

Courses in electrical Engineering & electrical trades

IQY Technical College Australia offers 3 Advanced Diplomas in Electrical Engineering, which are:

- UEE62220, the Advanced Diploma of Electrical Engineering, enabling motivated electricians to advance to design and management roles in the areas of power, industrial control, and/or gain entry to university with up to 12 months advanced standing.
- UEE62122, the Advanced Diploma of Engineering Technology – Electrical, enabling motivated persons with high school education, to advance to design and management roles in the areas of power, industrial control, motors, and/or gain entry to university with up to 18 months advanced standing.
- UET60222, the Advanced Diploma of ESI to enable the electricians to upgrade Level 2 and 3 Electricians in NSW to work on service provider's line and designing the power supply system.
- UEE30820 Certificate III in Electrotechnology-Electrician , This qualification provides individuals with the skills and knowledge to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in buildings and premises. It includes Electrical Regulatory Authority Council (ERAC), or their successor's, Essential Performance Capabilities for an 'Unrestricted Electrician's license'.
- NAT11297 Minimum Australian Context Gap, This course provides Minimum Australian Context Gap training to holders of an Offshore Technical Skills Record (OTSR) for the UEE30820 Certificate III in Electrotechnology Electrician (or successor). The MACG course has a nominal 12 months (full time equivalent) on-the-job work performance requirement and an off-the-job component that must be successfully met to complete the award 11297NAT.
Note: The MACG course is achieved through competency-based training, where some candidates may progress through both the on and/or off the job components quicker than others. By way of example, where a candidate works consistently long hours per week (in excess of 40hours) or 6 days per week they would be able to meet the on-the-job benchmarks and component of the course quicker than someone working 40 hours per week, 5 days per week.

Competency development activities in this qualification are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, a relevant contract of training through an Australian Apprenticeship, may be required. To obtain an Unrestricted Electrician's Licence in most jurisdictions the qualification must be completed as an apprenticeship or Trades Recognition Australia (TRA) pathway. Where required for Licensing, the certification documentation issued must indicate if the qualification was completed as an apprenticeship or Trades Recognition Australia (TRA) pathway.

These courses are available full and part time, and are costed on the basis of the units you need to do to complete the course, rather than what's in the course.

If you are entitled to Advanced Standing for some units, it is important you make this known to a teacher so that a fee recalculation can be done.

All the above Advanced Diploma qualifications will:

- give you the opportunity to progress in a variety of sectors, depending on which qualification you undertake
- enable entry to university

- gain advanced standing in 4 year electrical engineering degree as per RPL policy of the relevant faculty of the university.
- be recognised at Engineering Officer level by Engineers Australia

If I can assist you further, feel free to contact IQY Technical College





UEE 30820
Certificate III in
Electrotechnology-
Electrician

Presented by U Kyaw Naing
NSW Electrician Licence
NSW Professional Engineer Electrical



Learning Resources Course Developer

This qualification provides individuals with the skills and knowledge to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in buildings and premises. It includes Electrical Regulatory Authority Council (ERAC), or their successor's, Essential Performance Capabilities for an 'Unrestricted Electrician's license'.

WHAT WILL YOU LEARN

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OCCUPATIONAL HEALTH AND SAFETY

OHS RISK ASSESSMENT

CPR

LIVE RESCUE


WHS IN AUSTRALIA

- Australian WHS legislation, codes of practice and duty holders
- Workers' compensation
- Australian standards
- Safety leadership and culture
- Health & safety profession





