

**National ID and Name of unit** 

## **Learning and Assessment Plan**

This learning and assessment plan outlines how this unit or cluster of units will be delivered and assessed. The schedule of learning topics, assessments and the due date for assessments is included.

Qualification national code and title:	E30820 Certificate III in Electrotechnology Electrician	
<b>Delivery Period:</b>		
Cluster Name (if applicable)	N/A	

UEEEL0020 - Solve problems in low voltage a.c. circuits					
You can access the	full unit/s of con	npetency here: https://training.gov.au/Ti	raining/Details/U	EEEL0020	
Delivery Location/s					
(Campus/Room/Or	nline):				
Student Learning I	Resources, tex	t, equipment (Required/Optional)			
Electrical Principles peter Phillips 5 <sup>th</sup> Edition					
Lecturer Name:	Phone:	Email:	Contact times	Campus / Room	

### **Assessment Summary**

Assessment	Title and brief description	Due Date
ASS1AKB	Part A Knowledge Assessment	
	Part A Portfolio of Evidence	
	Part A skills assessment	
	Part B Knowledge Assessment	
	Part B Portfolio of Evidence	
	Part B skills assessment	

You will receive more detailed instructions on each assessment from your lecturer.

The regular learning requirements to develop the skills and knowledge for this unit are outlined below. Please refer to your timetable for session times.

RTO Code 52786 CRICOS Code: 00020G

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## **Learning and Assessment Plan**

**Please note:** This plan is to be used as a guide and may be adapted to meet the needs of students. You will be notified of changes as they occur.

Your training will include <b>structured in and out of class activities*</b> to be completed for this unit.					
*Out of class activities may include(☑):					
<ul> <li>□ lectures or tutorials, online tasks and forums</li> <li>□ assessments (when integrated with learning)</li> <li>□ workplace experience</li> <li>□ prescribed reading and research</li> </ul>	<ul> <li>□ workshop activities</li> <li>□ projects, assignments</li> <li>□ prescribed follow-up activities</li> <li>□ other (please specify)</li> </ul>				

Sessions (Hours)		Element number	Topic	Learning Resources*	Structured out of class activities*	
Session	Hrs				Activity	Hrs
1	4		Introduction To AC Waveforms The Sinewave	Electrical Principles 5 <sup>th</sup> Edition Ch 15 Portfolio		
2	3		Sinewave values Phase Relationships Tip to Tail Phasor Diagrams	Electrical Principles 5 <sup>th</sup> Edition Ch 15 Portfolio		
3	4	1.1-1.7 2.1-2.5 2.8-2.9 3.1-3.4	Practical activity 1 CRO and resistor Practical Activity 2 Values of Waveform Practical activity 3 CRO and resistors	Electrical Principles 5 <sup>th</sup> Edition Ch 15 Portfolio		
4	3		Power in AC resistive circuits Capacitance in AC circuits Capacitive Reactance. Power in capacitive circuits	Electrical Principles 5 <sup>th</sup> Edition Ch 16 Portfolio		
5	4		Iductance Inductive reactance Power in a purely inductive AC circuit Series RL AC circuits	Electrical Principles 5 <sup>th</sup> Edition Ch 16 & 17 Portfolio		
6	3		Series RC AC circuits Series RLC AC circuits Series resonance.	Electrical Principles 5 <sup>th</sup> Edition Ch 17 Portfolio		
7	4	1.1-1.7 2.1-2.6 2.8-2.9 3.1-3.4	Practical-Inductor on AC Practical RLC series Circuit	Electrical Principles 5 <sup>th</sup> Edition Ch 17 Portfolio		
8	3		Introduction Parallel resistors and AC L and R in parallel	Electrical Principles 5 <sup>th</sup> Edition Ch 18 Portfolio		
9	4		R and C in Parallel R, L and C in Parallel Parallel Resonance	Electrical Principles 5 <sup>th</sup> Edition Ch 18 Portfolio		
10	3	1.1-1.7 2.1-2.9 3.1-3.4	Practical L and R in parallel Practical R, L and C in Parallel Practical Varying C in R, L and C in parallel	Electrical Principles 5 <sup>th</sup> Edition Ch 18 Portfolio		

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11	4	1.1-1.7 2.1-2.6 2.8-2.9 3.1-3.4	Part A Knowledge Assessment Part A Practical Assessment Hand In Portfolio Part A	Electrical Principles 5 <sup>th</sup> Edition Portfolio		
12	3		Introduction Power in reactive resistive circuits Power in any AC circuit	Electrical Principles 5 <sup>th</sup> Edition Ch 19 Portfolio		
13	4		Power factor correction Practical Power factor in a single fluorescent circuit	Electrical Principles 5 <sup>th</sup> Edition Ch 19 Portfolio		
14	3		Introduction Three phase power generation Three phase Loads	Electrical Principles 5 <sup>th</sup> Edition Ch 20 Portfolio		
15	4		Measuring three phase power	Electrical Principles 5 <sup>th</sup> Edition Ch 20 Portfolio		
16	3		Harmonics Faults in three phase power systems	Electrical Principles 5 <sup>th</sup> Edition Ch 20 Portfolio		
17	4		Practical three phase Star and Delta Circuits Practical - Out of Balance current in three phase circuit Practical 3 phase power measurement	Electrical Principles 5 <sup>th</sup> Edition Ch 20 Portfolio		
18	3		Part B Knowledge Assessment	Electrical Principles 5 <sup>th</sup> Edition Portfolio		
19	4		Part B Practical Assessment	Electrical Principles 5 <sup>th</sup> Edition Portfolio		
20	3		RESITS for NYC			
Total Hours	70				Total hours out of class activities	
Total amount	t of tr	aining fo	r this unit			



## **Learning and Assessment Plan**

#### Recognition of Prior Learning (RPL) / Credit

You may be eligible for Recognition of Prior Learning (RPL) / Credit towards your studies If you have relevant existing skills, knowledge, or formal qualifications. Please discuss available options with your lecturer.

#### **Reasonable Adjustment**

We recognise that every student has different learning styles and needs. Please let your lecturer know if there is anything that may have an effect on your learning so they may be able to adjust your plan.

#### **Results and Appeals**

Students may lodge an appeal against an academic result. Appeals must be lodged within four weeks from notification of the assessment result. Please see details under Academic Appeals on the NMT website.

#### **Absences**

If you are unable to attend any class or assessment session you must inform your lecturer as soon as possible.

If you miss an assessment due to illness, please provide your lecturer with a medical certificate in order to negotiate an alternate time for the assessment.

#### **Plagiarism**

Plagiarism is using another person's ideas and words without clearly acknowledging the source of the information. It is not acceptable to submit an assessment that is based on another person's work and claim it as your own. If you submit an assessment that is significantly or recognizably the same or similar in content as submitted by another student (current or past) you may have to submit another assessment.

#### **Assessment Resit/Resubmission**

You shall be permitted to have at least two attempts to demonstrate competency against a unit of competency or cluster of units of competency.

To qualify for re-assessment:

- you must have made a reasonable attempt to complete the assessment satisfactorily AND
- you must have submitted the original assessment by the due date OR
- you must have attended and participated in the original assessment event

In the case of a re-assessment opportunity, your lecturer will give you a due date for your second attempt. Should you not achieve a Satisfactory result on the second attempt, you will need to re-enrol (R) in the unit.

In certain situations, a re-assessment is not possible; please refer to your assessment instructions.

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