

Short Courses

Electrical Principles and Skills

Course Duration	4 days (1 x 4 day week)
Course Objectives	This course provides essential underpinning knowledge and practical exercises to aid the understanding of electrical principles.
Course Content	<ul style="list-style-type: none">• Introduction to the Electricity at Work Regulations• Isolation and Safe Working Practices• Electron theory/conductors and insulators• Basic A.C./D.C. principles, conventional current flow and polarity• Main effects and use of current flow• Electrical terms and units• Use of basic electrical formulae• Resistive circuits – series / parallel connection• Current and voltage laws• Types and use of common test equipment for current, voltage, resistance, insulation.• Generation principles, A.C. waveform, frequency, R.M.S.• Distribution systems, use of transformers, voltage levels, reference to earth• Transformers – principles, common types, interconnection• Rectification – diodes, bridge rectifiers• Introduction to capacitors / inductors and effects• Over current protective devices and earthing.
Who should attend?	Personnel who require an insight and essential underpinning knowledge of electrical principles. OR The course may be taken as a separate course at the commencement of further electrical/mechanical courses.
Venue	EAGIT Training Centre - Unit 20
Course Dates	21 st November 2011
Examination Dates	N/A
Costs	£595 + VAT
Course Certificate	This course carries an EAGIT issued certificate of attendance.
Course Requirements	A calculator. Delegates may use their own test instruments e.g. multimeters.