SAFE MANUAL HANDLING



CHEMICAL HAZARDS

CHEMICAL SAFETY



WORKING AT HEIGHT SAFETY

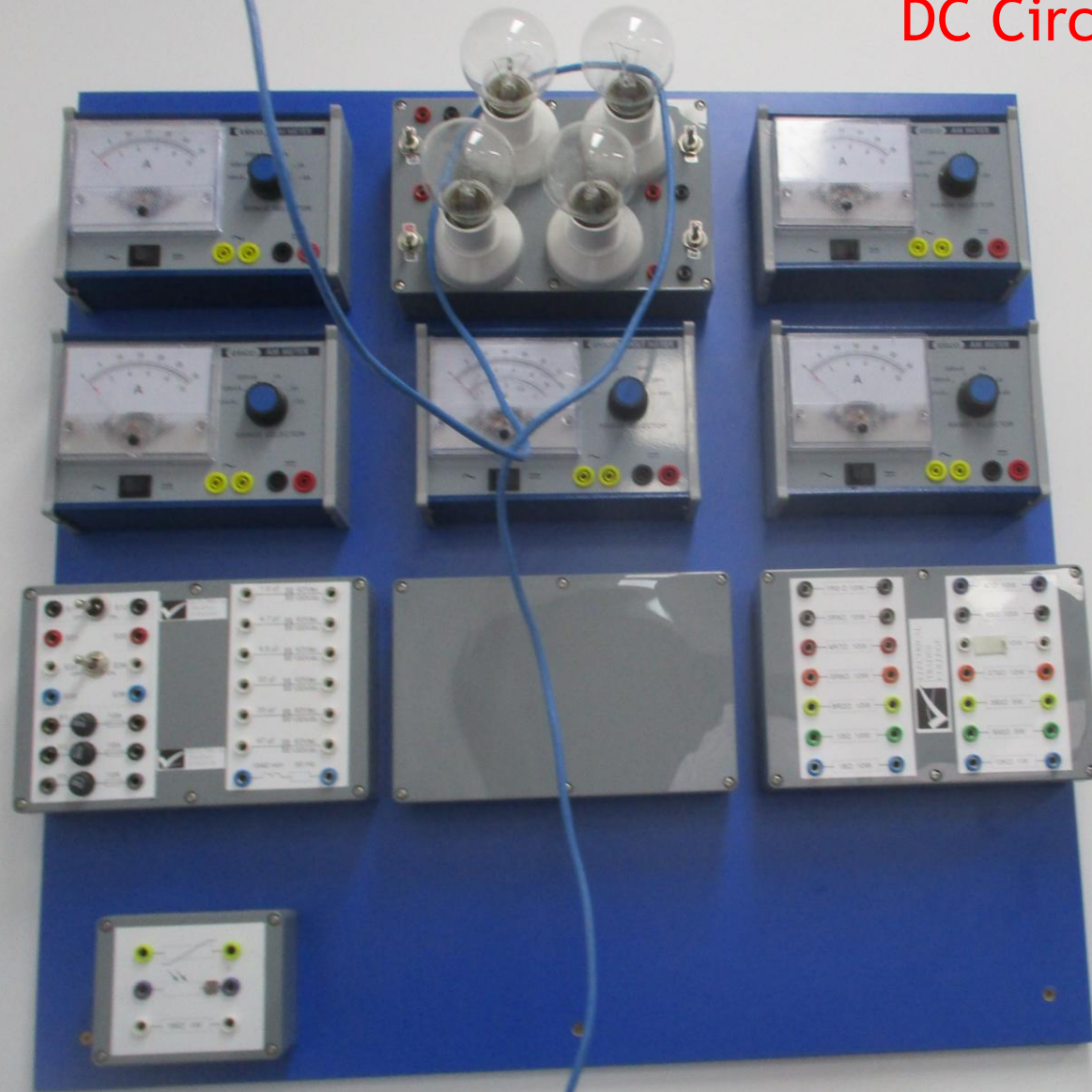


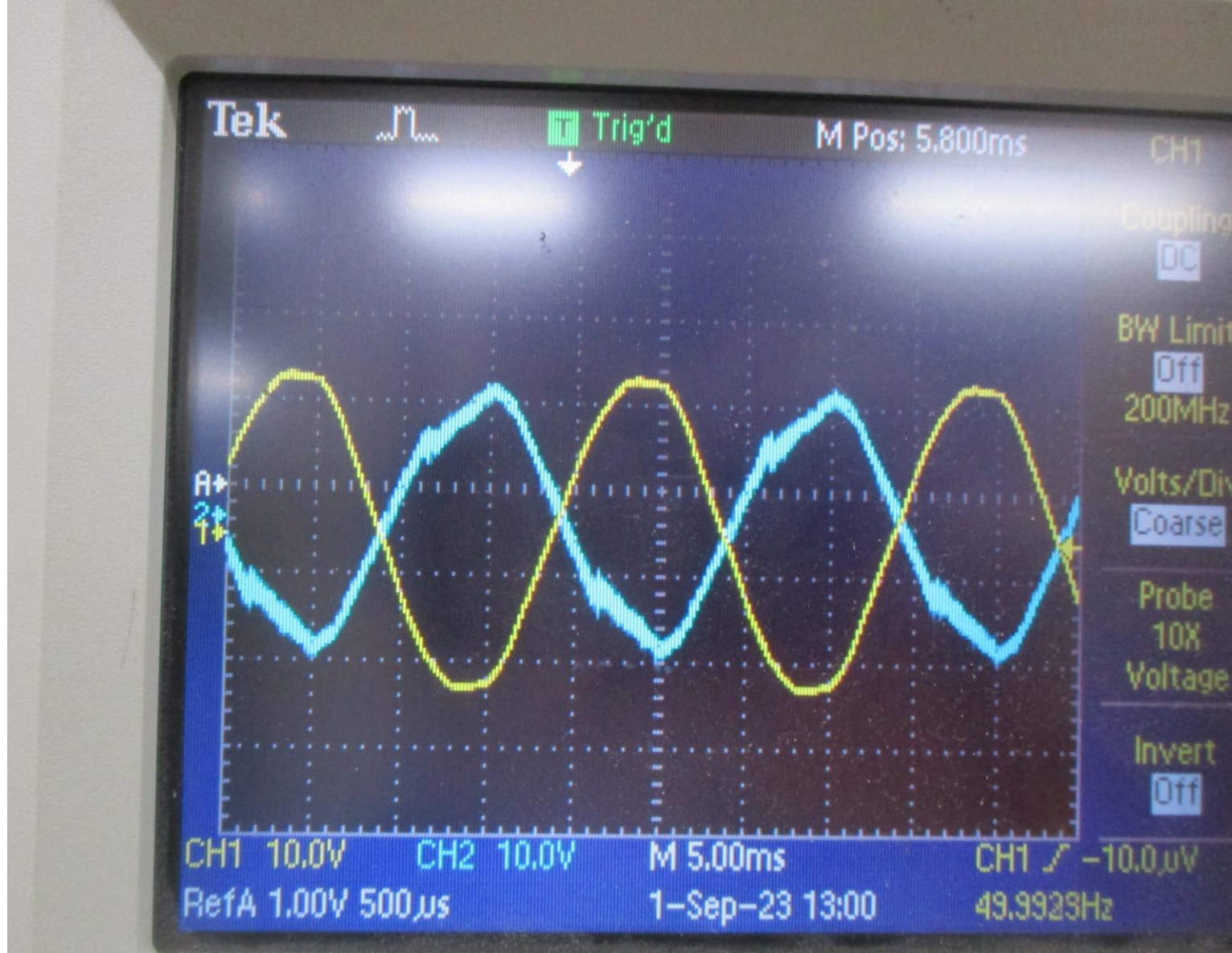
CONFINED SPACE SAFETY

ELECTRICAL PRINCIPLE

- DC PRINCIPLE
- AC PRINCIPLE
- MAGNETISM

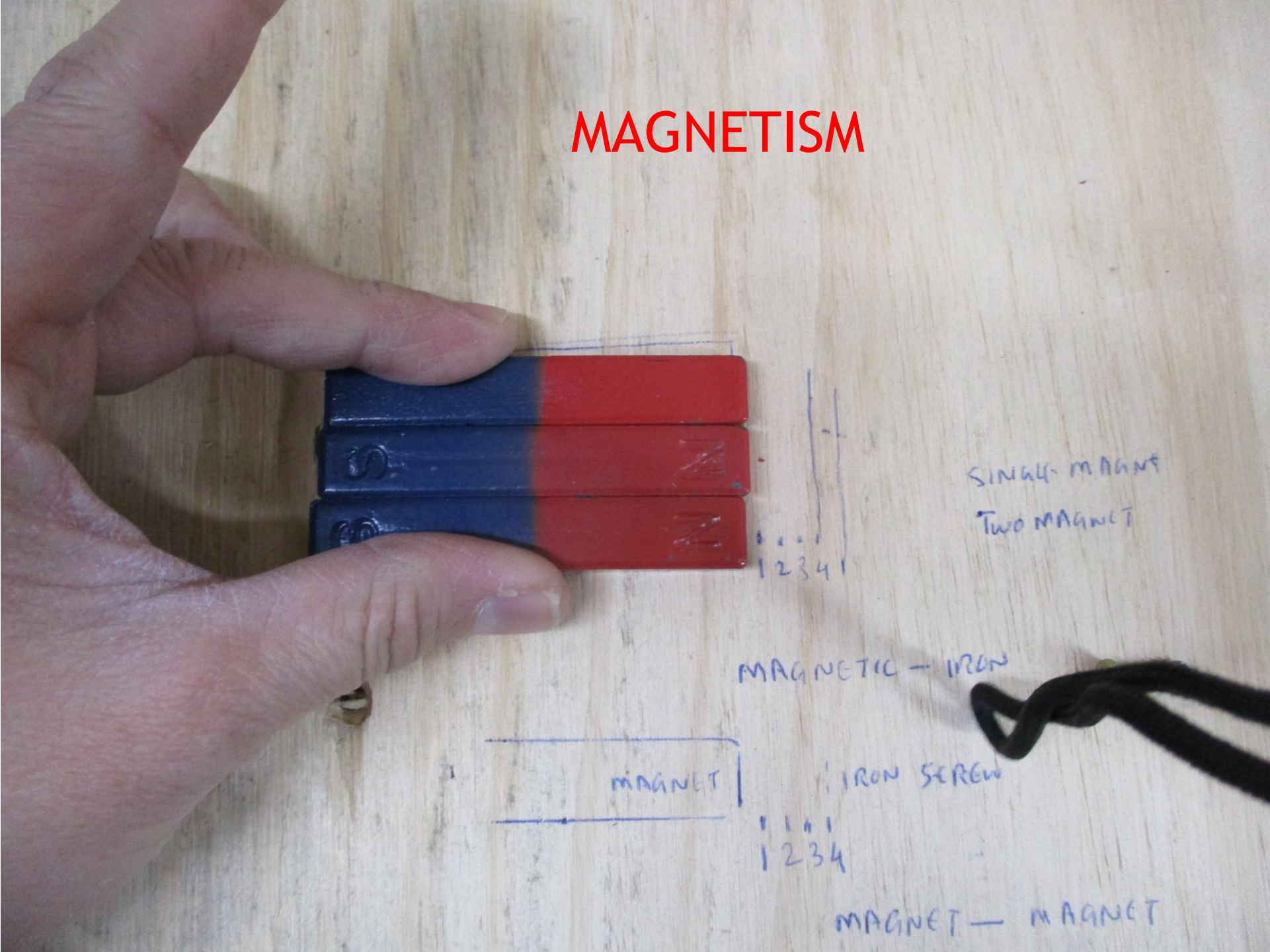
DC Circuits





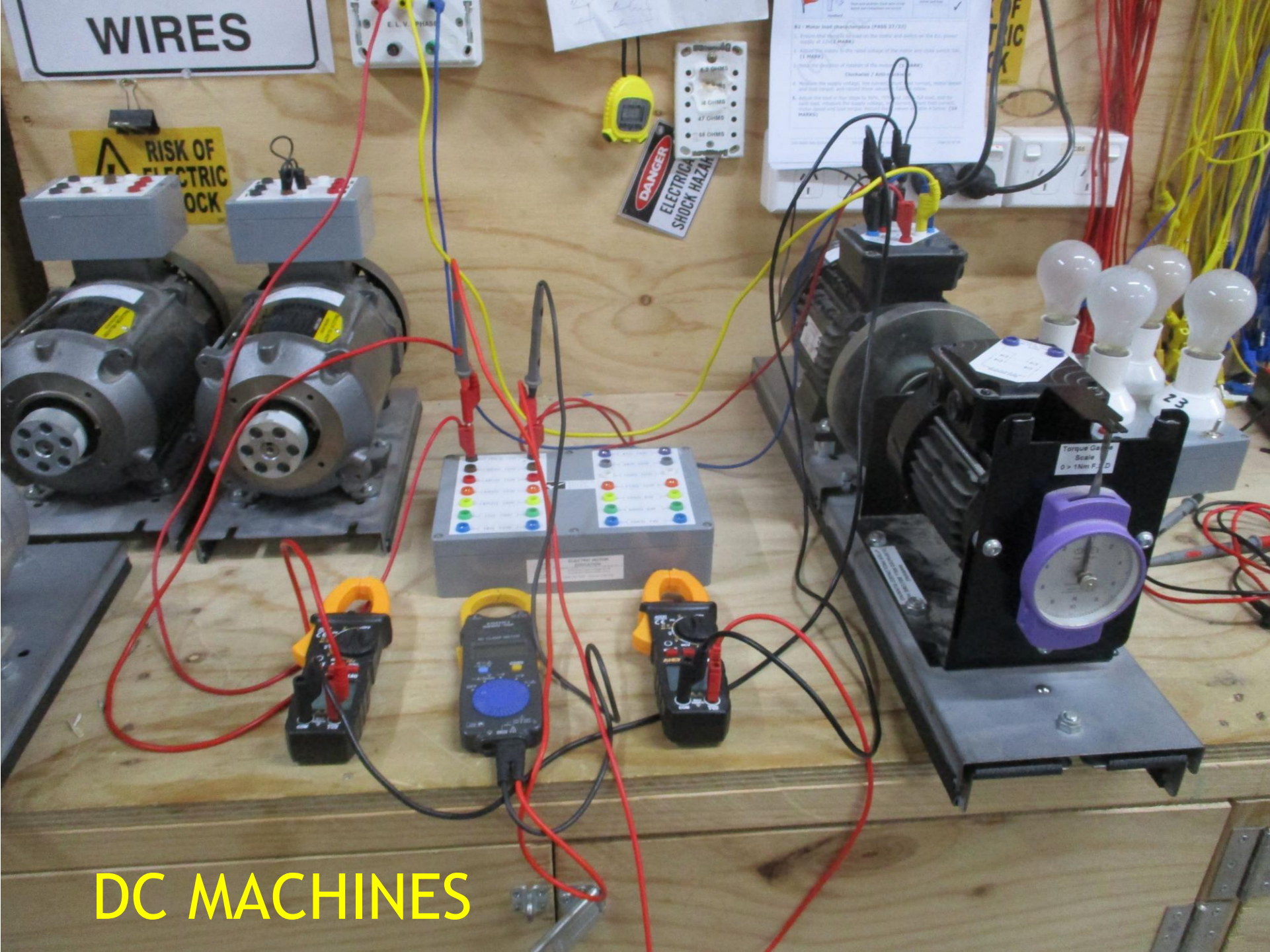
AC PRINCIPLE

MAGNETISM

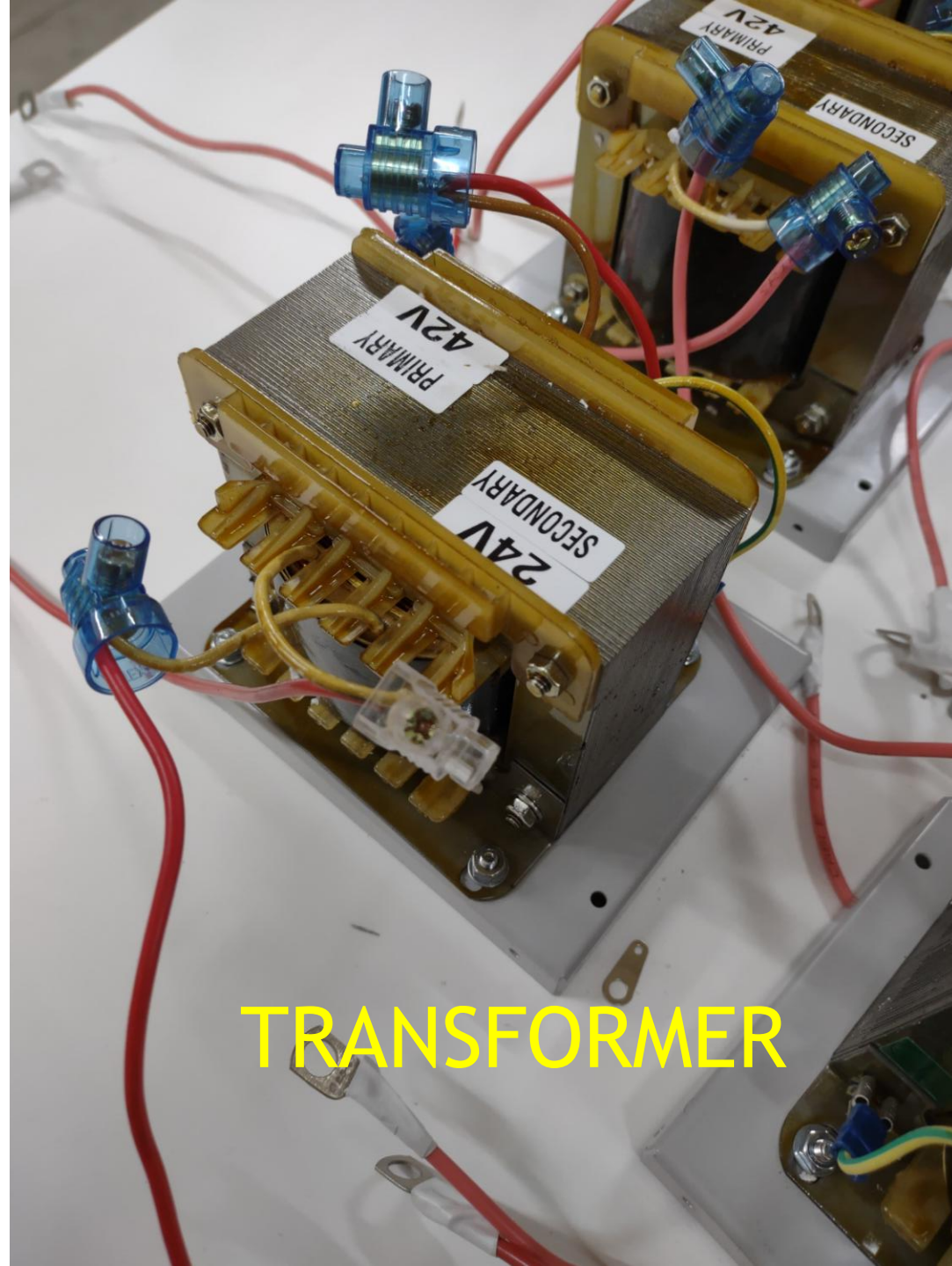


ELECTRICAL MACHINES

- DC MACHINES
- AC ROTATING MACHINE
- TRANSFORMER
- CONTROL



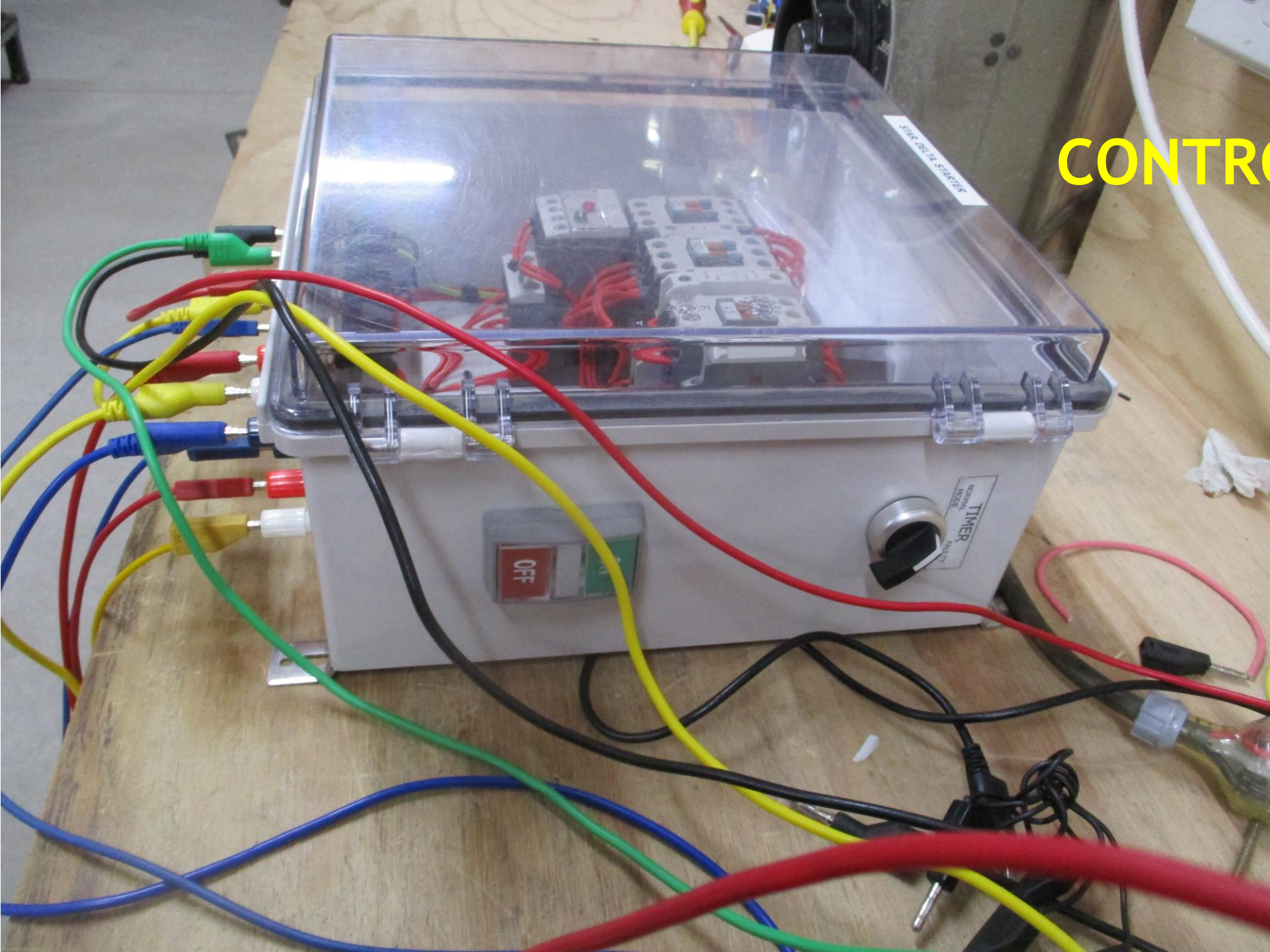
DC MACHINES



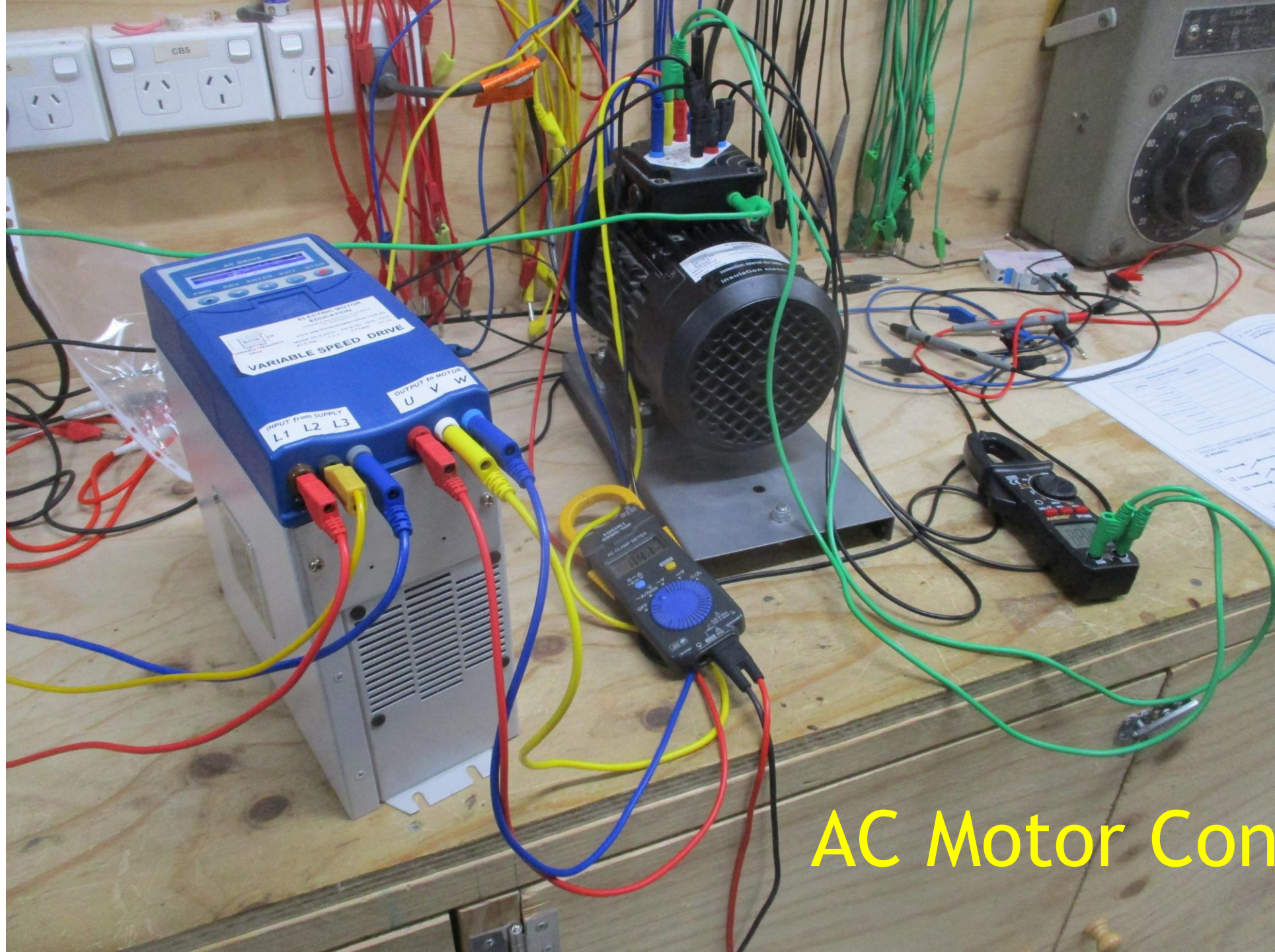
TRANSFORMER

AC MACHINES

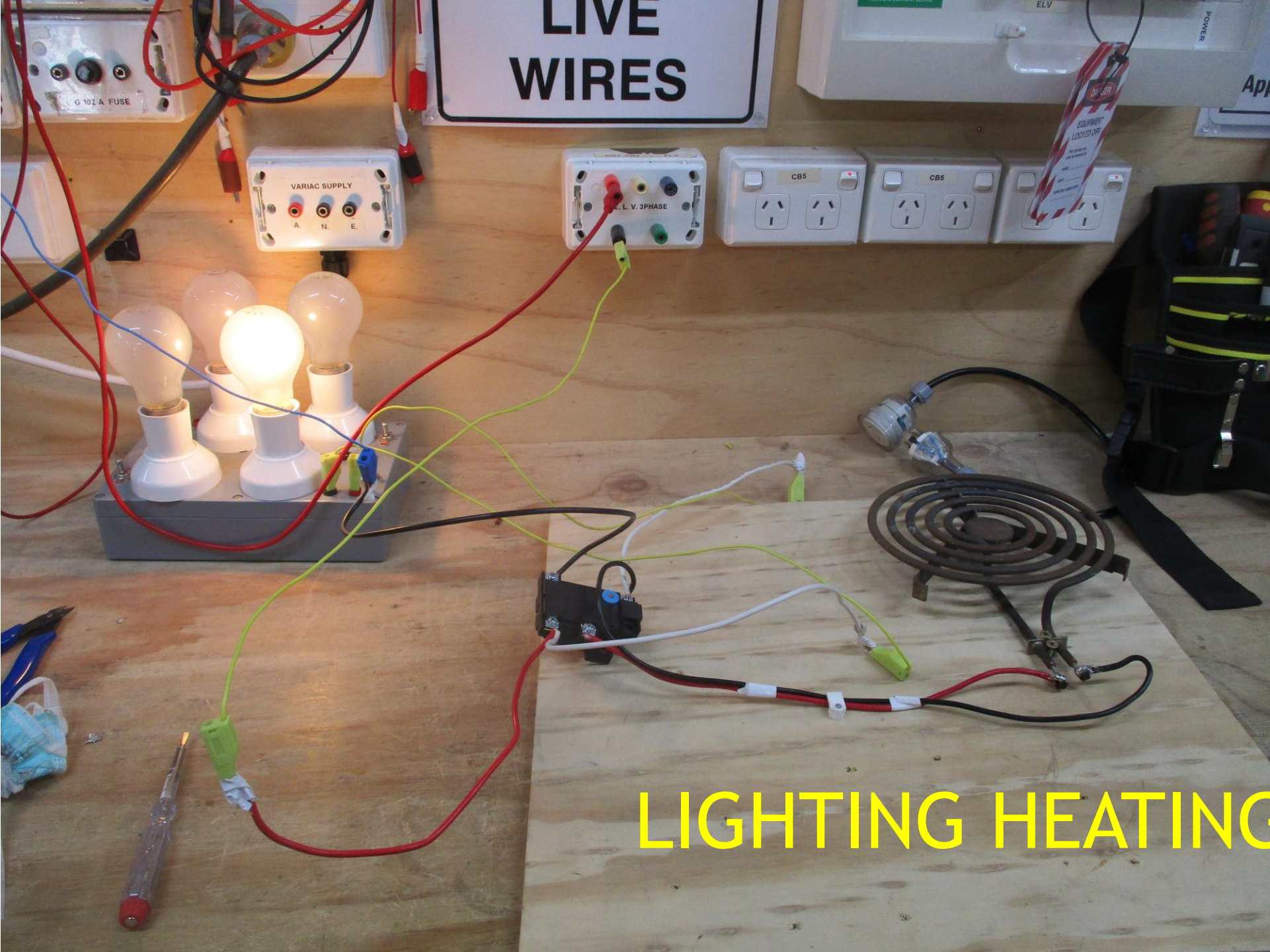




CONTROL



AC Motor Control

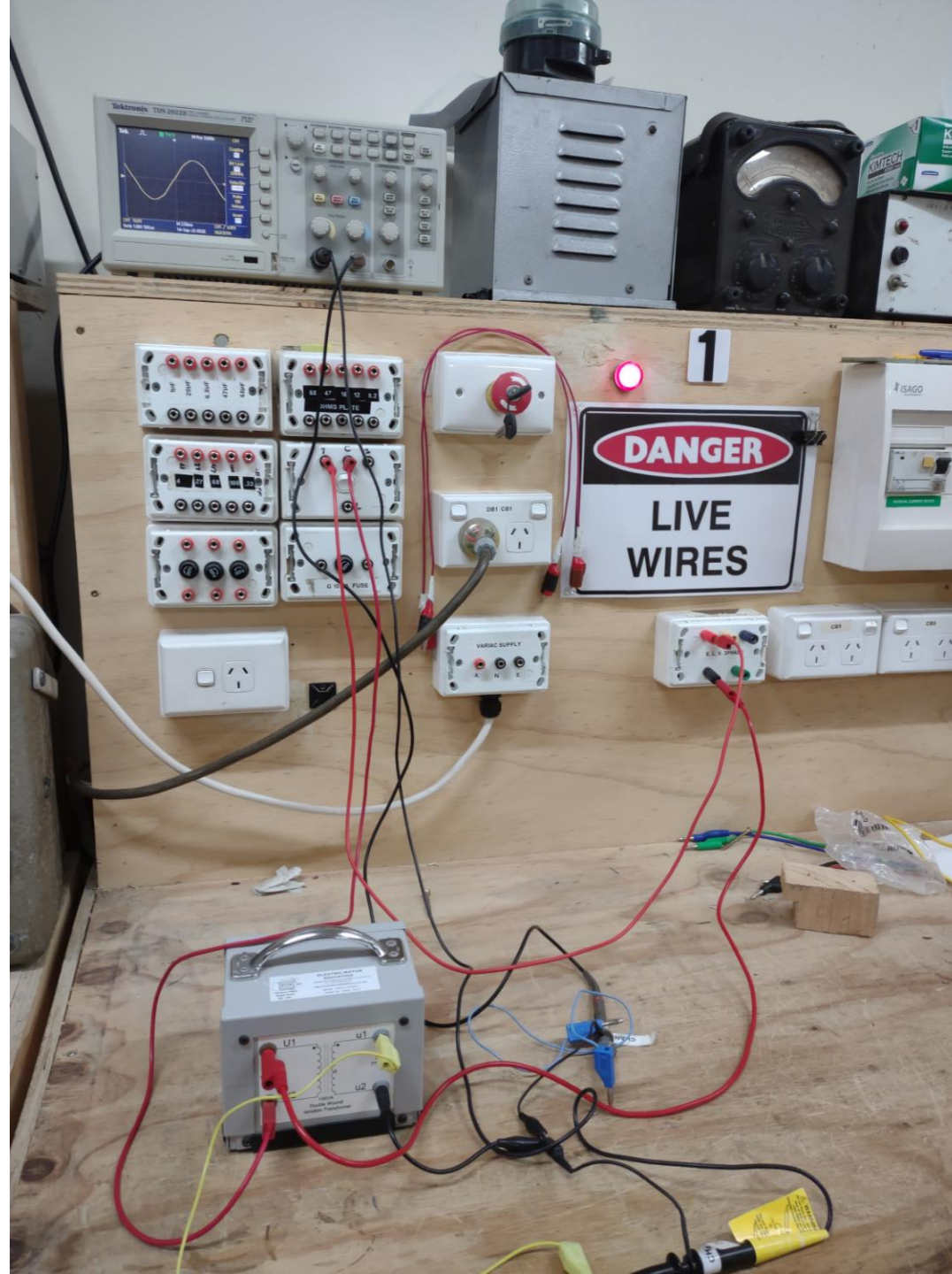


LIGHTING HEATING



LIGHTING

TRANSFORMER

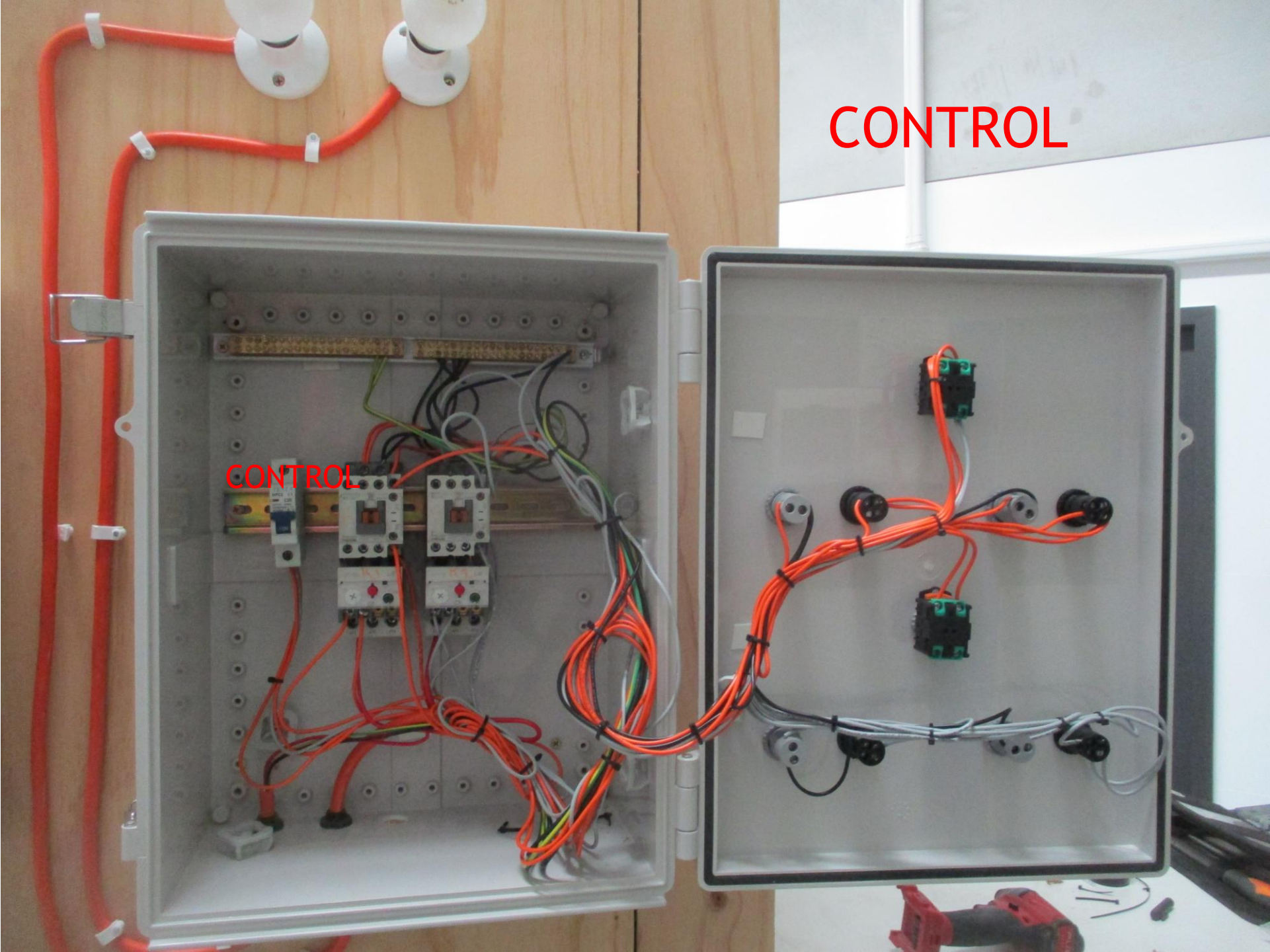


CONTROL



CONTROL

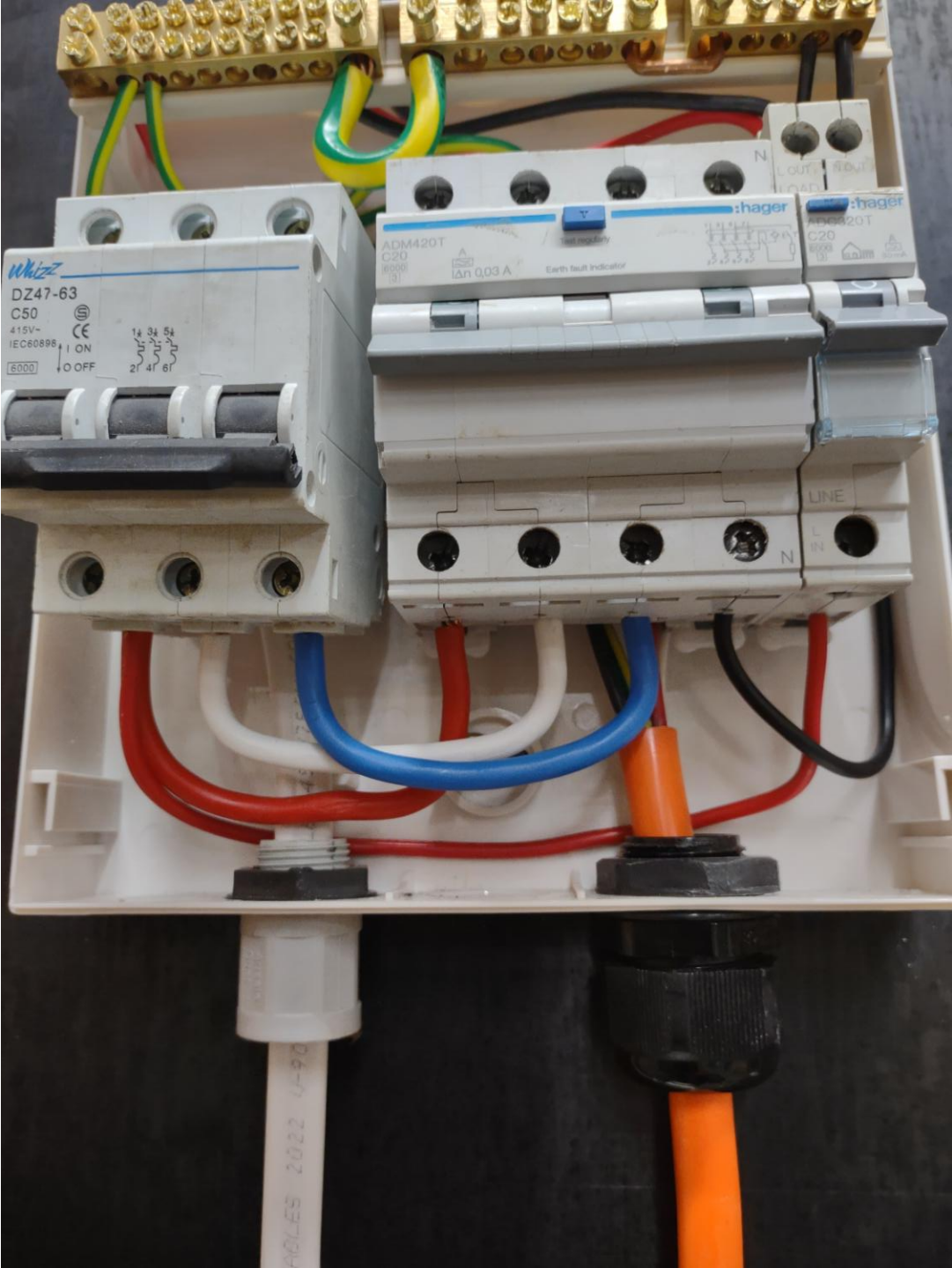
CONTROL



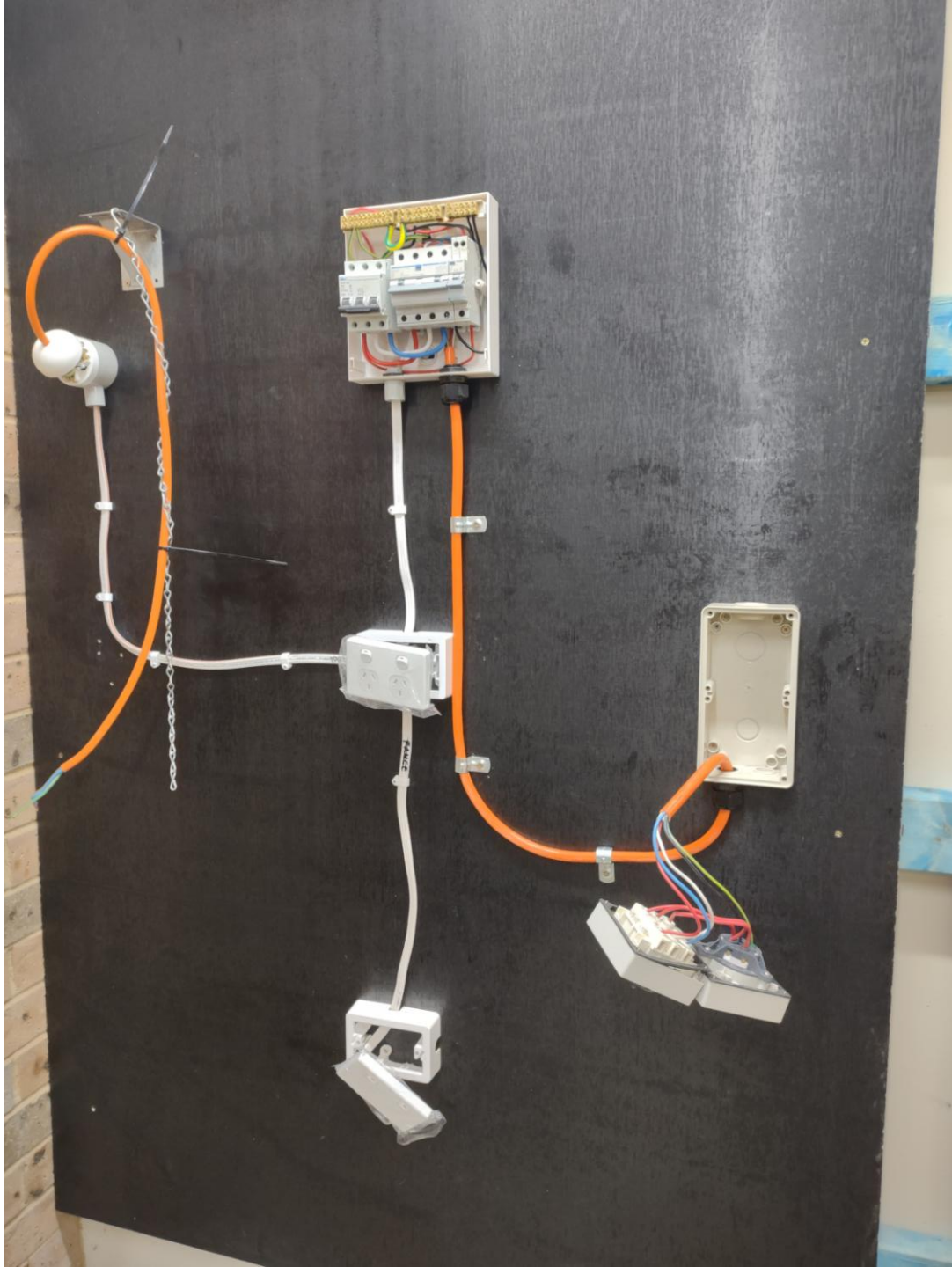
WIRING & PROTECTION

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SWITCHBOARD WIRING



**RESIDENTIAL &
COMMERCIAL WIRING**



RESIDENTIAL & COMMERCIAL WIRING



ELECTRICAL INSTALLATIONS



ELECTRICAL INSTALLATIONS



ELECTRICAL INSTALLATIONS



WORKSHOP

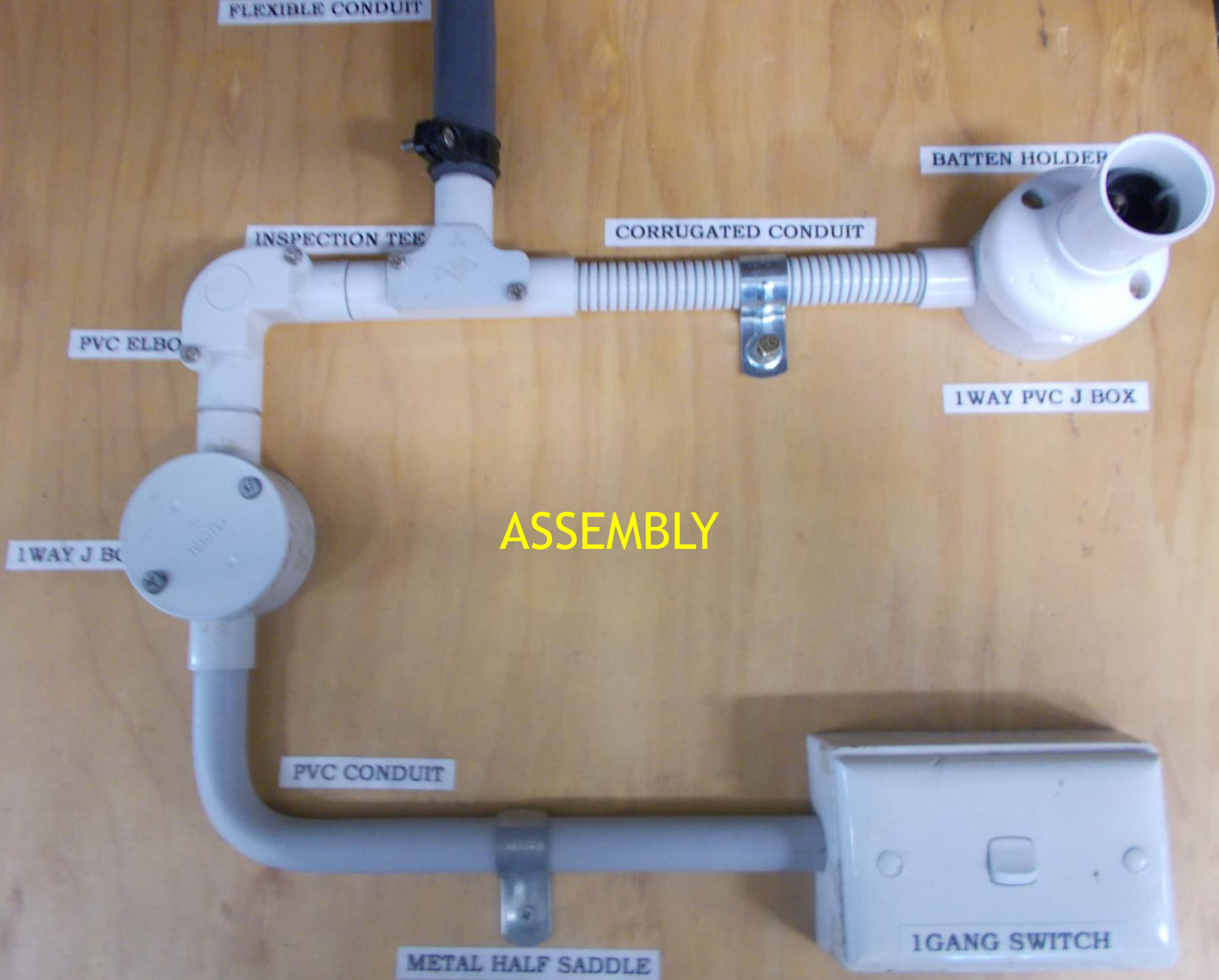
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FITTING





FITTING & MACHINING



ASSEMBLY



ASSEMBLY

CAPSTONE TEST

UEEEL0039

**COMPLETE CERTIFICATE III
IN ELECTROTECHNOLOGY
ELECTRICIAN**

- **WORK EXPERIENCE**
- **E PROFILING RECORD**

**APPLY FOR CERTIFICATE OF PROFICIENCY
FROM NSW VOCATIONAL TRAINING REVIEW
PANEL**

TRA ASSESSMENT FOR SKILLED VISA

OR

**CONTINUE TO ATTEND
UEE62122 ADVANCED DIPLOMA IN
ENGINEERING TECHNOLOGY
TO CONTINUE THE STUDY AT UNIVERSITY**

END

UEE30820 Certificate III in Electrotechnology Electrician Course Guide

COURSE DESCRIPTION

This is a course targeted for a specific cohort of participants.

It is designed for new entrants wanting to get qualified and become an electrician. The person is expected and required to be working in electrical trades workplace and it is expected that the person will be working under the supervision of a qualified electrician.

