

## **Electrotechnology Curriculum Framework**

### **Sample scope and sequence of units of competency to meet HSC course requirements and qualification packaging rules**

The selection of units of competency should be undertaken under the guidance of the RTO to ensure that the RTO has scope to deliver them.

Units of competency contained in the Framework can be delivered by RTOs with the scope and appropriately accredited teachers and facilities. Teachers should seek advice from their school system/sector authority regarding which qualifications and units of competency they are qualified to deliver.

Guidelines regarding the selection of units of competency for qualification outcomes are provided in Section 15 of Part A of the Syllabus. Teachers should consult this document, along with Part B, when selecting units of competency.

The following examples have been developed as models which meet *HSC course indicative hour requirements* **and qualification packaging rules** for qualifications available in the Framework. Each model is an **example** of **one approach** and the models are **not prescriptive**.

The following examples are included:

- Example 1: Electrotechnology (Career Start)  
*Electrotechnology (240 indicative hours) – Certificate II in Electrotechnology (Career Start) (UEE22007)*
- Example 2: Technical Support  
*Electrotechnology (240 indicative hours) + Electrotechnology School-based Traineeship Specialisation (60 indicative hours) – Certificate II in Technical Support (UEE21707)*

**Example 1: Electrotechnology (Career Start)**

This scope and sequence is for the delivery of Electrotechnology (240 indicative hours) over two years.

The possible qualification outcome is:

- Certificate II in Electrotechnology (Career Start) (UEE22007).

**YEAR 11**

| Week   |                                  | 1  | 2 | 3 | 4   | 5  | 6 | 7 | 8 | 9 | 10 |
|--|----------------------------------|--|---|---|---|--|---|---|---|---|----|
| TERM 1   | Electrotechnology<br>(240 hours) | Introduction to the course   |   |   |   | UEENEE007B<br>Use drawings, diagrams, schedules and manuals (15)<br><br>UEENEE048B<br>Carry out routine work activities in an electrotechnology environment (10) |   |   |   |   |    |
|  |                                  | UEENEE010B<br>Deliver a service to customers (5)<br><br>UEENEE001B<br>Apply OHS practices in the workplace (10)<br><br>UEENEE048B<br>Carry out routine work activities in an electrotechnology environment (5) |   |   |   |  |   |   |   |   |    |
| Assessment for RPL<br>(refer to Part A syllabus – Section 8.4) |                                  |  |   |   | → A 35-hour work placement is to be undertaken by end of Term 3 |  |   |   |   |   |    |

| Week   |                                  | 1  | 2 | 3 | 4 | 5   | 6 | 7 | 8 | 9 | 10 |
|--------|----------------------------------|--|---|---|---|---|---|---|---|---|----|
| TERM 2 | Electrotechnology<br>(240 hours) | UEENEE003B<br>Solve problems in extra-low voltage single path circuits (20)<br><br>UEENEE012B<br>Provide basic sustainable energy solutions for energy reduction in domestic premises (10) |   |   |   | UEENEE040B<br>Identify and select components/ accessories/materials for electrotechnology work activities (15)<br><br>UEENEE007B<br>Use drawings, diagrams, schedules and manuals (5) |   |   |   |   |    |
|        |                                  | work placements  |   |   |   |   |   |   |   |   |    |

| Week   |                                  | 1                                      | 2 | 3   | 4 | 5        | 6 | 7           | 8 | 9                                      | 10 |
|--------|----------------------------------|--|---|---|---|----------|---|-------------|---|--|----|
| TERM 3 | Electrotechnology<br>(240 hours) | UEENEE040B cont/d<br>UEENEE007B cont/d |   | UEENEE041B<br>Use routine equipment/plant/ technologies in an electrotechnology environment (25)<br><br>UEENEE007B<br>Use drawings, diagrams, schedules and manuals (5) |   | Revision |   | Yr 11 exams |   | UEENEE041B cont/d<br>UEENEE007B cont/d |    |
|        |                                  | work placements                        |   |   |   |          |   |             |   |  |    |

| Week   |                                  | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|----------------------------------|---|---|---|---|---|---|---|---|---|----|
| TERM 4 | Electrotechnology<br>(240 hours) | UEENEE001B<br>Apply OHS practices in the workplace (5)<br><br>UEENEE002B<br>Dismantle, assemble and fabricate electrotechnology components (30)<br><br>UEENEE05B<br>Fix and secure equipment (15) |   |   |   |   |   |   |   |   |    |
|        |                                  | → A second 35-hour work placement is to be undertaken by end of Term 2, Year 12   |   |   |   |   |   |   |   |   |    |

