

DAY 1			
START TIME	DURATION	SECTION	DETAILS
PDF Convert Mode - Fire Service Module			Video Time Stamp
https://plodon-trainings.teachable.com/courses/2425608/lectures/51116561			
09:30	00:15	Introduction	Introduction of TMEC software workflow and interface
09:45	00:05	Project Settings	Create new project setting options -> autosave prompt
09:50	00:05	Floor Settings	insert floors set floor height 1st floor:6 m, 2nd floor: 4m set floor elevation
09:55	00:05	Drawing Management	insert drawing for all floor scale drawing (drag copy scale value in drawing manager to other drawing) all drawing set floor according to drawing in the drawing manager panel
10:00	00:05	Axis Grid	select axis element make new axis element input bottom and left axis number and length relocate drawing
10:05	00:05	Show or Hide Layer	select the cad line entities by layer/color hide the selected drawing
10:10	00:30	Device Identify (1st floor & 2nd floor)	open sprinkler drawing 1st floor create new element based on drawing legend/notation setting attribute elevation pick device (auto identify method) select floor drawing to be identified in the identify box identify device (explain about identify rule of thumb hierarchy from complex to simple symbol) draw using points for unidentified device (manual method)
10:40	00:30	Pipe Works Modelling (1st floor)	create new elements based on drawing legend/notation per system (hydrant and sprinkler) name the pipe using inch as shown in drawing, and input the mm in the attribute editor. adjust attribute elevation and colour as necessary select pipe type in element list, and use Identify Pipe (auto identify pipe) to generate the model. input the dropper diameter use generate end pipe to generate pipe with no label (auto identify method) turn off generate cross in the status bar-explain about what is generate cross (when to turn on/off) use single line for the rest of pipe model (manual method)
11:10	00:30	Pipe Works Modelling (2nd floor)	use Line for the rest of the pipe model (manual method)-explain about: use the form elevation and attribute setting use Pipe to device to connect device and pipe if device doesn't connect to pipe generate riser and adjust the start elevation and end elevation of riser (explain per floor and continuous floor riser elevation setting)
11:40	00:20	Quantity Calculation + Discussion	adjust attribute elevation and colour as necessary use Identify Pipe (auto identify pipe) use generate end pipe to generate pipe with no label (auto identify method) turn off generate cross in the status bar & explain what is the function of this button use single line for the rest of pipe model (manual method) use Line for the rest of the pipe model (manual method) use Pipe to device to connect device and pipe if device doesn't connect to pipe generate riser and adjust the start elevation and end elevation of riser (explain per floor and continuous floor riser elevation setting)
Break 1.30 hours			
PDF (Scan & Convert) Mode - Electrical Module			Video Time Stamp
https://plodon-trainings.teachable.com/courses/2425608/lectures/51116562			
13:30	00:05	Drawing Management	insert drawing for all floor scale drawing (drag copy scale value in drawing manager to other drawing) relocate & move drawing set floor according to drawing in the drawing manager panel
13:35	00:10	Point Device Distribution Box (1st floor)	open electrical drawing (pdf scan) 1st floor (instalasi stop kontak lantai 1) create distribution box new element choose the point drawing button and click at the panel location to generate distribution box
13:45	00:30	Length Drawing Cable Tray (1st floor)	Create cable tray new element as necessary (make one element for cable tray dummy to connect panel that doesn't have cable tray) Adjust elevation and any attribute value needed in the attribute editor Draw cable tray & dummy cable tray using Line (manual method) generate cable tray riser and adjust the start elevation and end elevation of riser (explain per floor and continuous floor riser elevation setting)
14:15	00:15	Cable Tray Wiring (1st floor)	Create electric cable conduit new element and rename if necessary Adjust attribute value in the cable attribute editor Draw cable in the cable tray using Cable Tray Wiring Method to connect to each terminal Continue drawing cable using Line to non cable tray area and connect device to cable using Pipe To Device After all cable tray wiring connect from panel to panel, delete the cable tray dummy
14:30	00:10	Point Device Distribution Box (2nd floor)	open electrical drawing (pdf scan) 2nd floor (instalasi stop kontak lantai 2) create distribution box new element choose the point drawing button and click to at the panel location to generate distribution box