The model is similar to an apprenticeship but the worker is not signed up by their employer on an apprenticeship contract.

COURSE OUTLINE

This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in building and premises. It includes ERAC requirements for an 'Electrician's license'.

Successful graduates get the nationally recognised UEE30820 Certification III in Electrotechnology Electrician. Most graduates complete this course as a pathway to applying for an electrician license. Having this qualification is one of the essential requirements set by Fair Trading NSW.

Students who complete the UEE30820 Certificate III in Electrotechnology Electrician may work in a range of business settings supplying electrical trades "knowhow" into factories, commercial environments of the household market.

The opportunities are very broad Some successful graduates can enhance their career path and look to do UEE40620 Certificate IV in Electrotechnology – Systems Electrician

APPLICATION INTERVIEWS

When we have confirmed you meet the selection criteria the next step is the selection interview and enrolment process.

What happens if you have met criteria

We will interview you to validate your original documents you completed on the self-check survey. Recognition of Prior Learning and credit transfer are also discussed at this point.

Where you meet all criteria, the next stage is enrolment.

Course Units

Unit Code	Unit of Competency Title
	27 x Core Units
1	UEECO0023 Participate in electrical work and competency development activities
2	HLTAID009 Provide cardiopulmonary resuscitation

3	UETDRMP007	Perform rescue from a live LV panel
4	UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
5	UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology w
6	UEECD0019	Fabricate, assemble and dismantle utilities industry components
7	UEECD0020	Fix and secure electrotechnology equipment
8	UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications
9	UEERE0001	Apply environmentally and sustainable procedures in the energy sector
10	UEECD0046	Solve problems in single path circuits
11	UEECD0044	Solve problems in multiple path circuits
12	UEEEL0019	Solve problems in direct current (d.c.) machines
