The SPSP Specialized Award Electrical Program is internationally accredited by PAA/VQ-SET and is designed to provide students with a balanced combination of engineering theory and practical hands-on experience. This will ensure that on completion of the Electrical Program the student will have the required job entry skills to work within the Petroleum Services industries. Each student will complete the Academic and PEO foundation training prior to covering the Electrical Program.
Program Outline

On completion of the Electrical Program students will be able to:

- Understand electron, voltage, current and resistance theory.
- State the general principles of electromagnetic induction.
- Perform simple measurement of current, voltage and resistance through the use of instruments and multimeters.
- Correctly identify conductors and electrical components in electrical schematic diagrams and drawings.
- State the rules for battery maintenance, the operation of batteries, rectifiers and chargers, and safely maintain emergency lighting systems.
- Competently troubleshoot power distribution systems and accurately calculate transformer KVA.
- State the principles of operation, types and applications of single and three-phase motors, and carry out installation and testing.
- Install and test solenoid, relay and motor control circuits and overload protection devices.
- Maintain and operate motor operated valves (MOV) used in the petroleum industry.
- Troubleshoot a variety of remote sensing devices used in electrical control systems; level, flow, pressure, temperature and vibration switches.

Specialized Award Electrical Program Length 980 Hours