

## Apply Basic Engineering Mathematics at Work (Blended) MF-AUT-301C-1

Code: ABEM

Duration: 24 Hours

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### Synopsis:

This module is developed to enable learners to acquire knowledge and skills of Basic Engineering Mathematics and apply these to solve problems encountered at work with a clear and logical way.

### Course Objective:

On completion of this module, learners will be able to apply the necessary knowledge on the mathematical principles and application skills to solve problems encountered at work.

### Course Outline:

The knowledge and skills covered in this module include:

#### Skills:

- Determine the basic mathematics, electrical and logic control in accordance with its working principles
- Apply the basic mathematics, electrical and logic control in accordance with its working principles
- Solve problems encountered by using basic Engineering Mathematics in accordance with its working principles
- Documentation on the solved problems in accordance with its working principles

#### Knowledge:

- The application of Arithmetic Calculations
- The application of Electrical unit conversions
- The application of Algebra
- The application of Trigonometric
- The application of Number System
- The basic electrical principles
- Ohm's law on series and parallel circuit
- Statistical methods to analyse problems encountered

### For Whom:

Suitable for Line or Team Leaders, Technicians, Supervisors and Engineers.

**Entry Requirements:**

Participants are assumed to:

- Have completed 'O' Level or equivalent; or
- Have the ability of:
  - Basic knowledge of the Singapore Workplace Safety and Health requirements;
  - Follow written and oral work instructions;
  - Listen, read and write English at a proficiency level equivalent to the Employability Skills System (ESS) level 4;
  - Manipulate numbers at a proficiency level equivalent to Employability Skills System (ESS) level 4.

**Training Medium:**

This module is conducted in English.

**Training Methodology:**

This module is delivered through e-learning, lectures, group activities and demonstration.

**Assessment Methodology:**

Practical and written assessments are conducted at the end of the training module.

**Certification:**

An individual who completes a module will be awarded a Statement of Attainment (SOA).