13	UEEEL0021	Solve problems in magnetic and electromagnetic devices
14	UEEEL0020	Solve problems in low voltage a.c. circuits
15	UEEEL0023	Terminate cables, cords and accessories for low voltage circuits
16	UEEEL0024	Test and connect alternating current (a.c.) rotating machines
17	UEEEL0025	Test and connect transformers
18	UEEEL0003	Arrange circuits, control and protection for electrical installations
19	UEEEL0047	Identify, shut down and restart systems with alternate supplies
20	UEEEL0012	Install low voltage wiring, appliances, switchgear and associated accessories

21	UEEEL0014	Isolate, test and troubleshoot low voltage electrical circuits
22	UEEEL0018	Select wiring systems and select cables for low voltage electrical installations
23	UEEEL0005	Develop and connect electrical control circuits
24	UEEEL0008	Evaluate and modify low voltage heating equipment and controls
25	UEEEL0009	Evaluate and modify low voltage lighting circuits, equipment and controls
26	UEEEL0010	Evaluate and modify low voltage socket outlets circuits
27	UEEEL0039	Design, install and verify compliance and functionality of general electrical installations

5 x Electives Units

1	UEEDV0005 (80 points)	Install and maintain cabling for multiple access to telecommunication services
2	UEEDV0008 (40 points)	Install, modify and verify coaxial and structured communication copper cabling
3	ICTICT203 (20 points)	Operate application software packages
4	UEECO0017 (20 points)	Source and purchase material/parts for installation or service jobs
5	UEEAS0007 (40 points)	Assemble, mount and connect control gear and switchgear

Term 1		
1	HLTAID009	Provide Cardiopulmonary Resuscitation* (delivered together with HLTAID011 and HLTAID012) Healthcare Lab in AHSI
2	UEECD0007 (prerequisite)	Apply work health and safety regulations, codes and practices in the workplace

3	UEECO0023 (prerequisite)	Participate in electrical work and competency development activities
4	UEERE0001 (prerequisite)	Apply environmentally and sustainable procedures in the energy sector
5	UEECD0016	Document and apply measures to control WHS risks associated with electrotechnology work
6	UETDRRF004	Perform rescue from a live LV panel
Holiday break		
Term 2		