14:40	00:30	Length Drawing Cable Tray (2nd floor)	Create cable tray new element as necessary (make one element for cable tray dummy to connect panel that doesn't have cable tray) Adjust elevation and any attribute value needed in the attribute editor Draw cable tray using Line (manual method) generate cable tray riser and adjust the start elevation and end elevation of riser (explain per floor and continuous floor riser elevation setting)
15:10	00:15	Cable Tray Wiring (2nd floor)	Create electric cable conduit new element and rename if necessary Adjust attribute value in the cable attribute editor Draw cable in the cable tray using Cable Tray Wiring Method to connect to each terminal Continue drawing cable using Line to non cable tray area and connect device to cable using Pipe To Device After all cable tray wiring connect from panel to panel, delete the cable tray dummy
15:25	00:20	Scanned Device Identify Socket (2nd floor)	open electrical drawing (pdf scan) 2nd floor (instalasi tray lantai 2) create new socket element based on drawing legend/notation go to identify & draw menu > pick device legend by select one legend as reference adjust similarity percentage as necessary check or uncheck the identified legend according to the reference legend and identify draw point for unidentified socket
15:45	00:20	Device Identify Lamp (2nd floor)	open electrical drawing (pdf convert) 2nd floor (instalasi penerangan lantai 2) create new element based on drawing legend/notation (2 type of lamp (TL and 1 type of led strip) setting attribute elevation pick device (auto identify method) and explain about floor selection identify device generate device using points for unidentified device (manual method)
16:05	00:10	Length Drawing Electric Cable (2nd floor)	create new electric cable element based on drawing legend/notation explain draw cable using Line (manual method) to connect socket to cable tray use Pipe to device to connect device and cable if device doesn't connect to cable
16:15	00:10	Quantity Calculation + Discussion	Go to Quantity Ribbon Click Calculation symbol Select floor and hit Calculation Button After calculation done , open View Quantity By Category to see the quantity Check quantity using reverse check quantity Adjust Set Classification and Qty and Export To Excel if necessary Enable and adjust 3d model entity from BIM Model Menu > Entity 3d and Entity Model

DAY 2				
START TIME	DURATION	SECTION	DETAILS	
CAD Mode - Plumbing & Sanitary Module				Video Time Stamp
https://glodon-trainings.teachable.com/courses/2425608/lectures/51116563				
09:30	00:05	Manage drawing	Input drawing all floor Scale drawing Split drawing , set corresponding floor according the drawing floor Relocate drawing	00:00:00
09:35	00:05	Explode Drawing	Try device identify first for sanitary ware, if cannot identify then we explain the explode drawing method Click explode tools in Draw Menu (explain when we need to use explode tools) Left click selected sanitaryware drawing , right click to confirm	00:08:11
09:40	00:15	Device Identify Sanitaryware (1st floor)	create new element based on drawing legend/notation setting attribute elevation pick device (auto identify method) select floor drawing to be identified in the identify box identify device generate device using Points for unidentified device (manual method) explain about entity 3d and how to rotate the entity	00:07:14
09:55	00:55	Pipeworks Modelling (1st floor) Air Bersih & Air Kotor	create new elements based on drawing legend/notation per system and separate horizontal and vertical pipe element (air bersih, air recycle, air kotor) deleted existing pipe in element list adjust pipe name, diameter, attribute elevation and colour as necessary use Line to draw pipe 3d model (manual method) to explain slanted pipe method use Pipe To Device to connect device and pipe if device doesn't connect to pipe choose the pipe size from the element list	00:17:33
10:50	00:10	Arrange Riser (1st floor)	select Riser in the Draw Ribbon adjust the start elevation and end elevation of riser (explain per floor and continous floor riser elevation setting) place/point the vertical duct into desired position repeat the same for different riser sizes	00:27:16
11:00	00:20	Pipe Accessory (Valve & Flange) 1st floor & 2nd floor	explain that valve only can be identified if the pipe already modelled. Create valve element & adjust attribute if necessary pick device (auto identify method) select floor drawing to be identified in the identify box repeat for all valve/flange location desired use Adapt Linear Entity to uniform valve system with pipe system	00:36:48
11:20	00:20	Device, Pipeworks, Valve Modelling (2nd floor) Air Bersih dan Air Kotor addition	still at 1st floor, batch all plumbing and sanitary element and copy entity to other floor to 2nd floor	00:42:46
