1. Title	Assess the performance of DC and single-phase AC circuits
2. Code	EMELDE314A
3. Range	Apply basic electrical theories to assess the performance of DC and single-phase AC circuits for general electrical works, such as finding cable faults and selecting cables.
4. Level	3
5. Credit	9
6. Competency	Performance Requirements 6.1 Understand basic circuit theories ♦ Understand basic AC and DC circuit theories including: Ohm's law, Kirchhoff's law, superposition principle, Thevenin's theorem, Norton's theorem and delta/star conversion techniques 6.2 Apply common electrical theories and circuit conversion techniques to assess the performance of DC and single-phase AC circuits ♦ Apply common electrical theories and circuit conversion techniques to assess the performance of DC and single-phase AC circuits including; • Voltage, current, circuit impedance and power • Phase angle and power factor in voltage and current phasers • Draw phaser diagrams • Effect of the phase difference between voltage and current on power
7. Assessment Criteria	The integrated outcome requirement of this unit of competency is: (i) Capable to apply basic circuit theory to assess the performance of AC/DC circuits.
8. Remarks	