

TEKLA STRUCTURES FOUNDATION LEVEL COURSE

The Tekla Structure Foundation Level course strives to ground participants with the basics in BIM. It drives more detail and data into structural BIM workflows for a deeper understanding of designs at every phase. Besides the different functionality and configurations of Tekla Structures, participants will also be trained in basic skills to create basic 3D models and produce fabrication information.

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.

Tekla training and certification bring valuable and measurable rewards to structural engineers, steel detailers and fabricators, concrete detailers and manufacturers, BIM professionals, contractors, and the organisations that employ them.

TEKLA STRUCTURES FOUNDATION LEVEL COURSE

The Foundation Course strives to ground your basics in BIM. Besides the different functionality and configurations of Tekla Structures, you will also be trained in basic skills to create basic 3D models and produce fabrication information.

PRE-REQUISITE:

Beginners new to Tekla Structures or who are keen to enhance basic 3D BIM modeling skills.

COURSE DETAILS:

BIM Concept

- ▶ Open BIM Workflow
- ▶ BIM Modeling Environment Interoperability and Detailing

Interoperability with designer

- ▶ Precast Element Detailing

Drawing and Reports

- ▶ Precast/Steel Shop Drawing
- ▶ Precast/Steel Material Reporting

WHO MAY ATTEND:

For Civil Engineer consultant, Steel work Fabricator, Precast Fabricator, Lecturer, Students and anyone interested.

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

DAY 1

SESSION A: ABOUT TEKLA STRUCTURES

- Starting Tekla Structures
- Opening a Tekla Structures Model
- Tekla Structure Interface
- Coordinate System
- Selecting Objects
- View Manipulation
- Extracting Basic Information
- Using Commands

Course Contents

DAY 1

SESSION B: BASIC MODELING 1

- Creating a New Model
- Grid
- Pad Footing
- Concrete Column / Steel Column
- Concrete Beam / Concrete Poly Beam / Steel Beam / Steel Poly Beam
- Concrete Slab
- Copying an object
- Mirroring an object
- Numbering Settings
- Rotating an object around the z axis

DAY 2

SESSION A: BASIC MODELING 2

- Selection Switches
- Snap Switches
- Component
- Add a Component to a model
- Exploding Components

SESSION B: BASIC MODELING 3

- Work Area
- View Plane
- Work Plane
- Construction Objects
- Advanced Snapping

Course Contents

DAY 3

SESSION A: BASIC DETAILING 1

- Bolts
- Holes
- Welds

SESSION B: BASIC DETAILING 2 & NUMBERING

- Splitting and combining Parts
- Cutting a Part
- Steel Contour Plate
- Basic Numbering

DAY 4

SESSION A: BASIC DRAWING 1

- Main features of Drawings
- Principles of Drawings
- Drawing Types
- Document Manager
- Modifying drawing names and titles
- Adding view in drawings
- Modify, arrange and align drawings views
- Adding dimensions
- Editing dimensions
- Associative & Independent annotation objects
- Grid in drawings
- Different levels of setting up and modifying drawing properties
- Drawing Layout
- Report

Course Contents

DAY 4

SESSION B: COLLABORATION & INTEROPERABILITY

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

Facilitator

Ts. Ng Teck Wei is a highly qualified and experienced professional in the field of Construction Management. He holds a Bachelor of Construction Management (Honours) from University Tunku Abdul Rahman and a Master in Engineering (Civil) from Universiti Teknologi Malaysia. In addition to his academic qualifications, Ts. Ng is a registered Professional Technologist under the Malaysia Board of Technologists, and holds several certifications including Tekla Structure Advanced level certified, BIM modeler (Architectural and Structure) CIDB certified, and BIM Manager CIDB certified.

With over 9 years of experience in the industry and academia, Ts. Ng has established himself as an expert in Construction Management. He actively serves as a Council member of the Chartered Institute of Building (CIOB) Malaysia, lending his insights to industry advancement. He is also a Chartered Construction Manager (MCIOB) through CIOB and has taught Construction Management for over 7 years.

Furthermore, Ts. Ng is a certified Project Management Professional (PMP). Currently, he is the Associate Dean (Head of Department) at the Department of Construction Management at Tunku Abdul Rahman University of Management and Technology (TAR UMT).