7	UEECD0019	Fabricate, assemble and dismantle utilities industry components
8	UEECD0020	Fix and secure electrotechnology equipment
9	UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications
Holiday break		
Term 3		
10	UEECD0046	Solve problems in single path circuits
11	UEECD0044	Solve problems in multiple path circuits
Holiday break		
Term 4		
12	UEEEL0008	Evaluate and modify low voltage heating equipment and controls
13	UEEEL0009	Evaluate and modify low voltage lighting circuits, equipment and controls

14	UEEEL0010	Evaluate and modify low voltage socket outlets circuits
15	UEEEL0023	Terminate cables, cords and accessories for low voltage circuits
Holiday break		
Term 5		
16	UEEEL0021	Solve problems in magnetic and electromagnetic devices
17	UEEEL0019	Solve problems in direct current (d.c.) machines
Holiday break		
Term 6		
18	UEEEL0020	Solve problems in low voltage (a.c.) circuits
Holiday break		
Term 7		
19	UEEEL0014	Isolate, test and troubleshoot how voltage electrical circuits
20	UEEEL0012	Install low voltage wiring, appliances, switchgear and associated accessories
Holiday break		
Term 8		
21	UEEEL0018	Select wiring systems and select cables for low voltage electrical installations
22	UEEEL0003	Arrange circuits, control and protection for electrical installations
Holiday break		
Term 9		
23	UEEEL0024	Test and connect alternating current(a.c.) rotating machines
24	UEEEL0025	Test and connect transformers
25	UEEEL0005	Develop and connect electrical control circuits
Holiday break		
Term 10		
26	UEEEL0047	Identify, shutdown and restart systems with alternate supplies
27	UEEEL0046	Find and repair faults in LV (d.c.) electrical apparatus and circuits

28	UEEEL0069	Select and arrange equipment for special LV electrical installations
29	UEEEL0039	Design, install and verify compliance and functionality of general electrical installations
Holiday break		
Term 10		
27	UEEDV0005	Install and maintain cabling for multiple access to telecommunication services
28	UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling
29	UEEEL0039	Design, install and verify compliance and functionality of general electrical installations

Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.

Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an IQY Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.

Self-paced online learning: In your own time average 5 hours per week

You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the IQY Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time.

You will also use this IQY Moodle to log your work performance on the job.

Work performance: On the job captured in e-Log books

As this course is a trade course for electrician licence
, e-Profiling is needed.

UEE62122 Advanced Diploma of Engineering Technology-Electrical

Course Guide



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UEE62122 Advanced Diploma of Engineering Technology-Electrical

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UEE6220 Advanced Diploma of Electrical Engineering

Introduction

Advanced Diploma is preferred by many employers to work as Electrical Engineer or Electrical Engineering Technician in all states and territories and Advanced Diploma of Electrical Engineering entitles the holder to get the Professional recognition as Engineering Associate by Engineers Australia and equivalent international recognition by the countries which are signatories of Dublin Accord.

You must have been issued with an unrestricted license from the regulatory authority responsible for regulating electrical work and licensing of workers in the jurisdiction where the training will take place OR Certificate III in Electrotechnology-Electrician or relevant old IQY Technical courses BEFORE enrolling with us.

Now you are looking at gaining the Electrical Engineer qualification UEE62122 Advanced Diploma of Engineering Technology-Electrical through an RTO and are talking to IQY Technical College as a stepping stone toward your further study at Australian university to pursue electrical engineering degree.

This guide for IQY Technical College explains the qualification step to getting an advanced diploma of electrical engineering program which is included in UEE20 Training package recognized by Australian government.

Course Overview

This qualification covers competencies to design and validate/evaluate electrical equipment and systems and provide technical advice/sales.

This qualification covers competencies to design and validate/evaluate electrical equipment and systems, manage risk, estimate and manage projects and provide technical advice/sales. It develops competencies in the ethical and responsible application of mathematics, science, engineering techniques, standards and codes of practice, engineering design practices, supervision and management of physical, human and financial resources in engineering. The core competencies of this qualification meet the prescribed requirements for Engineering Associate membership of Engineers Australia.

Participants seeking Engineers Australia membership should ensure that their training provider is accredited by that body to provide Engineering Education Programs at the level of Engineering Associate. No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Course outcomes and pathways

On successful completion of this course, graduates will be issued with UEE62122 Advanced Diploma of Engineering Technology-Electrical (or successor).

On issuance of a with UEE62122 Advanced Diploma of Engineering Technology-Electrical (or successor), graduates may work as electrical engineering associate or electrical engineering technician which are also named generically as electrical engineer and seek the membership admission by Engineers Australia.

Entry and selection process

Open entry

Application Interviews and Information sessions at ETC workshop

After your enquiry and a discussion about your eligibility by phone or email /messaging, we invite you to an information session.

We prefer to do this face to face at our location in Revesby, Sydney but can also do this by Video Conference.

We show a short presentation and do a Q&A session. There are usually lots of questions.

When we have confirmed you meet the selection criteria the next step is the selection interview and enrolment process.

Met the criteria and understand the program timing and payment plan – enrol

Where you meet all criteria, the next stage is enrolment.

This must be the right course for you.

We explain the Readiness Assessment (online) that leads to the individual training plan.

We explain the fees and payment options and then you enrol.

We do more eligibility checking.

- We validate your original documents that you checked off on the self-check survey.
- Credit transfer is also discussed at this point.

- Candidates complete the Readiness Assessment (online) to check English speaking, reading and writing and math levels so we are aware of your support needs and gives an indication as to whether any extra support in language, literacy or numeracy at Advanced level is needed.
- Using these results, we prepare your individual training plan toward your Advanced Diploma of Electrical Engineering.

Course duration

Most students will be working full time and studying part time.

You study across 7 terms that are usually completed between 2 months per term.

We allow up to 18 months for completion of the UEE62122 Advanced Diploma of Engineering Technology-Electrical program.

Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.

Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an ETC Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.

Self-paced online learning: In your own time average 5 hours per week

You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the ETC Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time.

You will also use this ETC Moodle to log your work performance on the job.

Work performance: On the job captured in e-Log books

As this course is a post trade course for the holders of electrician licence or Certificate III in Electrotechnology-Electrician, e-Profiling is not needed.

However, your work performance and work experiences are required to be systematically Recorded for Chartered Engineering Associate assessment by Engineers Australia.

[UEE62122 blended delivery](#)

[Order of delivery and sample timing](#)

Plan	Times	Units * (See below)	Activity
Introduction	First week/s	Introductory	-Manuals handed out -Standards/references /text books ready
Term 1	2 months	UEECD0046 UEECD0044 UEECD0007 UEECD0024 UEECD0016 UEECD0019 UEECD0020	-Classroom teaching -Extra ETC handouts and materials -Workshop skill Gap Training
Term 2	2-3 months	UEEEL0020 UEECD0051 UEECD0025	-Self- study and individual practice
Term 3	2-3 months	UEEEL0021 UEEEL0019 UEEEL0042 UEEEL0079	Assessment
Term 4	2-3 months	UEECD0005 UEECD0004 MEM30027 ICTICT214	- Knowledges tests -Tutorial Assignments - Practical/Laboratory
Term 5	2-3 months	UEEEL0077 UEEEL0041 UEEEL0043 UEERE0013 UEECD0017 UEECD0003	-Final project

		UEECD0056
Term 6	2-3 months	UEECD0036 UEERE0064 UEEEL0080
Term 7	2-3 months	UEEEL0062 UEEEC0075 UEERE0066 UEECD0049
Term 8	2-3 months	UEERE0061 UEERE0063 UEECD0014 UEECD0026 UEECD0059 UEECO0001 UEEEL0015 UEEEL0058 UEECO0017 UEECD0010

UEE62122 Units of competency

Core Units:

UEECD0003	Apply industry and community standards to engineering activities
UEECD0004	Apply material science to solving electrotechnology engineering problems
UEECD0005	Apply physics to solving electrotechnology engineering problems
UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
UEECD0010	Compile and produce an energy sector detailed report
UEECD0014	Develop design briefs for electrotechnology projects
UEECD0026	Manage risk in electrotechnology activities
UEECD0036	Provide engineering solutions for problems in complex multiple path circuits
UEECD0039	Provide solutions to basic engineering computational problems*
UEECD0044	Solve problems in multiple path circuits*
UEECD0046	Solve problems in single path circuits *
UEECD0056	Apply methods to maintain currency of industry developments
UEECD0059	Write specifications for electrical engineering projects
UEECD0064	Interpret, produce and modify electrotechnology drawings
UEEEL0015	Manage large electrical projects*
UEEEL0019	Solve problems in direct current (d.c.) machines*
UEEEL0020	Solve problems in low voltage a.c. circuits*
UEEEL0021	Solve problems in magnetic and electromagnetic devices*
UEEEL0058	Plan large electrical projects*
UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits*
UEEEL0077	Evaluate and report on the performance of LV machines *
UEEEL0079	Plan and analyse LV electrical apparatus
UEEEL0080	Plan and analyse wiring systems, circuits, control and protection for electrical installations
UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector

Elective Units

UEEEL0077	Evaluate and report on the performance of LV machines
UEEEL0079	Plan and analyse LV electrical apparatus
UEEEL0080	Plan and analyse wiring systems, circuits, control and protection for electrical installations
UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector
UEECD0019	Fabricate, assemble and dismantle utilities industry components*
UEECD0020	Fix and secure electrotechnology equipment*
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*
MEM30027A	Prepare basic programs for programmable logic controllers
UEECD0025	Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits*
UEEEC0075	Troubleshoot single phase input d.c power supplies*
UEEDV0005	Install and maintain cabling for multiple access to telecommunication services*
UEEDV0008	Install, modify and verify coaxial and structured communication copper cabling*
UEERE0061	Design grid-connected photovoltaic power supply system
UEERE0060	Design grid-connected battery storage systems*
UEERE0064	Design renewable energy heating systems*
UEEEL0041	Develop engineering solution for synchronous machine and control problems
UEEEL0043	Develop engineering solutions for induction machine and control problems*
UEERE0066	Develop effective engineering strategies for energy reduction in buildings
UEERE0063	Design off-grid photovoltaic/generating set systems *
UEECD0049	Use advanced computational processes to provide solutions to energy sector engineering problems*
UEEEL0042	Develop engineering solutions for d.c. machine and control problems

Assessment

IQY TechnicalCollege uses a range of assessment methods for each unit that are validated by the industry. They are

- Knowledge tests
- Assignments
- Practical/ Laboratory
- Projects

Student support

ETC is a specialist college with manageable numbers of students.

Every student is known to the trainers and all students work through an individual training plan. Our unique support process is tried and tested.

We are technology driven, using laptops and an online system.

But we also have excellent workshop facilities where we demonstrate, and you practice skills at your own pace.

You can come into the College for classroom tutorial support and workshop practice on extra days to suit your work life.

Completion of the UEE62122 course – Issued your transcript results and certificates

Once you have successfully completed the UEE62122 program, IQY TechnicalCollege will issue diplomas:

- UEE62122 Advanced Diploma of Engineering Technology (or its successor)

Progress to your goal as electrical engineer, electrical engineering associate, electrical engineering technician

Current industry require advanced skills electricians to design, commission, operate and fault finding the advanced electrical control, systems and equipment.

IQY TechnicalCollege will provide guidance when our graduates reach the stage of applying for a licence. We Look forward to your success.

FAQ's – UEE62122 Advanced Diploma of Engineering Technology-Electrical training in Australia

1. I am interested. How do I check if I am eligible to do the course?

You MUST meet the eligibility criteria in order to enrol into the UEE62122 Advanced Diploma of Engineering Technology-Electrical Course

- Open Entry

2. Does the UEE62122 Course have to be done in Australia?

Yes – Australian regulators and industry have insisted this be the case.

The UEE62122 Advanced Diploma of Engineering Technology-Electrical is a nationally recognised qualification course that can only be offered by licensed registered training organisations (RTOs) such as IQY TechnicalCollege.

3. Do Engineers Australia and New South Wales (NSW) Department of Planning, Industry & Environment recognize the UEE62122 Course?

Yes – a UEE62122 Advanced Diploma of Engineering Technology-Electrical is a nationally recognised qualification. Engineers Australia recognize it as the qualification for admission as Engineering Associate membership and you can continue your university study in electrical engineering.

4. How long is the experience required for admission as Chartered Engineering Associate by Engineers Australia?

To become a Chartered Engineering Associate with Engineers Australia, you need a minimum of five years of postgraduate engineering experience. This experience must demonstrate competency across 16 elements covering four core areas, which you'll prove by submitting evidence of your work to Engineers Australia..

5. What is the industry preferred pathway for gaining my full qualification and occupational licence that is pre-requisite for enrolling UEE62122 Advanced Diploma of Engineering Technology-Electrical course?

Nil

6. Do I need to do Exemplar Profiling (eProfiling) in UEE62122 Course?

No, you do not need to do Exemplar Profiling (e Profiling) in UEE62122 course

7. Can I still enrol with IQY TechnicalCollege into the UEE62122 Course without UEE30820 or Electrician Licence?

Yes. You need to enroll UEE30820 Course or NAT11297 course if you have OTSR, then continue to attend UEE62122 upon completion of UEE30820 course with us.

8. What is the course fee involved with the UEE62122 course?

Regarding the fees information, you will be advised in Zoom Information session or our students administrator.

9. What is the duration of the UEE62122 Course?

The course is run as a blended delivery model. Students move at their own pace together with classroom attendance of two nights per week. It can be completed in 18 months.

10. Does IQY TechnicalCollege have proper certified authority to offer the UEE62122?

IQY TechnicalCollege is a Registered Training Organisation (RTO 45347). This course was authorized by Australian Skills Quality Authority (ASQA) on IQY TechnicalCollege's scope of the courses.

11. Does IQY TechnicalCollege have any branches outside Sydney?

No. We currently have 1 campus located in Sydney, Revesby. We can do Online training then you can return to your place of employment in a regional NSW location. IF that works for you.

