

1. Title	Perform basic tasks of designing fire service mechanical equipment
2. Code	EMFSDE402A
3. Range	Perform regular tasks of designing fire service mechanical equipment independently according to plans and specifications.
4. Level	4
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Basic knowledge of designing fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Understand the construction, working principles and characteristics of various types of fire service mechanical equipment ◆ Understand the basic requirements for designing fire service mechanical equipment ◆ Have a basic understanding of the contents of the design standards and codes, including: <ul style="list-style-type: none"> • The Code of Practice for Fire Service Installations and Equipment • Recognized international standards (BSEN, NFPA) <p>6.2 Perform basic tasks of designing fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Perform various types of basic tasks of designing fire service mechanical equipment according to design outline, recognized standards and relevant local regulations, including: <ul style="list-style-type: none"> • Designing schematic drawings and layout plans of various types of fire service mechanical equipment • Calculating and determining the size of components, such as: <ul style="list-style-type: none"> ▸ Pipe diameter ▸ Pump flow rate and pressure requirement ▸ Tank capacity • Formulate the specifications of various types of fire service mechanical equipment and select relevant equipment <p>6.3 Professionalism in basic design of fire service mechanical equipment</p> <ul style="list-style-type: none"> ◆ Perform basic tasks of designing fire service mechanical equipment according to instructions, legal requirements, codes of practice and design standards
7. Assessment Criteria	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to complete the basic tasks of designing fire service mechanical equipment effectively according to outline and local regulations relevant to fire systems and installations, including designing schematic drawings and layout plans and formulating specifications for various types of fire service mechanical equipment and selecting relevant equipment.</p>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses general knowledge of fire service mechanical equipment.