

**DATE**    *Session 1: 5-6 March 2022*  
*Session 2: 12-13 March 2022*  
*Session 3: 19-20 March 2022*  
*Session 4: 26-27 March 2022*

\*First come first served, max 30 student per session. If a session is full, you will be moved to the next session.

**TIME**        9 am - 1 pm

**FEE**            RM60/pax    (inclusive 6% sst)

# ***Certification Details***

Participants that have completed the Tekla Structure Foundation Level course may opt for the Tekla Structure Certification Examination organized and administered by Trimble for free. This is an online examination and participants may register with Trimble to sign up for the examination.

Upon receiving a passing grade,  
Certification of Achievement  
will be awarded.

# ***Course Contents***

## **SESSION A: ABOUT TEKLA STRUCTURES**

- Starting and opening Tekla Structures
- Tekla Structure Interface
- Coordinate System
- Selecting Objects
- View Manipulation
- Extracting Basic Information
- Using Commands

# Course Contents

## **SESSION B: BASIC MODELING**

- Creating a New Model
- Grid
- Pad Footing
- Concrete Column / Steel Column
- Concrete Beam / Concrete Poly Beam / Steel Beam / Steel Poly Beam
- Concrete Slab
- Copying / Mirroring an object
- Numbering Settings
- Rotating an object around the z axis
- Selection Switches / Snap Switches
- Add a Component to a model
- Exploding Components
- Work Area
- View Plane / Work Plane
- Construction Objects
- Advanced Snapping

## **SESSION C: BASIC DETAILING / NUMBERING**

- Bolts / Holes / Welds
- Splitting and combining Parts
- Cutting a Part
- Steel Contour Plate
- Basic Numbering

# Course Contents

## **SESSION D: BASIC DRAWING**

- Main features of Drawings
- Drawing Types
- Document Manager
- Modifying drawing names and titles
- Adding view in drawings
- Modify, arrange and align drawings views
- Adding / editing dimensions
- Grid in drawings
- Different levels of setting up and modifying drawing properties
- Drawing Layout
- Report

## **SESSION E: COLLABORATION & INTEROPERABILITY**

- Merging two Tekla Structures models
- Multi-user mode
- Trimble Connect
- Reference Models
- Import and export



# ***Facilitator***

**Ts. Ng Teck Wei** obtained his Master in Engineering (Civil) from Universiti Teknologi Malaysia. He holds a Bachelor of Construction Management (Honours) from University Tunku Abdul Rahman. He is a registered Professional Technologist under Malaysia Board of Technologists. Tekla Structure Advanced level certified, BIM modeler (Architectural and Structure) CIDB certified.

He has around 2 years of experiences in the industry and 6 years of experience teaching Construction Management courses. He is presently the Lecturer at the Department of Construction Management at TAR University College.