**YEAR 12**

| Week                   |                                  | 1   | 2                     | 3                    | 4   | 5 | 6 | 7   | 8        | 9             | 10 |
|------------------------|----------------------------------|---|-----------------------|----------------------|---|---|---|---|----------|---------------|----|
| TERM 1                 | Electrotechnology<br>(240 hours) | UEENEEE001B<br>cont/d   | UEENEEE002B<br>cont/d | UEENEEE05B<br>cont/d | UEENEEC010B<br>Deliver a service to customers (5) |   |   | UEENEEE003B<br>Solve problems in<br>extra-low voltage<br>single path circuits<br>(10) | Revision | Year 12 Exams |    |
|                        |                                  | UEENEEE048B<br>Carry out routine work activities in<br>an electrotechnology environment<br>(10) |                       |                      |   |   |   |   |          |               |    |
| <i>work placements</i> |                                  |   |                       |                      |   |   |   |   |          |               |    |

| Week                     |                                  | 1  | 2 | 3   | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------------------|----------------------------------|--|---|---|---|---|---|---|---|---|----|
| TERM 2                   | Electrotechnology<br>(240 hours) | UEENEEE003B<br>cont/d  |   | UEENEEE004B<br>Solve problems in multiple path d.c. circuits (35) |   |   |   |   |   |   |    |
|                          |                                  | UEENEEK012B<br>Provide basic sustainable energy solutions for energy reduction in domestic premises (15) |   |   |   |   |   |   |   |   |    |
| <i>work placements ←</i> |                                  |  |   |   |   |   |   |   |   |   |    |

| Week   |                                  | 1                     | 2 | 3        | 4         | 5 | 6        | 7 | 8 | 9 | 10 |
|--------|----------------------------------|-----------------------|---|----------|-----------|---|----------|---|---|---|----|
| TERM 3 | Electrotechnology<br>(240 hours) | UEENEEE004B<br>cont/d |   | Revision | Trial HSC |   | Revision |   |   |   |    |
|        |                                  | UEENEEK012B<br>cont/d |   |          |           |   |          |   |   |   |    |

**Example 2: Technical Support** (for school-based trainees only)

This scope and sequence is for the delivery of Electrotechnology (240 indicative hours) + Electrotechnology School-based Traineeship Specialisation (60 indicative hours) over two years.

The possible qualification outcome is:

- Certificate II in Technical Support (UEE21707).

*Please note: mandatory work placement requirements are met through the on-the-job training component of the school-based traineeship.*

**YEAR 11**

| Week   |                               | 1   | 2 | 3 | 4 | 5  | 6 | 7 | 8 | 9 | 10 |
|--------|-------------------------------|---|---|---|---|--|---|---|---|---|----|
| TERM 1 | Electrotechnology (240 hours) | Introduction to the course<br>UEENEEC010B<br>Deliver a service to customers (5)<br>UEENEEE001B<br>Apply OHS practices in the workplace (10)<br>UEENEEE048B<br>Carry out routine work activities in an electrotechnology environment (5) |   |   |   | UEENEEE022B<br>Carry out preparatory electrotechnology work activities (15)<br><br>UEENEEE007B<br>Use drawings, diagrams, schedules and manuals (10) |   |   |   |   |    |
|        |                               | <i>Assessment for RPL<br/>(refer to Part A syllabus – Section 8.4)</i>  |   |   |   |  |   |   |   |   |    |

