This training module is designed for the experienced GT-POWER users from corporate and individual engineers who are interested to prepare Fast Running Model (FRM) and Mean Value Engine Model (MVEM) in GT-POWER. These models are used during engine development (e.g. control system) where the plant “Engine” model needs to run fast enough or even faster than real time. The module includes theory, construction & calibration of FRM & MVEM from test data and/or detailed GT-POWER model. Participants will get good amount of time for practice of software. It will cover the following topics:

Participants are expected to have basic level understanding of GT-POWER software. At the end of the session, participants will be in a position to build and calibrate FRM & MVEM for their projects.

- Duration - 1 day; 1 Session; 9 hrs per day
- Trainer industrial experience - Over 16 years

**Agenda:**

- Why FRM and MVEM; and their applications
- Conversion of a detailed GT-POWER engine model into an FRM (controllers included)
- Neural network approach
- Conversion of a detailed GT-POWER engine model into a MVEM (controllers included)
- Calibration techniques for both FRM & MVEM
- Transient simulation
- Post-processing using GT-POST