

PEARSON VOCATIONAL EDUCATION

OTHER QUALIFICATIONS AVAILABLE IN THIS SERIES



CONTACT US

Country Manager
Catherine Sissing
M: 0811 420 161
Email: catherine.sissing@pearson.com

Key Account Manager
Kenneth Linno
M: 081 278 9704
Email: kenneth.linno@pearson.com

Pearson Africa (Southern & East Africa) Customer Services
Email: pearsonafrica.ce@pearson.com
Tel: +27 21 532 6000

BRICKLAYING AND PLASTERING



**Levels 1–4
Student's Book**



Understanding the layout of the Bricklaying and Plastering content

The content of this title covers the curriculum requirements of Bricklaying and Plastering Levels 1 to 4.

The authors have organised the content into logical modules and units starting from the simple concepts and building to the more complex.

The content is not presented as individual Unit Standards as this would encourage learning and training for testing purposes. Instead, the content takes you, the student, on a journey through the theoretical basics of the Bricklaying and Plastering environment to complex practical procedures.

Modules 1 to 5 concentrate on theoretical aspects that will be applied in all practical contexts:

- Module 1 Explains how to plan and organise for work, work in a team, communicate effectively and develop innovative ideas. You are expected to apply this knowledge in all practical contexts.
- Module 2 introduces you to all tools and equipment found in the construction environment. You learn how to identify all tools and machines used in the different aspects of the construction industry, know how to use, maintain and store them. You are expected to apply this knowledge in all practical contexts.
- Module 3 explains how different scaffolding, ladders and ropes should be used in the construction industry. You are expected to apply this knowledge wherever scaffolding, ladders or ropes are needed.
- Module 4 develops the skills of measurement in the construction environment. Details how to calculate materials needed and the cost of construction projects. You are expected to apply this knowledge wherever calculations and measurements are needed.
- Module 5 exposes you to building drawings, the types and functions of drawings and how to read and interpret them. You are expected to apply this knowledge whenever presented with drawings in practical situations.

Modules 6 and 7 is the first step into the practical realm of the construction industry. You learn how to make your own bricks and blocks for sale or use. You then learn how to prepare a building site for construction, by levelling and setting out a new structure.

- Module 6 explains how to mix aggregate and cement for the manufacture of bricks and blocks, how to cast the concrete into moulds and allow the product to cure and dry. You then learn how to monitor the quality of the bricks and blocks.
- Module 7 explains how to identify the boundaries and clear a site for construction. You then learn how to set out first lines of building alignment, right-angled corners and different angles and shapes. You learn how to check building lines for squareness and use levelling devices. You are expected to apply this knowledge whenever levelling and setting out is required.

The next two modules deal with mortar and concrete, excavations and foundations, throwing a slab and when to use reinforced concrete with formwork.

- Module 8 teaches you how to identify types of mortar, when to use each type, mixing ratios and how to mix it. Once the mortar is mixed you learn how to cast, finish and cure concrete. Aspects of reinforced concrete are then explained. You are expected to apply your knowledge of identifying which mortar to mix, mixing ratios and how to mix it whenever mortar is needed in a practical context.
- Module 9 explains different types of foundations, how to excavate for foundations, how to throw concrete for foundations and slabs, and how and when to use reinforced concrete with formwork. You are expected to apply this knowledge whenever there is a need to choose the type of foundation needed, excavate foundations and throw foundations and slabs.

Modules 10 to 12 deal with all aspects of brickwork and building a structure from the cured slab to roof height.

- Module 10 details how to check if a foundation is level and how to check the level of any brickwork done. Constructing brick walls in different bonds, basic bricklaying principles such as spreading the mortar on a brick, buttering a brick and laying brick courses while building a wall that is level and plumb is explained. You will be expected to apply this knowledge when you are required to build any wall.
- Module 11 explains all aspects of building from slab level to roof level. This is a complex module and this knowledge is essential to all entering the construction industry.
- Module 12 details how openings for door and window frames are allowed for and how to include these in a structure.

Now that the structure has reached roof height, you will apply the finishes needed:

- Module 13 details plastering of walls and ceilings, including complex plastering techniques. You will learn how to finish a slab by applying a screed. Tiling of walls and floors, installing glass blocks and carrying out exposed aggregate and textured finishes is explained. You will be expected to apply the appropriate finish to any structure.

You will learn about aspects surrounding the building, including drainage, paving and laying stone:

- Module 14 explains how to build masonry drainage structures like manholes and sewage disposal systems like septic tanks. You will also learn how to lay pipes for subsoil drainage systems that lead away from structures into combined drainage systems.
- Module 15 explains how to set out a work area for paving, how to lay the paving and how to maintain the paving.
- Module 16 details the use of natural stone that can be used in dry stone structures or with mortar.

The final module addresses renovations and renovation of structures.

- Module 17 explains how to inspect a structure and select a renovation method. Demolition and removal of rubble is detailed. This is followed by learning about alterations, installing partition walls, using expansion joints, reinforcing and underpinning structures. Finally, you will learn how to repair defects.

The Bricklaying and Plastering journey is now complete!