This is to verify that **Tshingombe Fiston** has completed the course **Electrical Engineering in Theory** on Alison.

Tshingombe Fiston

Alison ID: 37876299

Course Completed: Electrical Engineering in Theory

Date Of Completion: 7th April 2025

Email ID: tshingombefiston@gmail.com

Total Study Time: 0h 35m

Scan To Verify

Final Assessment Score:
Alison courses requires at least 80% to pass the final assessment

100%

CPD Hours Completed:
CPD approved learning hours completed through this course

0-1h

Course Information

The advent of electricity in homes, offices and industries marks the beginning of the modern age of technological development. Electricity has become such an essential part of our contemporary lives that we cannot imagine a world without it. It has been described as one of the "good fortunes that science has given to man," and the development of any country is measured by the rate of its electrical energy consumption. But electrical energy is not visible. As such, electrical engineers must study models from physics and mathematics to help them understand the mechanics and applications of electricity.

This course highlights the fundamental ideologies of the core elements of electrical engineering, including the theories and principles of energy conversion, transmission and utilisation. We study atomic theory, electromotive force, conductance and conductivity, Ohm's law and more. Moreover, we dissect work, energy and power before treating DC networks and network theorems. We investigate the three classifications of DC circuits and also show you how to read and connect circuit diagrams in experimental or real-world scenarios.

Finally, we explain the mathematical method for nodal analysis and the system for calculating the current flowing through a planar circuit (i.e., mesh analysis). Then, you will learn about the superposition, Thevenin's and Norton's theorems of linear and terminal networks. We will delve into single-phase AC circuits and electrical machines to study the characteristics and applications of DC generators, motors and transformers. Enrol today and start learning.

Modules Studied

Module 1: Electricity and Electrical Applications

Module 2: Course assessment