NATIONALS IN A NUTSHELL

The National Parent Forum of Scotland Summary of Practical Electronics National 5

PRACTICAL ELECTRONICS TECHNOLOGIES

3 UNITS

CIRCUIT DESIGN CIRCUIT SIMULATION CIRCUIT CONSTRUCTION

COURSE ASSESSMENT: PRACTICAL ACTIVITY

What skills will my child develop?

- electronic knowledge and skills in a range of contexts
- awareness of electronics impacts on society and the environment
- knowledge and understanding of the systems approach to electronics, including sub-systems
- understanding of key electrical concepts current, voltage, resistance, power, analogue/digital, capacitance, magnetic effect of current
- knowledge and understanding of a range of electronic and electromagnetic components and concepts
- knowledge and understanding of combinational logic
- awareness of safe working practices
- simulating, testing and evaluating solutions to electronic problems
- skills in using a range of test equipment
- the ability to construct a range of electronic circuits using permanent (soldering) and non-permanent methods

WHAT WILL MY CHILD EXPERIENCE DURING THE COURSE?

- Active and independent learning through self and peer evaluations, group feedback, reflecting on learning, making independent decisions
- A blend of classroom approaches including practical and experiential learning in real-life contexts; whole class learning; team working; investigative work
- Collaborative learning: working in pairs, small groups or larger groups; working with partners in other Technologies subjects, Maths, Sciences
- Space for personalisation and choice: learners can choose how they develop their Practical Activity
- Applying learning
- Embedding literacy and numeracy skills: interpreting drawings/ diagrams, measuring, marking out, analysing data, designing.

ASSESSMENT

- To gain National 5, learners must pass all Units and the Course Assessment
- Units are assessed as pass or fail by the school/centre (following SQA external quality assurance to meet national standards)
- Unit assessment (or 'evidence of learning') could be presented in a variety of ways such as completed tasks, records of the task development (blogs, diaries). A portfolio of work (including a learner checklist) may be prepared
- The Course Assessment consists of a more challenging Practical Activity which requires learners to solve an electronics problem, completing a record of progress, a report on testing the solution and on the final solution. This is assessed by the centre, in accordance with SQA guidance, and is graded A to D.

National 5 progresses onto National 5 can progress onto a variety of Technology, Science and Skills for Work courses, or training or work For more detailed course information:

SQA: Practical Electronics National 5: www.sqa.org.uk/sqa/47460.html Education Scotland: www.educationscotland.gov.uk/nationalqualifications/index.asp Curriculum for Excellence Key Terms and Features Factfile: www.educationscotland.gov.uk/Images/CfEFactfileOverview_tcm4-665983.pdf



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