START TIME	DURATION	END TIME	SECTION	DETAILS	VIDEO TIME STAMP		
Day 1 - TAS							
			https://glodon-trainings.teach	hable.com/courses/2433752/lectures/51321076			
09:30	00:15	09:45	Introduction	 Welcome the participants, get to know their background. Participant to fill attendance form. BIM introduction and what solutions TRB&TAS have to offer. TAS Interface Introduction 	00:00:00		
09:45	00:15	10:00	Training Explanation	 What items covered in the training, what end results will be produced. Drawing explanation (type of building, how many levels, room functions). Software's User Interface explanation: options bin model, (type of files, export import) identify, draw, calculate menu elements, element list, attribute, drawing managers draw, select, command at bottom, press esc/right click view (adjacent floor, other floor, whole building) inform about interoperability between TAS, TRB, and TBQ Flow chart of modelling 	00:03:00		
10:00	00:35	10:35	Floor settings & Gridlines	 Set floor settings, concrete grade, rebar weight Input axis gridline for modelling with auto identification, teach them manually (with new simple grid system) 	00:06:18		
10:35	00:25	11:00	Model Preparation	 Explain what type of files that can be imported to the software, and how to prepare the files before imported (By using Cubic files or TAS/TRB Files) Input CAD files structure and architectural, split drawings 	00:12:36		
11:00	00:20	11:20	Making Structure Plans	Relocate all drawing to the axis grid Relocate all drawing to the axis grid How to Switch plans level, explain about the view menu	00:17:20		
				Modelling Foundation Floor			
11:20	00:20	11:40	Model pile cap	 Auto-definition of the second s	00:21:15		
11:40	00:20	12:00	Model Column	Define rectangular column, draw column manually with point Zexplain how to rotate column Change level of bottom elevation Copy to other grids, mirror	00:26:42		
12:00	01:30	13:30	Lunch Break		00:00:00		
13:30	00:20	13:50	Tie beam modelling	 Draw beam using Line drawing method for dummy beam around raft Make beam element list for TB1&TB2 Auto-identify beam 	00:30:33		
13:50	00:30	14:20	Basement Wall and Shear Wall modelling	 Auto identify basement wall Scale cad Shearwall drawing and create 3d model manually by using Irregular Wall method 	00:35:03		
14:20	00:30	14:50	Raft & slab modelling	 Create raft element RF-1 (2500) and slab BS-1 Create BS-1 & Raft 3d model using Rectangular drawing Convert BS-1 to slab, delete BS-1 from raft element list 	00:37:30		
14:50	00:30	15:20	Basement Wall and Shear Wall modelling	Continue drawing shearwall 3D model	00:44:01		
15:20	00:15	15:35	Level 1 Column & Shear wall modelling	Copy entity to other floor using Draw Menu > Copy Entity to Other Floor	00:52:50		
15:50	00:15	16:05	Level 1 Column size update	Update column size according to Basement Floor Column Schedule	00:54:49		
16:05	00:30	16:35	Beam modelling	 Identify excel (completed all type & dimension) Draw Beam 3d model for quarter side (left wing area) of the drawing using manual method (draw primary beam first then secondary beam, axis to axis) and the beam balcony area with By Cad Line function Then draw the rest of 3d beam using Auto Identify method Revised and change the element list beam type according to Beam Detail for the dimension and naming (delete unwanted element of beam from element list) can use Beam Identification Check function Connect each (extend) of the beam edge to another beam/column to added the support point when later to be imported to TRB 	00:59:00		
16:35	00:35	17:10	Slab modelling	 Auto identify slab label & extend slab Make slab opening for the void area and shaft Revise unwanted slab element in the slab element list and change to the proper type of slab from the Slab Detail Make drop (split, and then edit top elevation) set variable section 	01:10:39		

Day 2 - TAS							
https://glodon-trainings.teachable.com/courses/2433752/lectures/51321077							
09:30	00:10	09:40	Review on 1st day training	Review training materials	00:00:00		
				Modelling Typical Tower Floor			
09:40	00:30	10:10	Measurement Rules	 Calculate, explain view expression in column, beam, and slab element, what quantity we get for concrete element (discuss daily method) Explain how to change Measurement Rules in TAS (example case slab vs column) & discuss the result Explain extent slab 	00:00:00		
10:10	00:20	10:30	Masonry Walls, Curtain Walls and Railing modelling	 Auto identify masonry wall, rename and change the material of each wall (masonry and concrete) Draw curtain an railing wall manually using line Drawing method, draw to the middle of the drawing and then Mirror the rest curtain wall and railing (create example first of using the lift wing area of the drawing) For separation line make example also in left wing area of the drawing in selected room area 	00:10:33		
10:30	00:30	11:00	Door and Window Opening modelling	 Identify Door element using Identify Element from Excel (excel provided) Place the door manually based on the Floor Finished drawing location using Point Drawing method and explain that the door is automatically placed align with the wall, and include lintel and stiffener Because limited duration of training so make example of area that the door will be placed, if they want they can complete all later Make example for door window opening on the left wing area of the drawing 	00:30:00		
