



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:	UEE30820 Certificate III in Electrotechnology
Delivery Period:	1st Semester

National ID	Name of unit
UEEEL0024 UEEEL0025	Test and connect alternating current (a.c.) rotating machines Test and connect transformers
Delivery Location/s (Campus/Room):	Balga Campus – Electrical classroom Q block

Student Learning Resources, text, equipment (Required)				
Student to supply: PPE (Safety glasses, safety boots), writing materials, calculator & danger tag, AS/NZS 3000:2007& AS/NZS 3008.1.1:2009.				
College to supply: UEEEL0024/UEEEL0025 Resource Books				
Lecturer Name:	Phone:	Email:	Contact times	Campus / Room
Tim Highfield	0430 122 478	Tim.highfield@nmtafe.wa.edu.au	08.00 – 15.45	E010

Assessment Summary

Assessment	Title	Due Date
Part A – Portfolio	Part A – Transformers Portfolio	TBA
Part A – Knowledge	Part A – Transformers Written - Knowledge	TBA
Part A – Skill	Part A – Transformers Skill - Practical	TBA
Part B – Portfolio	Part B – Rotating Machines Portfolio	TBA
Part B – Knowledge	Part B – Rotating Machines Written - Knowledge	TBA
Part B – Skill	Part B – Rotating Machines Skill - Practical	TBA

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.

Please note: This program 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.

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Your training will include **structured in and out of class activities*** to be completed for this unit.

**Out of class activities* may include (☑):

- | | |
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| <input checked="" type="checkbox"/> lectures or tutorials, online tasks and forums
<input checked="" type="checkbox"/> assessments (when integrated with learning)
<input type="checkbox"/> workplace experience
<input checked="" type="checkbox"/> prescribed reading and research | <input checked="" type="checkbox"/> workshop activities
<input checked="" type="checkbox"/> portfolios
<input checked="" type="checkbox"/> prescribed follow-up activities
<input checked="" type="checkbox"/> on-the-job profiling (Q Tracker) |
|---|--|

SESSIONS (Hours)		TOPIC (incl. Elements addressed)	RESOURCES to be supplied by student (if required)	Structured out of class activities*	
Day/ Session	Hrs			Activity	Hrs
Day 1	1	1	Introduction to CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION- Discuss unit requirements	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book	
	2	6	Preparing to test and connect transformers – single phase transformers 1. Discuss WHS/OHS requirements/workplace procedures 2. Identify hazards, assess risk - control measures/procedures implemented 3. Obtain transformer problems – documentation/service manual, work supervisor 4. Seek advice – co-ordinate work effectively 5. Obtain/identify necessary tools, equipment, testing devices	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes 10
Day 2	3	3	Revision/discussion of element 1. Solving problems in specialised transformers: 1. Continue WHS/OHS risk control measures/workplace procedures as above 2. Determine need to test/measure live work – all WHS/OHS safety compliant 3. Check – circuits, machines/plant: isolate, as required: WHS/OHS requirements	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag.	Update Ready Skills and complete worksheet quizzes 5
	4	4	Continue with problem solving in specialised transformers: 1. Calculate and measure values 2. Verify electrically safe/connected to supply: accordance with industry standards/procedures 3. Resolve problems – no damage to circuits/ surrounding environment or services - use sustainable energy practices	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes 10



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Day 3	5	7	Revision of elements 1 & 2 – then 3-phase: Prepare to test and connect transformers – three-phase transformers – as above day 1 and 2	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes	10
Day 4	6	3	Complete revision of single and 3-phase transformers	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes	10
	7	4	Complete work and document activities 1. WHS/OHS risk control measure – completed/followed 2. Clean worksite – make safe: workplace procedures 3. Justify solutions – solving machine problems: document all in accordance with procedures 4. Complete all documentation 5. Notify appropriate personnel	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator.		
Day 5	8	4	PART A - Observed Practical Assessment - KS01-EG006A Single & three phase transformers	Part A- Transformer Portfolio Due		
	9	3	PART A - Finalising portfolio of evidence PART A – Knowledge Assessment	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes	10
Day 6	10	4	Preparing to test and connect a.c. rotating machines – 3-phase 1. Discuss WHS/OHS requirements/workplace procedures 2. Identify hazards, assess risk - control measures/procedures implemented 3. Obtain transformer problems – documentation/service manual, work supervisor 4. Seek advice – co-ordinate work effectively 5. Obtain/identify necessary tools, equipment, testing devices	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes	10
	11	3	Revision/discussion of element 1. Testing/solving problems and connecting - Three-phase rotating machines: 1. Continue WHS/OHS risk control measures/workplace procedures as above 2. Determine need to test/measure live work – all WHS/OHS safety compliant Check – circuits, machines/plant: isolate, as required: WHS/OHS requirements			



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Day 7	12	4	<p>Revision/discussion of element 1.</p> <p>Continue testing/connecting a.c. rotating machines – 3-phase</p> <ol style="list-style-type: none"> Continue WHS/OHS risk control measures/workplace procedures as above Determine need to test/measure live work – all WHS/OHS safety compliant Check – circuits, machines/plant: isolate, as required: WHS/OHS requirements 	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag		10
	13	3	<p>Synchronous and asynchronous machines</p> <ol style="list-style-type: none"> Testing/ connecting – information flow Discussion/revision 			
Day 8	14	4	<p>Continue with a.c. single phase rotating machines</p> <ol style="list-style-type: none"> Calculate and measure values Verify electrically safe/connected to supply: accordance with industry standards/procedures Resolve problems – no damage to circuits/ surrounding environment or services - use sustainable energy practices 	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag	Update Ready Skills and complete worksheet quizzes	10
	15	3	<p>Revision of elements 1 & 2 – then single phase a.c. rotating machines:-</p> <p>Prepare to test and connect transformers – three-phase transformers – as above day 1 and 2</p>	CENGAGE ELECTRICAL PRINCIPLES, 5TH EDITION Resource Book Writing materials & Calculator. PPE & Danger Tag		5
Day 9	16	4	<p>Complete revision of single and 3-phase a.c. rotating machines</p> <p>Complete work and document activities</p> <ol style="list-style-type: none"> WHS/OHS risk control measure – completed/followed Clean worksite – make safe: workplace procedures Justify solutions – solving machine problems: document all in accordance with procedures Complete all documentation Notify appropriate personnel 			
	17	3	<p>REVISION ALL IN PREPARATION FOR ASSESSMENTS</p>			



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Day 10	3	PART B - Observed Practical Assessment -	
	3	PART B - Finalising portfolio of evidence	
	1	PART B – Knowledge Assessment	
Total Hours	70		Total hours out of class activities 90
Total amount of training for this unit: 64 hours of training & 8 hours of assessments			160

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 of the date of your statement of academic record being issued. Please contact the Student Experience Team relevant to your portfolio area.

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 may qualify for (1) re-assessment per each assessment event when:

- you have made a reasonable attempt to complete the assessment satisfactorily
AND
- you have submitted the original assessment by the due date
OR
- you 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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