Access to Higher Education Unit

This unit forms part of an Access to HE Diploma. If delivering the graded version of this unit, please refer to the Provider Handbook for details on grading descriptors and the application of these across units within your programme.

Unit Title: Electronic Components

Graded Unit Reference Number: GA33EEE04

Ungraded Unit Reference Number: UA33EEE04

Module: Electrical and Electronic Engineering

Level: Three (3)

Credit Value: Three (3)

Minimum Guided Learning Hours: 30

Learning Outcome (The Learner will):	Assessment Criterion (The Learner can):
1. Understand the properties of semiconductor materials	1.1 Explain why silicon and other elements in the same periodic group are described as semiconductors
	1.2 Describe the production and properties of n-type and p-type semiconductor material
2. Be able to identify common electronic components	2.1 Identify common electronic components as discrete devices or on circuit boards
	2.2 Identify common electronic components from their symbols in circuit diagrams
3. Understand the operation, characteristics and use of common electronic components	Describe the operation, and compare the characteristics and uses of: 3.1 P-n junction diodes
	3.2 Zener diodes
	3.3 Point contact transistors
	3.4 Bipolar transistors (BJT and HBT)
	3.5 Field effect transistors (FET and MOSFET)
	3.6 Linear voltage regulators, e.g. TO220, 78xx and 79xx series

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