

Practical Maths for Plumbing & Heating Students and Apprentices

The Course at a Glance

Overview

A complete, ready-to-deliver maths programme designed specifically for Level 2 and Level 3 Plumbing & Heating learners.

Built to improve learner confidence, support achievement, and reduce lecturer workload through structured, practical delivery.

Who It's For

- FE Colleges delivering Plumbing & Heating courses (Level 2 & 3)
 - Apprenticeship providers
 - Training centres supporting plumbing and heating learners
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The Problem It Solves

Many plumbing and heating learners struggle with maths due to:

- Lack of confidence
- Difficulty applying maths in practical trade contexts
- Gaps in foundational mathematical knowledge

This impacts learner progress, practical understanding, assessment performance, and lecturer workload.

The Solution

This course provides:

- Maths taught through real plumbing and heating scenarios
 - Structured, step-by-step delivery
 - Consistent teaching approach across staff
 - Ready-to-use resources requiring minimal preparation
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Course Structure

10 structured units:

1. Basic Maths Fundamentals
 2. Fractions
 3. Decimals
 4. Percentages
 5. Ratios
 6. Powers and Standard Form
 7. SI Units and Conversions
 8. Basic Algebra
 9. Transposition of Formulae
 10. Trigonometry and Pythagoras
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Delivery Model

- 1 unit = 1 session (approx. 3 hours)
 - Designed for classroom or workshop-based delivery
 - Suitable for mixed-ability groups
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What's Included

A complete teaching and learning package:

- Course Textbook (PDF)
- PowerPoint Slides (Editable + PDF)
- Student Worksheets
- Answer Sheets
- Teacher Notes
- Lesson Plans (3-hour sessions)

- Course Guide / Scheme of Work
 - Statement of Works
 - Final Assessment Pack (Questions + Answers)
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Key Benefits

For Learners

- Improved understanding of maths in plumbing and heating contexts
- Increased confidence with calculations and measurements
- Better assessment performance

For Lecturers

- Significant reduction in planning time
- Clear, structured delivery
- Consistent teaching resources across units

For Departments

- Standardised maths delivery
 - Improved learner outcomes
 - Scalable across multiple groups and lecturers
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Outcomes

Learners will be able to:

- Apply core maths skills to plumbing and heating scenarios
 - Solve problems involving measurements, calculations, pipework dimensions, flow rates, and formulas
 - Demonstrate improved confidence in mathematical tasks
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Implementation

- Plug-and-play delivery — no redevelopment required
 - Can be integrated into existing programmes
 - Suitable as a standalone maths support course or embedded delivery
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Licensing

Available as an annual licence per institution:

- Single trade (Electrical or Plumbing & Heating)
 - Combined trade package available
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Summary

This is not just a set of resources.

It is a complete, structured maths delivery system designed to improve learner outcomes while reducing lecturer workload.