

1. Title	Design water supply systems
2. Code	EMPDDE403A
3. Range	As regards plumbing projects, master all kinds of plumbing system components and their operating principles; design water supply systems according to rules and regulations; and offer several design options for customer’s consideration.
4. Level	4
5. Credits	3
6. Competency	<div><div><div><div><div></div><div>6.1</div><div>Understand the construction of various kinds of water supply systems, the system components and their operating principles</div></div><div><div></div><div>6.2</div><div>Design water supply systems</div></div><div><div></div><div>6.3</div><div>Professionalism in designing water supply systems</div></div></div><div><div><div></div><div>◆</div><div>Understand the construction and operating principles of various kinds of water supply systems including:<ul style="list-style-type: none"><li>Fresh water system</li><li>Flush water system</li><li>Special water supply systems</li></ul></div></div><div><div></div><div>◆</div><div>Understand all kinds of water supply system components and their operating principles</div></div><div><div></div><div>◆</div><div>Design water supply systems (system coordination and accessory equipment)<ul style="list-style-type: none"><li>Be familiar with the impact of accessories and auxiliary devices on the system<ul style="list-style-type: none"><li>▸ impact of changing accessories and auxiliary devices on the system</li><li>▸ influence of changing and adding accessories and auxiliary devices on the system</li></ul></li><li>Run the operating procedures according to the system default</li><li>Adapt the changes in system load</li><li>Work out diversified designs flexibly</li><li>Master the limitation of system performance and consider the extendibility of the system</li><li>Use the coordination system for the best result</li></ul></div></div><div><div></div><div>◆</div><div>Work out a highly efficient system design complying with technical requirements according to legal requirements, professional code of practice and specified conditions</div></div></div></div></div>
7. Assessment Criteria	<div>The integrated outcome requirements of this unit of competency are:<div><div>(i)Capable to master all kinds of plumbing system components and their operating principles; and</div><div>(ii)Capable to use system coordination to design highly efficient water supply systems.</div></div></div>
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses design knowledge of relevant water supply systems.