## **Powertech**

## Course 601 Powerflow and Short Circuit Analysis Using PSAT

Course objectives	To provide the necessary background and technical skills for applications of PSAT
Material covered	<ul> <li>The basic concepts of powerflow and short circuit analysis of power systems</li> <li>Modeling, computational techniques, and analysis methods</li> <li>Operation of PSAT</li> <li>Result analysis</li> </ul>
Who should attend	<ul> <li>Engineers involved in</li> <li>powerflow and short circuit analysis of power systems using PSAT</li> <li>other types power system analysis (such as stability analysis)</li> </ul>
Background required	Basic knowledge of power system modelling and operation
Duration	1 day (extendable upon request)

## Part 1: Descriptions of PSAT

- 1. Introduction to PSAT
- 2. Main features
  - Analysis
  - Data manipulation
  - Single-line diagram
  - Study tools
  - Reporting
  - Advanced features
- 3. Input/output data formats
- 4. Program customization and operation
- 5. Help sources

## Part 2: Hands-on Exercises

- 1. Test case descriptions
- 2. Hands-on exercises including the following topics:
  - Import/export data
  - Manage powerflow information
  - Work with single-line diagrams
  - Solve powerflow and examine results
  - Use other functions in PSAT

Note: the actual contents of the course may be customized based on user requests; please refer to the course announcement for details.