

1. Title	Formulate overall design requirements for railway signal and control systems and coordinate the design requirements of all parts
2. Code	EMRADE606A
3. Range	Formulate overall design requirements for railway signal and control systems according to the overall railway system design, and coordinate different designing teams, according to the classification of railway signal and control system equipment, to formulate design requirements for the equipment and systems.
4. Level	6
5. Credits	10
6. Competency	<p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Review, integrate and apply the performance requirements and design guidance information for railway signal and control systems</p> <ul style="list-style-type: none"> ◆ Master the techniques of reviewing, assessing and integrating performance requirements for railway signal and control systems and overall design guidance information for railway signal and control systems ◆ Analyze, integrate and develop the information on the overall railway system design into the basis of the overall design of railway signal and control systems ◆ By applying specialized railway signal and control system engineering knowledge, develop the requirements for the overall design into performance requirements for various component system equipment <p>6.2 Procedures of formulating overall design requirements for railway signal and control systems and coordinating the design requirements for various component systems</p> <ul style="list-style-type: none"> ◆ Capable to formulate overall design requirements for railway signal and control systems according to overall design requirements for railway system and overall design guidance for signal and control systems ◆ Capable to coordinate the design requirements for various component equipment, including traffic management system, interlock system, chain system, signal system, trackside equipment, track circuit and automatic train control, according to the overall design requirements for railway signal and control systems <p>6.3 Professionalism in formulating overall design requirements for railway signal and control systems</p> <ul style="list-style-type: none"> ◆ Capable to formulate overall design requirements for railway signal and control systems according to the standards and requirements for safety, health, environmental protection and quality management of railway works ◆ Understand the safety guidelines as required by the law and codes of practice in formulating overall design requirements for railway signal and control systems

7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to draft design requirements for major equipment of railway signal and control systems according to the overall design requirements for the signal and control systems; and (ii) Capable to coordinate the design requirements for various component systems so that the component systems can have good match.
8. Remarks	The credit value of this unit of competency is set on the presumption that the person already possesses professional knowledge of railway signal system engineering.