| Week   |                               | 1  | 2 | 3 | 4   | 5 | 6 |  | 7 | 8 | 9 | 10 |
|--------|-------------------------------|--|---|---|---|---|---|--|---|---|---|----|
| TERM 2 | Electrotechnology (240 hours) | UEENEEE003B<br>Solve problems in extra-low voltage single path circuits (15) |   |   | UEENEEE038B<br>Participate in development and follow a personal competency development plan (5) |   |   | UEENEEE007B<br>Use drawings, diagrams, schedules and manuals (10)<br><br>UEENEEE048B<br>Carry out routine work activities in an electrotechnology environment (10) |   |   |   |    |
|        |                               |  |   |   |   |   |   |  |   |   |   |    |

| Week   |                               | 1  | 2 | 3   |  | 4        |  | 5           | 6   | 7 | 8 | 9 | 10 |
|--------|-------------------------------|--|---|---|--|----------|--|-------------|---|---|---|---|----|
| TERM 3 | Electrotechnology (240 hours) | UEENEEE007B cont/d<br>UEENEEE048B cont/d |   | UEENEEE001B<br>Apply OHS practices in the workplace (5)<br>UEENEEE002B<br>Dismantle, assemble and fabricate electrotechnology components (30)<br>UEENEEE05B<br>Fix and secure equipment (15)<br>UEENEEE007B<br>Use drawings, diagrams, schedules and manuals (5)<br>UEENEEE022B<br>Carry out preparatory electrotechnology work activities (15) |  | Revision |  | Yr 11 exams | UEENEEE001B cont/d<br>UEENEEE002B cont/d<br>UEENEEE005B cont/<br>UEENEEE007B cont/d<br>UEENEEE022B cont/d |   |   |   |    |
|        |                               |  |   |   |  |          |  |             |   |   |   |   |    |

| Week   |                               | 1   | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|-------------------------------|---|---|---|---|---|---|---|---|---|----|
| TERM 4 | Electrotechnology (240 hours) | UEENEEE001B cont/d<br>UEENEEE002B cont/d<br>UEENEEE005B cont/<br>UEENEEE007B cont/d<br>UEENEEE022B cont/d |   |   |   |   |   |   |   |   |    |
|        |                               |   |   |   |   |   |   |   |   |   |    |

**YEAR 12**

|        |   | Week  | 1 | 2 | 3 | 4 | 5 | 6 | 7        | 8             | 9 | 10 |
|--------|---|---|---|---|---|---|---|---|----------|---------------|---|----|
| TERM 1 | Electrotechnology<br>(240 hours)                      | UEENEEC010B<br>Deliver a service to customers (5)<br><br>UEENEEE038B<br>Participate in development and follow a personal competency development plan (5)<br><br>UEENEEE048B<br>Carry out routine work activities in an electrotechnology environment (10) |   |   |   |   |   |   | Revision | Year 12 Exams |   |    |
|        | Electrotechnology<br>SBT Specialisation<br>(60 hours) | UEENEEE037B<br>Document occupational hazards and risks in electrotechnology (15)<br><br>UEENEEG011B<br>Carry out basic repairs to electrical apparatus (40)   |   |   |   |   |   |   |          |               |   |    |

|        |   | Week   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------|---|--|---|---|---|---|---|---|---|---|---|----|
| TERM 2 | Electrotechnology<br>(240 hours)                      | UEENEEE003B<br>Solve problems in extra-low voltage single path circuits (15)<br><br>UEENEEE004B<br>Solve problems in multiple path d.c. circuits (35)<br><br>UEENEEE022B<br>Carry out preparatory electrotechnology work activities (10) |   |   |   |   |   |   |   |   |   |    |
|        | Electrotechnology<br>SBT Specialisation<br>(60 hours) | UEENEEE037B cont/d<br><br>UEENEEG011B cont/d   |   |   |   |   |   |   |   |   |   |    |

|        |                                  | Week  | 1 | 2        | 3         | 4 | 5        | 6 | 7 | 8 | 9 | 10 |
|--------|----------------------------------|---|---|----------|-----------|---|----------|---|---|---|---|----|
| TERM 3 | Electrotechnology<br>(240 hours) | UEENEEE003B<br>cont/d<br>UEENEEE004B<br>cont/d<br>UEENEEE022B<br>cont/d |   | Revision | Trial HSC |   | Revision |   |   |   |   |    |