

## UEP40212 CERTIFICATE IV IN ESI GENERATION – OPERATIONS

Entura’s operations course provides participants with a mixture of classroom theory, as well as practical demonstrations of functioning equipment, to prepare trades-based staff to safely and efficiently operate power generating equipment and associated switchgear, including circuit reading and fault finding.

The course includes a site specific tailored practical program for the training and assessment of operational competency, transferring the practical and operational knowledge of our experienced operational staff to the trainee operator in a structured and certified program.

The essential knowledge and skills will be provided in either a classroom or e-learn methodology as part of the initial formal component of the overall training. The training can be clustered to provide efficiencies in both training and assessment.

The practical field-based activities will include both training and assessment activities. Trainees will need to be mentored by appropriate senior staff. Where required, their mentor will need to sign off on an activity that has been completed using a workplace competency assessment workbook.

### COMPLETION REQUIREMENTS

The requirements for granting this qualification will be met when competency is demonstrated and achieved for:

- all the core competency standard units, defined in the core competency standard units table
- a combination of elective competency standard units to achieve a total weighting of 740 points in accordance with the elective competency standard units table, including any associated prerequisite units.

Those gaining this qualification will be able to complete work function such as the development of operational procedures and systems, manage the start-up and shut-down of generation plant. It also includes the implementation of safe working practices, environmental procedures, management and supervision of others, and the coordination of work activities of individuals and/or teams.

### CORE COMPETENCY STANDARD UNITS

*All core competency standard units to be achieved*

|             |  |
|-------------|--|
| UEENEEE117A | Implement and monitor energy sector OHS policies and procedures                        |
| UEENEEE101A | Apply occupational health and safety regulations, codes and practices in the workplace |
| UEPOPS202B  | Apply quality systems to work  |
| UEPOPS252A  | Undertake local systems operations   |
| UEPOPS301B  | Conduct single energy source isolation procedures for permit to work                   |
| UEPOPS337B  | Maintain quality systems within the team   |
| UEPOPS342B  | Interpret and analyse single operation protection devices                              |
| UEPOPS347B  | Operate and monitor supervisory, control and data acquisition systems                  |
| UEPOPS402B  | Conduct multiple energy source isolation procedures for permit to work                 |
| UEPOPS403B  | Coordinate permit to work system   |
| UEPOPS405B  | Operate and monitor AC electrical systems  |
| UEPOPS406B  | Operate and monitor DC electrical systems  |
| UEPOPS417B  | Monitor and implement environmental plans and procedures                               |
| UEPOPS426B  | Interpret and analyse multi-operation protection devices                               |
| UEPOPS439B  | Plan and organise work   |
| UEPOPS440B  | Coordinate team activities   |
| UEPOPS454A  | Coordinate response to critical incidents  |

## ELECTIVE COMPETENCY STANDARD UNITS

Total weighting of 740 points

### Group A – minimum 0 and maximum 220 points

|            |                                |    |
|------------|--------------------------------|----|
| TAEDEL301* | Provide work skill instruction | 40 |
| BSBWOR404* | Develop work priorities        | 40 |

### Group B – minimum 0 and maximum 620 points

|             |   |    |
|-------------|---|----|
| UEPOPS203B  | Operate and monitor communications systems                                  | 20 |
| UEPOPS326B  | Operate and monitor oil systems   | 30 |
| UEPOPS327B  | Monitor and maintain civil assets   | 30 |
| UEPOPS328B  | Undertake dam safety surveillance   | 30 |
| UEPOPS334B  | Operate and monitor a wind generator  | 60 |
| UEPOPS336B* | Manage, operate and monitor a gas turbine unit                              | 60 |
| UEPOPS343B  | Operate hydro-electric generating plant and auxiliary equipment             | 60 |
| UEPOPS344B  | Conduct Water Conveyance and Control  | 30 |
| UEPOPS346B  | Conduct non-routine operational testing                                     | 60 |
| UEPOPS349B  | Operate local H.V. switchgear   | 40 |
| UEPOPS351B  | Operate H.V. condition changing apparatus                                   | 60 |
| UEPOPS352B  | Conduct operational checks on in-service mechanical plant                   | 40 |
| UEPOPS356B  | Apply environmental and sustainable energy procedures                       | 20 |
| UEPOPS357B  | Operate local L.V. switchgear   | 40 |
| UEPOPS358A  | Monitor and maintain wind farm civil assets                                 | 40 |
| UEPOPS360A  | Operate and monitor a hydro turbine   | 60 |
| UEPOPS361A  | Operate and monitor hydro plant auxiliary systems                           | 60 |
| UEPOPS362A  | Operate and monitor generator/alternator                                    | 60 |
| UEPOPS364A  | Ensure compliance with occupational health and safety policy and procedures | 20 |
| UEPOPS369A  | Respond to a critical incident  | 40 |
| UEPOPS371A  | Carry out operational checks on in-service electrical plant                 | 40 |

### Group C – Minimum 140 and maximum 740 points

|             |   |    |
|-------------|---|----|
| UEPOPS412B  | Undertake operations commissioning/decommissioning  | 30 |
| UEPOPS414B  | Perform risk analysis of generation plant   | 20 |
| UEPOPS428B  | Develop H.V. switching programs   | 40 |
| UEPOPS430B  | Control permit to work operations   | 30 |
| UEPOPS437B  | Manage system restart   | 40 |
| UEPOPS441B  | Operate and monitor system equipment  | 30 |
| UEPOPS443A  | Coordinate wind farm operations   | 40 |
| UEPOPS444A  | Start and run-up a hydro turbine  | 60 |
| UEPOPS445A  | Shut down a hydro turbine   | 60 |
| UEPOPS446A  | Operate and monitor hydro unit control and protection systems                             | 80 |
| UEPOPS447A  | Coordinate photovoltaic solar power plant operations                                      | 60 |
| UEPOPS452A  | Conduct operational checks and carry out corrective action on in-service electrical plant | 40 |
| UEPOPS456A  | Perform switching to a switching program  | 30 |
| UEPOPL001A* | Licence to operate a steam turbine  | 60 |
| UEPOPL002A* | Licence to operate a reciprocating steam engine   | 60 |

\*Not provided. Credit transfer is possible with proof of attainment.

Prerequisites may apply to units.

The elective units provided relate best to students in the hydropower industry. Please check the full training package available at [training.gov.au](http://training.gov.au) for all options.