# Scope

This micro-credential establishes the minimum skills for a candidate to prove competent at using a megger.

# MICRO-CREDENTIAL Megger Use

1. Did the candidate inspect the Megger and declare it safe for use?
   1. Candidate MUST
      1. Inspect the lead set for damage
      2. Perform continuity check
      3. Check battery status
      4. Check condition of case
      5. Ensure machine is damage free
      6. Inspect the DMM if they intend to use it to confirm isolation from energy sources
2. Did candidate correctly identify PPE needed and inspect the PPE properly?
   1. Candidate MUST
      1. Have safety glasses, high voltage gloves and possibly arc flash PPE
      2. Demonstrate proper inspection methods of all PPE
3. Did the candidate confirm circuit electrical isolation?
   1. Candidate MUST
      1. Verify electrical zero energy state of the component and/or system being tested with the Megger
      2. Use the hot-cold-hot method of verification
      3. Wear all appropriate PPE until circuit isolation is verified
4. Did the candidate perform a continuity check on the component and/or system prior to introducing voltage with the Megger?
   1. Candidate MUST
      1. Perform a continuity check on the component and/or system prior to introducing voltage with the Megger
         1. This check can be performed using the Ohm function of the Megger or the Ohm function of the DMM
      2. Be able to explain to the evaluator why this step is important
5. Was the candidate able to identify the nominal operating voltage of the component and/or system being tested?
   1. Candidate MUST
      1. Identify to the evaluator the nominal operating voltage of the component and/or system
      2. How they determined the value
      3. Why it is important to set the Megger voltage levels
6. Did the candidate perform the insulation test using the proper setting?
   1. Candidate MUST
      1. Set the proper voltage level on the Megger
      2. Connect leads properly
      3. Execute the insulation test noting the reading on the meter display
      4. Explain to the evaluator what the Megger reading indicates
      5. If the test was performed on a circuit and/or component that is capacitive in design
         1. A hot-cold-hot test MUST be performed to verify the system is at zero energy state after the test is complete
7. Did the candidate correctly repeat Step C through F on a different part, component and/or system?
   1. Evaluator MUST
      1. Select a different part, component and/or system for the candidate to demonstrate competency with
         1. This is to verify that the candidate can transfer their knowledge of how the insulation test is applied to other parts, components and/or systems
      2. Choose the part, component and/or system
   2. Same criteria MUST
      1. Be used in Steps C through F
   3. Candidate MUST
      1. Complete Steps C through F correctly
8. Did the candidate perform all tasks in a safe manner?
   1. Candidate MUST
      1. Use all PPE
      2. Practice electrical safety rules