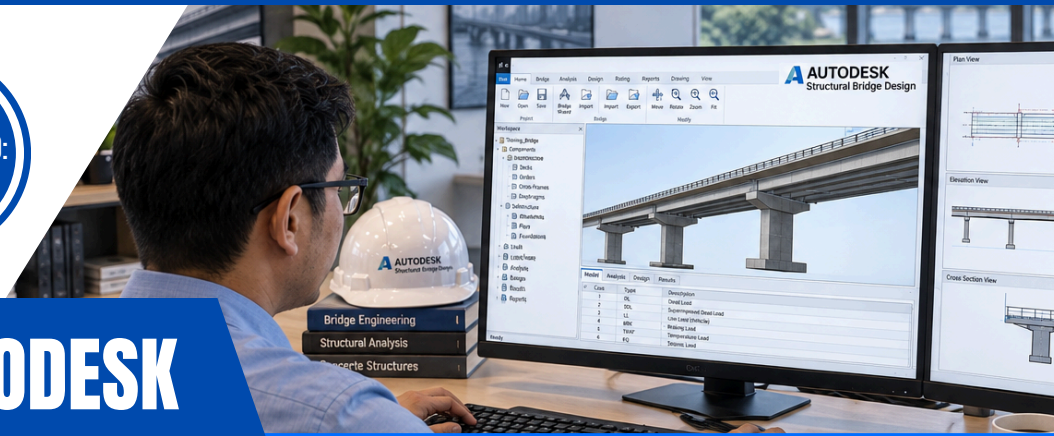


Organised by:



COURSE ON AUTODESK STRUCTURAL BRIDGE DESIGN (SBD)



4 NOVEMBER 2026



9.00 AM - 5.00 PM



HOTEL ARMADA PETALING JAYA

Autodesk Structural Bridge Design (SBD) is part of Autodesk Architecture, Engineering & Construction (AEC) collection. The AEC collection includes Revit, Inventor, Plant 3D, and Civil 3D and other software programs.

Course Outline

- The training will be a step-by-step program. At the end of the training session, the trainee will be able to analyse 3 types of bridge deck using the built in grillage program.
- The detailed step by step approach is required as SBD is a strictly hierarchical program. Taking short cuts will result in failure to complete design and analysis task. The SBD program does not generally prompt error messages.

Participants will need to have their laptops with a licence to run SBD.



Target Audience: Graduate Engineers who have started a career in bridge design, with 1 to 3 years of exposure.



Target Group: Civil & Structural Engineers



Target Industry: Engineering Consultancy and Bridge Construction

Trainer



Ir. Patrick Augustin graduated with a B.Sc. (Upper 2nd Class Honours Engineering) from Lancaster University and a DIC, M.Sc. (Concrete Structures) from Imperial College London University. He is a registered

Professional Engineer, a Chartered Engineer, a Fellow of IEM, ICE & IStructE and a member of ACEM. He has also served as a Council Member for both ACEM and IEM. Ir. Patrick is also a BEM Accredited Checker and a HRD Accredited Trainer.

Ir. Patrick Augustin has written and published several articles related to the design and construction of bridges. He also conducts courses and presents paper at seminars and conferences on the subject.

Registration Fee (inclusive of 8% SST)

ACEM Member Firms RM 1,200.00 per person

Others RM 1,500.00 per person

(E-certificate of attendance will be issued, subject to full attendance)

For further enquiries, please contact the ACEM secretariat at 012 5290031 or e-mail vivien@acem.com.my.



Please click link
<https://kliksini.my/4RP4i>
or scan QR code for
ONLINE REGISTRATION.

Please await final confirmation from the ACEM secretariat before making any flight or hotel reservations.



COURSE SCHEDULE

8:30 AM - 9:00 AM

Registration / Welcome Coffee & Tea

9:00 AM - 10:30 AM

Two (2) types of bridge design will be demonstrated :

- 30 degrees skew bridge deck 11.5m wide with a span of 22m using M beams.
- 10 degrees skew bridge deck with 11.5m wide deck with a span of 40m using T beams.

The process starts by:

- Selecting material properties
- Defining nominal sections
- Defining main beams
- Defining prestressing

10:30 AM - 10:45 AM

Morning Tea Break

10:45 AM - 1:00 PM

- How to modify numbers of prestressing strands / tendons.
- De-bonding of strands and specifying post-tensioned tendon profiles.
- Defining construction sequence.
- The best method of specifying carriageway IE design lines.

1:00 PM - 2:00 PM

Lunch at Coffee House

2:00 PM - 3:30 PM

- Crucial to specify start and end of spans.
- Assigning nominated beams to the created deck structure.
- Applying highway loads.

3:30 PM - 3:45 PM

Afternoon Tea Break

3:45 PM - 5:00 PM

- Shear and torsion design of beams, along with standard detailing rules such as lapping and anchorage lengths.
- Setting up of line beams to transfer results of analysis
- Exporting the results.
- The session will end by introducing steel concrete composite girder designs and the initial selection process.

The expected outcome is that Civil & Structural Engineers attending this course will be able to maximise the use of Autodesk SBD.

5:00 PM

End of course