11:40	00:20	Quantity Calculation + Discussion	Go to Quantity Ribbon Click Calculation symbol Select floor and hit Calculation Button After calculation done , open View Quantity By Category to see the quantity Check quantity using reverse check quantity Adjust Set Classification and Qty and Export To Excel if necessary Enable and adjust 3d model entity from BIM Model Menu > Entity 3d and Entity Model	00:44:29
Break 1.30 hours				
CAD Mode - ACMV Module				Video Time Stamp
https://glodon-trainings.teachable.com/courses/2425608/lectures/51116564				
13:30	00:05	Manage drawing	Input drawing all floor scale cad relocate drawing	00:00:00
13:35	00:05	CAD layer drawing settings	select the cad line entities by layer/color hide the selected layer	
13:40	00:15	Equipment Device Identify (1st floor)	create new element based on drawing legend/notation setting attribute elevation Equipment > Pick Device > Pick System text (capacity of equipment) (auto identify equipment method) generate device using Points for unidentified device (manual method)	00:03:03
13:55	00:15	Air Grille Device Identify (1st floor)	create new element based on drawing legend/notation setting attribute elevation pick device (auto identify method) select floor drawing to be identified in the identify box identify device generate device using Points for unidentified device (manual method)	00:08:47
14:10	00:20	Air Duct Modelling (1st floor)	Make new element of ducting in the element list (rectangular and round duct base on the ducting detail) Explain and adjust attribute editor value especially for elevation, ducting support and insulation Draw the ducting using double line and line method combined	00:11:51
14:30	00:10	Air Duct Fitting Identification (1st floor)	select Air Duct Fitting Identification button, and block all ducting entity, right click if any duct fitting are can't be identified, drag manually the ducting to each other to manually create fitting	00:20:27
14:40	00:10	Pipe To Device (Ducting to Equipment & Air Grille 1st floor)	select equipment/device, right click select ducting/pipe and pipe connection will generated repeat for all equipment/device	00:21:25
14:50	00:15	Equipment Device Identify (2nd floor)	create new element based on drawing legend/notation setting attribute elevation Equipment > Pick Device > Pick System text (capacity of equipment) (auto identify equipment method) identify device generate device using Points for unidentified device (manual method)	00:21:48
15:05	00:20	Duct System Identify (2nd floor)	Select the dimension and the double line then right click explain insulation attribute in the Element Editing Window before generate ducting repeat the same step for different ducting sizes	00:23:22
15:25	00:10	Air Duct Fitting Identification (2nd floor)	use Line method to draw other unidentified ducting model, include Flexible ducting using round duct element and Line method drawing select the Air Duct Fitting Identification button, and block all ducting entity, right click repeate the same for different duct sizes	00:26:21
15:35	00:15	Quantity Calculation + Discussion	Go to Quantity Ribbon Click Calculation symbol Select floor and hit Calculation Button After calculation done , open View Quantity By Category to see the quantity Check quantity using reverse check quantity Adjust Set Classification and Qty and Export To Excel if necessary Enable and adjust 3d model entity from BIM Model Menu > Entity 3d and Entity Model Explain Main Vent Equipment Setting Explain Other Setting for ducting material thickness	00:27:10
15:50	00:10	Define Region	Open Quantity menu Select Define region Block room area Fill in area name and floor Re-Calculate Open View Quantity By Category and activate Region classification condition from Set Classification and Quantity option	00:00:00
16:00	00:10	Import TAS File to TME	open BIM Model select import TAS Model open file gshmd select element and corresponding floor after TAS model imported and then relocate model to corresponding axis use entity display setting to manage the model view	00:00:00
16:10	00:20	Clash Detection and Model Adjustment	click Clash Detection Test tools select the desired clash option in the selection box (pipe and beam for example) using manage model, only check relevant TAS entity to be shown (for example: check beams only) adjust the entity of pipe to bend below beam using Break and Adjust Elevation tools	00:00:00
16:30	00:10	Merge TME File	open first project file to be merged use Merge Project in BIM Model select second tme project file to be merged select position axis for each of model to be merged visual check overall model that already merged	00:00:00
16:40	00:30	Evaluation Test TMEC	All offline and online participant join the test which will be announced by zoom chat	