

CONVERSION GUIDELINES FOR ELECTRICIAN TRADE THEORY FROM NATED (N) COURSES TO UNIT STANDARDS (US)

The purpose of this skills programme is for the successful learner to gain access to the relevant trade test and not to gain credits or part of credits as only relevant specific outcomes addressing the theory part are to be achieved

| LEARNING ACTIVITIES | UNIT STANDARD ID | MATERIAL AVAILABLE | UNIT STANDARD TITLE | THEORY | |
|------------------------------------------------|-----------------------------------------------------------------------|--------------------|---------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------|
| | | | | SPECIFIC OUTCOME NUMBER | SPECIFIC OUTCOME |
| Electrical Measuring Equipment (Panel Mounted) | Select, use and care for electrical measuring instruments | Eseta | 10237 | SO 1 | Identify and read fixed electrical measuring instruments. |
| | Install or replace electrical metering units or measuring instruments | Eseta | 25819 | SO 1 | Plan to install and/replace an electrical metering units or measuring instruments |
| Electrical Measuring Equipment (Portable) | Select, use and care for electrical measuring instruments | Eseta | 10237 | SO 1 | Identify and read fixed electrical measuring instruments. |
| Soft Solder | Construct Basic Electronic Circuits | Eseta | 10270 | SO 1 | Understanding confirmed plan to construct basic electronics circuit |
| | Apply soldering techniques | Eseta | 113863 | SO1,2,3,4 | Learn the techniques of soldering, health and safety regulation, knowledge of different types of equipments and tools |

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| Review: Learning Programme Manager | | Approved: CEO | |

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| Fault Finding | Fault find on single phase alternating current (AC) systems | Eseta | 13791 | SO 1 | Explain the principles and procedures to be applied during fault finding on single phase AC systems. |
| | Fault find and repair a DC powered machine | Eseta | 259180 | SO 1 | Explain the factors critical to fault finding and repairing DC powered machines |
| | Fault find, repair and maintain three phase voltage electrical circuits | Eseta | 10259 | SO1,2,3,4,5 | Understand fault finding methods and procedures, applicable worksite procedures, and electrical isolating procedures |
| Conductors | Install, join and terminate Low Voltage cables and conductors | Eseta | 258921 | SO 2 | Understanding confirmed prepare to install, join and terminate low voltage cables and conductors |
| Cables | Install, join and terminate Low Voltage cables and conductors | Eseta | 258921 | SO 2 | Understanding confirmed prepare to install, join and terminate low voltage cables and conductors |
| Electrical Equipment | Install and commission electrical metering units, measuring instruments and control devices | Eseta | 259078 | SO 1 | Explain the procedure and requirements to install electrical metering units or measuring instruments and control devices |
| | Install and commission direct-on-line AC rotating machines and control gear | Eseta | 259077 | SO 1,3 | Understanding confirmed plan and prepare for the work task, connect direct on line AC rotating |
| | Install or replace mini substations and ring-main units/switches | Eseta | 258958 | U/S EEK | Understanding of stores procedures, Basic understanding of the reticulation network layout, Basic knowledge of mini substations, ring-main units/switches, its connecting/rigging points/lashing and transporting requirements, Relevant safe working procedures. |

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| | Connect and commission a three-phase direct on line motor control system | Eseta | 10281 | SO 1 | Requirements pertaining to connection & commissioning of 3 phase direct on line motor control system |
| | Install an electronic control unit for AC pole changing motors | Eseta | 10733 | SO 1 | Explain the requirements pertaining to installing the electronic control unit |
| Wiring | Wire and commission domestic or commercial electrical circuits | Eseta | 258968 | SO 1 | Understanding confirmed plan to wire and commission domestic or commercial circuits |
| Installations | Install and commission electrical metering units, measuring instruments and control devices | Eseta | 259078 | SO 2,3 | Understanding confirmed plan to install and connect electrical metering units or measuring instruments |
| | Install and commission direct-on-line AC rotating machines and control gear | Eseta | 259077 | SO 1,3 | Understanding confirmed plan and prepare for the work task, connect direct on line AC rotation |
| | Connect and commission a three-phase direct on line motor control system | Eseta | 10281 | SO 1 | Requirements pertaining to connection & commissioning of 3 phase direct on line motor control system |
| | Install an electronic control unit for AC pole changing motors | Eseta | 10733 | SO 1 | Explain the requirements pertaining to installing the electronic control unit |
| AC Machines | Anticipate and troubleshoot machine functioning | Eseta | 9890 | SO 3 | Gather and analyse information to troubleshoot equipment problems. |
| | | | | SO 4 | Communicate equipment repair needs and preventive maintenance needs to maintenance specialists |
| | Conduct advanced tests on electro-mechanical components | Eseta | 244663 | SO 1 | Plan to test electro-mechanical components. |
| | Dismantle basic components and sub-assemblies | Eseta | 244664 | SO 1 | Plan to dismantle components and sub-assemblies. |
| DC Machines | Anticipate and troubleshoot machine | Eseta | 9890 | SO 3 | Gather and analyse information to troubleshoot equipment problems. |

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