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| 1. Title | Conduct comprehensive train tests and analyze train performance |
| 2. Code | EMRAIT505A |
| 3. Range | Conduct comprehensive tests for trains in depot and railway main lines, measure and analyze operational data systematically and assess the dynamic performance of the trains. |
| 4. Level | 5 |
| 5. Credits | 9 |
| 6. Competency | <p style="text-align: center;"><u>Performance Requirements</u></p> <p>6.1 Methods and techniques for comprehensive train tests and data analysis</p> <ul style="list-style-type: none"> ◆ Be familiar with the methods of testing performance of different aspects of trains, including: <ul style="list-style-type: none"> • Speed / time curve test • Brake test • Acceleration test ◆ Master the techniques of measuring operational data ◆ Be familiar with methods and techniques of analyzing operational data <p>6.2 Procedures for comprehensive train tests and performance data analysis</p> <ul style="list-style-type: none"> ◆ Work out a driving pattern and conduct full distance tests for trains safely and effectively according to the driving pattern, and measure relevant data ◆ Choose railway sections to conduct brake tests and acceleration tests safely and effectively, and measure relevant data ◆ Use statistical techniques for selection and analytical principles to appraise the dynamic performance of trains <p>6.3 Professionalism in conducting for comprehensive train tests and performance data analysis</p> <ul style="list-style-type: none"> ◆ Be familiar with safety guidelines and codes of practice for railway and apply them in comprehensive tests for trains |
| 7. Assessment Criteria | <p>The integrated outcome requirement of this unit of competency is:</p> <p>(i) Capable to draft a set of instructions for conducting an comprehensive test safely and effectively on train operation, including testing procedures, measurements and important points to note; and</p> <p>(ii) Capable to conduct brake tests for trains systematically and effectively, and use techniques for data selection and analysis to analyze the brake performance according to the data from tests.</p> |
| 8. Remarks | The credit value of this unit of competency is set on the presumption that the person already possesses the knowledge of train operation and performance. |