

1. Title	Apply the knowledge of installation and related legislations of ventilation systems
2. Code	EMACIN302A
3. Range	Apply the knowledge of installation and related legislations of ventilation systems, at design studios or ventilation system work sites, in the design, installation, commissioning, testing, operation, repair and maintenance of ventilation systems.
4. Level	3
5. Credit	6
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Knowledge of installation and related legislations of ventilation systems</p> <ul style="list-style-type: none"> ◆ Understand the working principles of various types of ventilation systems , including: <ul style="list-style-type: none"> • Functions and applications of air-conditioning system • Negative pressure ventilation, positive pressure ventilation and balanced pressure ventilation ◆ Calculate the fresh air requirement of a ventilation system ◆ Possess knowledge of installing, maintaining and repairing air duct system equipment, including: <ul style="list-style-type: none"> • Performance, working principles and installation method of different types of ventilation fans and fans • Uses and properties of different types of air duct materials • Uses, working principles and installation method of air dampers, fire dampers and smoke dampers • Uses, performance, working principles, installation method and maintenance of air filters and dust collectors ◆ Understand legal requirements in Hong Kong on ventilation systems, including: <ul style="list-style-type: none"> • Legal requirements of Buildings Department on the installation and maintenance of ventilation systems • Legal requirements of Fire Services Department on the installation and maintenance of ventilation systems(including thermal insulation materials) • Legal requirements of Food and Environmental Hygiene Department on the installation and maintenance of ventilation systems ◆ Understand the relationship between air-conditioning and ventilation systems and fire control systems, including: <ul style="list-style-type: none"> • Working principles of ventilation/ air-conditioning control (VAC control) systems • Working principles of control linkage between automatic fire alarm system and ventilation/ air-conditioning control (VAC control) systems

	<p>6.2 Application of knowledge of installation and related legislations of ventilation systems</p> <p>◆ Apply the knowledge of installation and related legislations of ventilation systems to solve problems involved in the design, installation, commissioning, testing, operation, repair and maintenance of ventilation systems; communicate with the sector and clients</p>
<p>7. Assessment Criteria</p>	<p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to apply the knowledge of ventilation systems installation and related legislations of ventilation systems to solve problems involved in the design, installation, commissioning, testing, operation, repair and maintenance of ventilation systems; communicate with the sector and clients.</p>
<p>8. Remarks</p>	<p>This unit of competency is applicable to ventilation system engineering practitioners.</p>