

1. Title	Apply the knowledge of water-based fire systems and equipment	
2. Code	EMFSDE305A	
3. Range	Apply the knowledge of water-based fire systems and equipment and undertake the tasks of designing, installing, commissioning, operating, repairing and maintaining such systems at design offices or work sites.	
4. Level	3	
5. Credit	6	
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of water-based fire systems and equipment</p> <ul style="list-style-type: none"> ◆ Understand the types, structure, construction, applications and working principles of typical water-based fire systems and equipment, including: <ul style="list-style-type: none"> • Sprinkler system • Fire hydrant/hose reel system • Drencher/deluge/water spray system ◆ Understand the construction and uses of components, and the impact of different accessories on system operation ◆ Understand the operation sequence and performance requirements of typical water-based fire systems ◆ Read the drawings of water-based fire systems and components ◆ Know about relevant specifications and guidelines stated in the Code of Practice for Fire Service Installations and Equipment <p>6.2 Application of water-based fire systems and equipment</p> <ul style="list-style-type: none"> ◆ Communicate with clients effectively on issues relevant to the design, installation, commissioning, operation, repair and maintenance of water-based fire systems ◆ Apply the knowledge of water-based fire systems and equipment to the tasks of design, installation, commissioning, operation, repair and maintenance, including: <ul style="list-style-type: none"> • Select proper water-based fire systems and equipment according to building types and uses • Ensure that the selected water-based fire systems and equipment meet the requirements and guidelines stated in the Code of Practice for Fire Service Installations and Equipment • Perform assessments and tests of the general installation, operation and maintenance work of water-based fire systems and equipment and make proposals for solving the problems 	

<p>7. Assessment Criteria</p>	<p>The integrated outcome requirements of this unit of competency are:</p> <ul style="list-style-type: none"> (i) Capable to communicate with clients effectively on issues relevant to the design, installation, commissioning, operation, repair and maintenance of water-based fire systems; and (ii) Capable to apply the knowledge of water-based fire systems and equipment in the selection of proper systems for the client and to solve the problems relevant to the design, installation, commissioning, operation, repair and maintenance of such systems.
<p>8. Remarks</p>	<p>The credit value of this unit of competency is set on the presumption that the person already possesses basic knowledge of fire service installations.</p>