



WHAT IT TAKES TO ENGINEER SINGAPORE'S FUTURE

/ACEPLP/

Working as an engineering professional in Singapore gives plenty of opportunities to gain skills, experience and network. There are ample opportunities to learn, including technological advancements such as Building Information Modelling (BIM). Amidst the flurry of construction projects in Singapore, three NTU Alumni who are CAD & BIM engineers,

Toh Jiaban

Bachelor in Materials Engineering, 2011 and

Tommy Tian Shuo

Bachelor in Materials Engineering, 2011 and

Nicholas Chan Kee Onn

Bachelor in Mechanical Engineering, 2011

share their experience on AcePLP's Engineering Apprenticeship Programme.

Tell us about a memorable experience while on the AcePLP Apprenticeship Programme.

Jiaban

AcePLP assigned me to a project by Sembawang Engineering and Construction (SE&C). It was a PUB project to build a wastewater treatment plant for the aerospace industry at Seletar. The learning curve was steep in terms of picking up the use of Autodesk Revit (BIM) software.

I also had to learn piping concepts (technical knowledge about piping systems such as chemical systems) as my focus was mainly on the mechanical and electrical (MEP) portions of the project.

Tommy

I really appreciate being part of the construction of Singapore's new iconic stadium, the Sports Hub and its special moveable roof. My role in this assignment was to help my client, Light10, with their job of lighting design and its installation on the roof. This included both fixed and movable parts.

I was involved in the whole process from design to installation. We designed the spherical roof of the stadium to hold a big LED display and the spherical nature of the roof meant that each row of lighting points was at a unique angle and each cable tray had its own length. This is different from LED installations in normal buildings like shopping malls and condominiums, as normal buildings can be divided into levels, unlike this piece of roof. The LED installation for this project was to be on a single piece of giant ceiling.

Nicholas

My current assignment with KTC Civil Engineering & Construction (KTC) is to work on Thomson Line Project T218 (Orchard Boulevard Station). I was involved in traffic and utilities diversions planning, site utilisation planning, as well as checking of drawings for discrepancies. My client is the main contractor for the project, so I have to assist the client in coordinating with the subcontractors for the various station services once the structural works are in place.