12. How can I speak to an IQY TechnicalCollege representative?

Please visit our 'CONTACT US' page <https://electricalcollege.edu.au/contact/> for all Contact Information.

13. What are the operating hours for IQY TechnicalCollege?

IQY TechnicalCollege is open from 9:30AM – 9PM Monday – Friday. We currently conduct training & assessment from 4pm – 9pm

14. Does IQY TechnicalCollege issue Electrical Licenses?

No.

15. What do I need in order to get my Level 3 electrical license?

You need to firstly acquire Level 1 Electrician Licence. You will need a qualification at first. This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in building and premises. It includes the Electrical Regulatory Authorities Council ("ERAC")

requirements for an 'Electrician's license' as regulated by NSW Fair Trading. Then you complete UEE62122 Advanced Diploma of Engineering Technology-Electrical and go through the structured process that involves several key steps: education, training, certification, renewal and right pathway preparation.

16. What do I need to bring with me to class?

You will need:

1. A laptop which is WIFI enabled in order to access online content provided by IQY TechnicalCollege.
2. Note Pad
3. Pens/Pencils
4. Scientific Calculator
5. Australian Standards

17. Do I need to be wearing PPE when attending class?

You MUST wear your safety boots at all times when attending our Training Facility. ETC will provide appropriate PPE when applicable.

18. What do I need to bring with me to the workshop?

IQY TechnicalCollege enforces a strict policy regarding WHS. You will need to be:

- Wearing your safety boots
- Bring your hand tools (Note: Your tools will be inspected by IQY TechnicalCollege for safety purposes prior to use)

Note: IQY TechnicalCollege will provide PPE when applicable



UEE62122
Advanced Diploma of Engineering
Technology Electrical





This qualification covers competencies to design and validate/evaluate electrical equipment and systems and provide technical advice/sales.

This qualification covers competencies to design and validate/evaluate electrical equipment and systems, manage risk, estimate and manage projects and provide technical advice/sales.

It develops competencies in the ethical and responsible application of mathematics, science, engineering techniques, standards and codes of practice, engineering design practices, supervision and management of physical, human and financial resources in engineering.

The core competencies of this qualification meet the prescribed requirements for Engineering Associate membership of Engineers Australia.

Participants seeking Engineers Australia membership should ensure that their training provider is accredited by that body to provide Engineering Education Programs at the level of Engineering Associate. No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Course outcomes and pathways

On successful completion of this course, graduates will be issued with UEE62122 Advanced Diploma of EngineeringTechnology-Electrical (or successor).

On issuance of a with UEE62122 Advanced Diploma of EngineeringTechnology-Electrical (or successor), graduates may work as electrical engineering associate or electrical engineering technician which are also named generically as electrical engineer and seek the membership admission by Engineers Australia.

Entry and selection process

Entrants to the UEE62220 Advanced Diploma of Electrical Engineering must

- hold a UEE30820 Certificate III in Electrotechnology Electrician (or successor or predecessor or equivalent electrical trade course leading to electrician licence)
- The holders of overseas electrical trades qualifications or electrical engineering qualifications will need to undergo the skills assessment under TRA Guideline to be issued with OTSR and Certificate III in Electrotechnology or Electrician Licence. Minimum Australian Context Gap (MACG) is the pathway followed by most overseas trained electricians or the holders of overseas electrical engineering qualifications.



Course duration

Most students will be working full time and studying part time.


You study across 7 terms that are usually completed between 2 months per term.

We allow up to 18 months for completion of the UEE62220 Advanced Diploma of Electrical Engineering program.




Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.



Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an IQY Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.



Self-paced online learning: In your own time average 5 hours per week



You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the IQY Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time. You will also use this IQY Moodle to log your work performance on the job.

UEE62122 units of competency


Core Units:

- UEECD0003 Apply industry and community standards to engineering activities
- UEECD0004 Apply material science to solving electrotechnology engineering problems
- UEECD0005 Apply physics to solving electrotechnology engineering problems
- UEECD0007 Apply work health and safety regulations, codes and practices in the workplace
- UEECD0010 Compile and produce an energy sector detailed report
- UEECD0014 Develop design briefs for electrotechnology projects
- UEECD0026 Manage risk in electrotechnology activities
- UEECD0036 Provide engineering solutions for problems in complex multiple path circuits
- UEECD0039 Provide solutions to basic engineering computational problems*
- UEECD0044 Solve problems in multiple path circuits*
- UEECD0046 Solve problems in single path circuits *
- UEECD0056 Apply methods to maintain currency of industry developments
- UEECD0059 Write specifications for electrical engineering projects
- UEECD0064 Interpret, produce and modify electrotechnology drawings
- UEEEL0015 Manage large electrical projects*
- UEEEL0019 Solve problems in direct current (d.c.) machines*
- UEEEL0020 Solve problems in low voltage a.c. circuits*
- UEEEL0021 Solve problems in magnetic and electromagnetic devices*
- UEEEL0058 Plan large electrical projects*
- UEEEL0062 Provide engineering solutions to problems in complex polyphase power circuits

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- 
- UEEEL0077 Evaluate and report on the performance of LV machines *
 - UEEEL0079 Plan and analyse LV electrical apparatus
 - UEEEL0080 Plan and analyse wiring systems, circuits, control and protection for electrical installations
 - UEERE0013 Develop strategies to address environmental and sustainability issues in the energy sector


Elective Units

- UEEEL0077 Evaluate and report on the performance of LV machines
- UEEEL0079 Plan and analyse LV electrical apparatus
- UEEEL0080 Plan and analyse wiring systems, circuits, control and protection for electrical installations
- UEERE0013 Develop strategies to address environmental and sustainability issues in the energy sector
- UEECD0019 Fabricate, assemble and dismantle utilities industry components*
- UEECD0020 Fix and secure electrotechnology equipment*
- UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications*
- MEM30027A Prepare basic programs for programmable logic controllers
- UEECD0025 Lay wiring/cabling and terminate accessories for extra-low voltage (ELV) circuits*
- UEEEC0075 Troubleshoot single phase input d.c power supplies*
- UEEDV0005 Install and maintain cabling for multiple access to telecommunication services*
- UEEDV0008 Install, modify and verify coaxial and structured communication copper cabling*
- UEERE0061 Design grid-connected photovoltaic power supply system
- UEERE0060 Design grid-connected battery storage systems*
- UEERE0064 Design renewable energy heating systems*
- UEEEL0041 Develop engineering solution for synchronous machine and control problems
- UEEEL0043 Develop engineering solutions for induction machine and control problems*
- UEERE0066 Develop effective engineering strategies for energy reduction in buildings
- UEERE0063 Design off-grid photovoltaic/generating set systems *





UEECD0049 Use advanced computational processes to provide solutions to energy sector engineering problems*

UEEEL0042 Develop engineering solutions for d.c. machine and control problems



Plan	Times	Units * (See below)	Activity
Introduction	First week/s	Introductory	-Manuals handed out -Standards/references /text books ready
Term 1	2 months	UEECD0046 UEECD0044 UEECD0007 UEECD0024 UEECD0016 UEECD0019 UEECD0020	-Classroom teaching -Extra ETC handouts and materials -Workshop skill Gap Training
Term 2	2-3 months	UEEEL0020 UEECD0051 UEECD0025	-Self-study and individual practice
Term 3	2-3 months	UEEEL0021 UEEEL0019 UEEEL0042 UEEEL0079	Assessment
Term 4	2-3 months	UEECD0005 UEECD0004 MEM30027 ICTICT214	- Knowledges tests -Tutorial Assignments - Practical/Laboratory
Term 5	2-3 months	UEEEL0077 UEEEL0041 UEEEL0043 UEERE0013 UEECD0017 UEECD0003 UEECD0056	-Final project



Term 6	2-3 months	UEECD0036 UEERE0064 UEEEL0080
Term 7	2-3 months	UEEEL0062 UEEEO0075 UEERE0066 UEECD0049
Term 8	2-3 months	UEERE0061 UEERE0063 UEECD0014 UEECD0026 UEECD0059 UEECO0001 UEEEL0015 UEEEL0058 UEECO0017 UEECD0010



Sample Program

For UEECD0024 Implement and monitor energy sector WHS policies and procedures

Three sessions of 10 hours PLUS Additional Reading hours to fulfil the unit delivery volume. One 4 hr Session for Lecture+Discussion PLUS one 4 hrs session for Discussion on Assignment Plus assistance for online research task.



IQY Technical College uses a range of assessment methods for each unit that are validated by the industry.

They are

- Knowledge tests
- Assignments
- Practical/ Laboratory
- Projects


Student support

IQY is a specialist college with manageable numbers of students. Every student is known to the trainers and all students work through an individual training plan. Our unique support process is tried and tested.

We are technology driven, using laptops and an online system.

But we also have excellent workshop facilities where we demonstrate, and you practice skills at your own pace.

You can come into the College for classroom tutorial support and workshop practice on extra days to suit your work life.



Completion of the UEE62122 course – Issued your transcript results and certificates

Once you have successfully completed the UEE62122 program, IQY Technical College will issue diplomas:

- UEE62122 – Advanced Diploma of Engineering Technology-Electrical (or its successor)

Progress to your goal as electrical engineer, electrical engineering associate, electrical engineering technician

Current industry require advanced skills electricians to design, commission, operate and fault finding the advanced electrical control, systems and equipment.

UEE62220 Advanced Diploma of Electrical Engineering

Course Guide

USING THIS GUIDE

This course guide contains the information needed by a student to make an informed decision to study with IQY Technical College

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UEE6220 Advanced Diploma of Electrical Engineering

Introduction

Congratulations. If you are reading this course guide you have successfully completed UEE30820 Certificate III in Electrotechnology -Electrician or older courses or possess the unrestricted electrician licence issued by any state or territory of Australia and wanted to upgrade your qualification to become an Electrical Engineer or Electrical Engineering Technician.

Advanced Diploma is preferred by many employers to work as Electrical Engineer or Electrical Engineering Technician in all states and territories and Advanced Diploma of Electrical Engineering entitles the holder to get the Professional recognition as Engineering Associate by Engineers Australia and equivalent international recognition by the countries which are signatories of Dublin Accord.

You must have been issued with an unrestricted license from the regulatory authority responsible for regulating electrical work and licensing of workers in the jurisdiction where the training will take place OR Certificate III in Electrotechnology-Electrician or relevant old electrical trades courses BEFORE enrolling with us.

Now you are looking at gaining the Electrical Engineer qualification UEE62220 Advanced Diploma of Electrical Engineering through an RTO and are talking to IQY Technical College as a stepping stone toward your further study at Australian university to pursue electrical engineering degree.

This guide for IQY Technical College explains the qualification step to getting an advanced diploma of electrical engineering program which is included in UEE20 Training package recognized by Australian government.

Course Overview

This qualification covers competencies to design and validate/evaluate electrical equipment and systems, manage risk, estimate and manage projects and provide technical advice/sales. It develops competencies in the ethical and responsible application of mathematics, science, engineering techniques, standards and codes of practice, engineering design practices, supervision and management of physical, human and financial resources in engineering. The core competencies of this qualification meet the prescribed requirements for Engineering Associate membership of Engineers Australia.

Participants seeking Engineers Australia membership should ensure that their training provider is accredited by that body to provide Engineering Education Programs at the level of Engineering Associate. No licensing, legislative or certification requirements apply to this qualification at the time of publication.

Course outcomes and pathways

On successful completion of this course, graduates will be issued with UEE62220 Advanced Diploma of Electrical Engineering (or successor).

On issuance of a with UEE62220 Advanced Diploma of Electrical Engineering (or successor), graduates may work as electrical engineering associate or electrical engineering technician which are also named generically as electrical engineer and seek the membership admission by Engineers Australia.

Entry and selection process

Entrants to the UEE62220 Advanced Diploma of Electrical Engineering must

- hold a UEE30820 Certificate III in Electrotechnology Electrician (or successor or predecessor or equivalent electrical trade course leading to electrician licence)
- The holders of overseas electrical trades qualifications or electrical engineering qualifications will need to undergo the skills assessment under TRA Guideline to be issued with OTSR and Certificate III in Electrotechnology or Electrician Licence. Minimum Australian Context Gap (MACG) is the pathway followed by most overseas trained electricians or the holders of overseas electrical engineering qualifications.