11:00	00:30	11:30	Room Modelling	 Import excel for room definition, model with point, auto process gap, rectify floor finish. Explain room layout setting Use of enclose feature to close the gap of element wall (example) Use autogenerate stiffener to add more stiffener in the opening area or every determined length span of wall Create lintel element list and use autoarrange Lintel to add lintel for every opening of wall and window 	00:35:26		
11:30	00:30	12:00	Drop Ceiling Modelling	Explain how to make different ceiling level & define vertical surface	00:46:00		
12:00	01:30	13:30	Lunch Break				
13:30	00:20	13:50	Calculate & View Quantity	Explain the output from TAS, Volume of concrete, formwork, and finishing from View Quantity by Category and all of it can be export to Excel Z. Explain Reversely Check Model function	00:49:00		
13:50	00:10	14:00	View Expression	1. Explain the result of View expression for architectural elements	00:55:00		
14:00	00:20	14:20	Measurement Setting	Make example of the application of measurement setting by using wall finish element (custom finish)	00:55:53		
14:20	00:20	14:40	New Feature: Segmentation	Explain segmentation function that can be choose by 3 different type (Construction Zone, Progress Claim, Subcontracting) and show the how to create the segmentation and output of the segmentation in Quantity (create example for segmentation using Construction Zone function)	00:59:30		
14:40	00:30	15:10	New Feature: Revision	Explain revision by using given example of cad in the Training Material Drawing and show how to compare drawing, change revision 3d model based on the comparation and the output (volume difference comparison)	01:07:12		
15:10	00:10	15:20	Export TAS Model	Explain how TAS model can be exported to TRB	01:14:15		
15:20	00:15	15:35	Short Break				
15:35	01:00	16:35	TAS Quiz				

Day 3 - TRB						
09:30	00:10	09:40	Review on 2nd day training material	Participants to fill attendance form	00:00:00	
09:40	00:30	10:10	Explain TRB Tools and Function	Short Explanation about difference Tools and Function in the TRB compare to TAS (Calculation Rules, Rebar Data Check, Project Setting Rebar Tools)	00:00:30	
10:10	00:20	10:30	Import 3D model TAS and Add	Import 3d model from TAS and add structure drawing in the drawing manager to use the Structure Detail and Plan drawing to get rebar information	00:01:00	
10:30	00:20	10:50	Input Pile Cap Rebar	 Input pile cap rebar data using Attribute Editor Setting deduction of slab rebar into pile cap in attribute editor Setting concrete cover in attribute editor 	00:11:00	
10:50	00:20	11:10	Input Raft Foundation Rebar	 Input raft foundation rebar using parametric drawing for continuous rebar Input raft foundation rebar using Draw line to arrange for extra bar (must use raft foundation raft foundation rebar plan) 	00:22:00	
11:10	00:40	11:50	Input Column Rebar	 Input column rebar using Identify Rebar form Excel (excel provided) Basement Floor and Typical Floor Explain part of rebar input (all main bar, link, legs) and the arrangement of writing procedure of rebar information Explain dowel bar and main bar anchorage for continuous vertical rebar without dowel overlap in the basement floor 	00:45:10	
11:50	01:40	13:30	Friday Prayer for Muslim and Lunch Break			
13:30	01:10	14:40	Input Beam Rebar	 Check Beam 3d model that imported from TAS, explain the difference for scenario of 3d beam as example continuous drawing of 3d beam will have different result of rebar quantity with the uncontinuous one when calculated Change Basement Floor beam to Foundation Coupling Beam category Merge element & entity for separate beam Batch Identify Support so the rebar can be disperse into each of the span of beam & explain Beam support (add and delete beam support) Input beam rebar using Identify Rebar from Excel for Basement Floor and Typical Floor Copy span data as much as possible Use Beam Schedule to Sync Beam info to entity 	01:01:27	
14:40	00:20	15:00	Input Slab Rebar	Use Parametric Arrangement to input slab rebar (one way / two ways slab reinforcement) for Basement floor and Typical floor slab	01:26:00	
15:00	00:20	15:20	Input RC Wall Rebar	 Use Attribute editor to input RC wall rebar Explain dowel bar and main bar anchorage for continuous vertical rebar without dowel overlap in the basement floor 	00:36:00	
15:20	00:30	15:50	Input Shearwall Rebar	 Input Shearwall Rebar element using Identify Column Section method by using Shearwall rebar cad drawing Copy Shearwall Entity from Basement Floor to Typical Floor 	00:54:10	
15:50	00:30	16:20	Calculate, View Quantity, Rebar Data Check, 3D Rebar, Edit Rebar, Rebar Layout	Recap, review, analyze result of TRB rebar quantity using various function in Tools and Quantity Menus	01:35:38	
16:20	00:10	16:30	Closing & Discussion	Review of the training material and filling attendance form and feedback form		
16:30	01:00	17:30	TRB Quiz			