Application Interviews and Information sessions at ETC workshop

After your enquiry and a discussion about your eligibility by phone or email /messaging, we invite you to an information session.

We prefer to do this face to face at our location in Revesby, Sydney but can also do this by Video Conference.

We show a short presentation and do a Q&A session. There are usually lots of questions. When we have confirmed you meet the selection criteria the next step is the selection interview and enrolment process.

Met the criteria and understand the program timing and payment plan – enrol

Where you meet all criteria, the next stage is enrolment.

This must be the right course for you.

We explain the Readiness Assessment (online) that leads to the individual training plan.

We explain the fees and payment options and then you enrol.

We do more eligibility checking.

- We validate your original documents that you checked off on the self-check survey.
- Credit transfer is also discussed at this point.

- Candidates complete the Readiness Assessment (online) to check English speaking, reading and writing and math levels so we are aware of your support needs and gives an indication as to whether any extra support in language, literacy or numeracy at Advanced level is needed.
- Using these results, we prepare your individual training plan toward your Advanced Diploma of Electrical Engineering.

Course duration

Most students will be working full time and studying part time.

You study across 7 terms that are usually completed between 2 months per term.

We allow up to 18 months for completion of the UEE62220 Advanced Diploma of Electrical Engineering program.

Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.

Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an ETC Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.

Self-paced online learning: In your own time average 5 hours per week

You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the ETC Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time.

You will also use this ETC Moodle to log your work performance on the job.

Work performance: On the job captured in e-Log books

As this course is a post trade course for the holders of electrician licence or Certificate III in Electrotechnology-Electrician, e-Profiling is not needed.

However, your work performance and work experiences are required to be systematically Recorded for Chartered Engineering Associate assessment by Engineers Australia.

[UEE62220 blended delivery](#)

[Order of delivery and sample timing](#)

Plan	Times	Units * (See below)	Activity
Introduction	First week/s	Introductory	-Manuals handed out -Standards/references /text books ready
Term 1	2 months	UEECD0024 UEERE0013 UEECD0017	-Classroom teaching -Extra ETC handouts and materials -Workshop skill Gap Training
Term 2	2-3 months	UEECD0005 UEECD0004 UEECS0033	-Self- study and individual practice
Term 3	2-3 months	UEEEL0043 UEEIC0016 UEEIC0017 UEECD0003 UEECD0056	Assessment
Term 4	2-3 months	UEECD0036 UEECD0039	- Knowledges tests -Tutorial Assignments - Practical/Laboratory
Term 5	2-3 months	UEEEL0062 UETDRIS033 UETDREL005 UETDRIS032	-Final project
Term 6	2-3 months	UEEIC0042 UEECD0049 UETDRIS026 UETDRIS027	
Term 7	2-3 months	UEECD0059 UEECO0003 UEEEL0015 UEEEL0058 UEECD0010	

UEE62220 units of competency

Core Units:		
1	UEECD0003	Apply industry and community standards to engineering activities
2	UEECD0004	Apply material science to solving electrotechnology engineering problems
3	UEECD0005	Apply physics to solving electrotechnology engineering problems
4	UEECD0010	Compile and produce an energy sector detailed report
5	UEECD0014	Develop design briefs for electrotechnology projects
6	UEECD0017	Establish and follow a competency development plan in an Electrotechnology engineering discipline
7	UEECD0024	Implement and monitor energy sector WHS policies and procedures
8	UEECD0026	Manage risk in electrotechnology activities
9	UEECD0036	Provide engineering solutions for problems in complex, multiple-path circuits
10	UEECD0039	Provide solutions to basic engineering computational problems*
11	UEECD0056	Apply methods to maintain currency of industry developments
12	UEECD0059	Write specifications for electrical engineering projects
13	UEECS0033	Use engineering applications software on personal computers
14	UEEEL0015	Manage large electrical projects*
15	UEEEL0058	Plan large electrical projects*
16	UEEEL0062	Provide engineering solutions to problems in complex polyphase power circuits
17	UEERE0013	Develop strategies to address environmental and sustainability issues in the energy sector
Elective Units		
1	UETDRIS032	Solve problems in network equipment*
2	UETDRIS033	Solve problems in network protection*
3	UEEIC0042	Solve problems in single-phase electronic power control circuits*
4	UETDRIS026	Diagnose and resolve faults in electrical apparatus*
5	UETDRIS027	Diagnose and resolve faults in transmission systems*
6	UEECD0049	Use advanced computational processes to provide solutions to energy sector engineering problems*
7	UEECO0003	Manage contract variations
8	UEEEL0043	Develop engineering solutions for induction machine and control problems*
9	UEEIC0016	Diagnose and rectify faults in a.c. motor drive systems*
10	UEEIC0017	Diagnose and rectify faults in d.c. motor drive systems*

Assessment

IQY Technical College uses a range of assessment methods for each unit that are validated by the industry. They are

- Knowledge tests
- Assignments
- Practical/ Laboratory
- Projects

Student support

ETC is a specialist college with manageable numbers of students.

Every student is known to the trainers and all students work through an individual training plan. Our unique support process is tried and tested.

We are technology driven, using laptops and an online system.

But we also have excellent workshop facilities where we demonstrate, and you practice skills at your own pace.

You can come into the College for classroom tutorial support and workshop practice on extra days to suit your work life.

[Completion of the UEE62220 course – Issued your transcript results and certificates](#)

Once you have successfully completed the UEE62220 program, IQY Technical Collegewill issue diplomas:

- UEE62220 – Advanced Diploma of Electrical Engineering (or its successor)

[Progress to your goal as electrical engineer, electrical engineering associate, electrical engineering technician](#)

Current industry require advanced skills electricians to design, commission, operate and fault finding the advanced electrical control, systems and equipment.

[IQY Technical Collegewill provide guidance when our graduates reach the stage of applying for a licence. We Look forward to your success.](#)

FAQ's – UEE62220 Advanced Diploma of Electrical Engineering training in Australia

1. I am interested. How do I check if I am eligible to do the course?

You MUST meet the eligibility criteria in order to enrol into the UEE62220 Advanced Diploma of Electrical Engineering Course

- hold a UEE30820 Certificate III in Electrotechnology Electrician (or successor or predecessor or equivalent electrical trade course leading to electrician licence)
- hold an unrestricted licence issued by the regulatory authority responsible for regulating electrical work and licensing of workers in the jurisdiction where the training will take place
- If you do not hold the above qualifications, you may need to enroll UEE30820 Course or MACG (NAT11297) course at Electrical Trades College. You will need to consult with the relevant administrator of the college to enroll into those courses.

2. Does the UEE62220 Course have to be done in Australia?

Yes – Australian regulators and industry have insisted this be the case.

The UEE62220 Advanced Diploma of Electrical Engineering is a nationally recognised qualification course that can only be offered by licensed registered training organisations (RTOs) such as Electrical Trades College.

3. Do Engineers Australia and New South Wales (NSW) Department of Planning, Industry & Environment recognize the UEE62220 Course?

Yes – a UEE62220 Advanced Diploma of Electrical Engineering is a nationally recognised qualification . Engineers Australia recognize it as the qualification for admission as Engineering Associate membership and (NSW) Department of Planning, Industry & Environment accept the advanced diploma as meeting the educational requirement for Level 3 Electrician OR Level 3 Accredited Service Provider (ASP) electrician which is admitted after having completed the structured process that involves several key steps: education, training, certification, renewal and right pathway preparation. The candidates who complete UEE62220 Advanced Diploma of Electrical Engineering meet the education requirement for ASP Level 3 Electrician.

4. How long is the experience required for admission as Chartered Engineering Associate by Engineers Australia?

To become a Chartered Engineering Associate with Engineers Australia, you need a minimum of five years of postgraduate engineering experience. This experience must demonstrate competency across 16 elements covering four core areas, which you'll prove by submitting evidence of your work to Engineers Australia..

5. What is the industry preferred pathway for gaining my full qualification and occupational licence that is pre-requisite for enrolling UEE62220 Advanced Diploma of Electrical Engineering course?

The industry endorsed skilled migration pathway and process for Skilled Migrants (excluding New Zealand qualified Electricians) under OSAP and TSS is Trades Recognition Australia (TRA) Pathway

Specifically, this pathway involves candidates:

1. Successfully undertake a OTSR skills assessment by a TRA approved RTO;
2. The successful completion of the nationally accredited 11297 NAT Course in Electrician – Minimum Australian Context Gap (including supervised workplace experience captured by eProfiling) in Australia by an E-Oz licensed GAP training RTO (such as Electrical Trades College);
3. Then issuance of the full Certificate III qualification which allows an occupational licence to be issued by the relevant State or Territory regulator.

Skilled Migrants should be extremely cautious about undertaking any pathway or process outside of the industry approved process. Unless you are a qualified New Zealand Electrical and/or licence holder migrating to Australia.

Any migration pathway resulting in the issuance of an Australian Qualification or occupational licence that does not involve steps 1-3 above, is most likely against regulatory requirements and training package rules. Australian qualification in the Electrotechnology sector must be delivered in Australia, under appropriate electrical licensing and sufficient on the job exposure gathered in Australia

6. Do I need to do Exemplar Profiling (eProfiling) in UEE62220 Course?

No, you do not need to do Exemplar Profiling (e Profiling) in UEE62220 course if you hold UEE30820 Qualification or relevant older qualifications leading to issue of electrician licence or electrician licence. However, if you enroll UEE30820 Course that is prerequisite for UEE62220 course, as part of UEE30820 course, you need to do e-Profiling.

Exemplar Profiling records your on-the-job work experience. This system has been developed by industry and is an important component of the gap training course.

Exemplar profiling gathers, on a weekly basis, the different tasks undertaken and tracks over time exposure to the various elements of the gap training course. This information is verified by your supervisor and used as work performance evidence by IQY Technical College

7. Can I still enrol with IQY Technical College into the UEE62220 Course without UEE30820 or Electrician Licence?

Yes. You needs to enroll UEE30820 Course or NAT11297 course if you have OTSR, then continue to attend UEE62220 upon completion of UEE30820 course with us.

8. What is the course fee involved with the UEE62220 course?

Regarding the fees information, you will be advised in Zoom Information session or our students administrator.

9. What is the duration of the UEE62220 Course?

The course is run as a blended delivery model. Students move at their own pace together with classroom attendance of two nights per week . It can be completed in 18 months.

10. Does IQY Technical College have proper certified authority to offer the UEE62220?

IQY Technical College is a Registered Training Organisation (RTO 45347). This course was authorized by Australian Skills Quality Authority (ASQA) on Electrical Trades College's scope of the courses.

11. Does IQY Technical College have any branches outside Sydney?

No. We currently have 1 campus located in Sydney, Revesby. We can do Online training then you can return to your place of employment in a regional NSW location. IF that works for you.

12. How can I speak to an IQY Technical College representative?

Please visit our 'CONTACT US' page <https://electricalcollege.edu.au/contact/> for all Contact Information.

13. What are the operating hours for Electrical Trades College?

IQY Technical College is open from 9:30AM – 9PM Monday – Friday. We currently conduct training & assessment from 4pm – 9pm

14. Does IQY Technical College issue Electrical Licenses?

No. This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in building and premises. It includes the Electrical Regulatory Authorities Council ("ERAC") requirements for an 'Electrician's license' as regulated by NSW Fair Trading.

15. What do I need in order to get my Level 3 electrical license?

You need to firstly acquire Level 1 Electrician Licence. You will need a qualification at first. This qualification provides competencies to select, install, set up, test, fault find, repair and maintain electrical systems and equipment in building and premises. It includes the Electrical Regulatory Authorities Council ("ERAC") requirements for an 'Electrician's license' as regulated by NSW Fair Trading.

Then you complete UEE62220 Advanced Diploma of Electrical Engineering and go through the structured process that involves several key steps: education, training, certification, renewal and right pathway preparation.

16. What do I need to bring with me to class?

You will need:

1. A laptop which is WIFI enabled in order to access online content provided by Electrical Trades College.
2. Note Pad
3. Pens/Pencils
4. Scientific Calculator
5. Australian Standards

17. Do I need to be wearing PPE when attending class?

You MUST wear your safety boots at all times when attending our Training Facility. ETC will provide appropriate PPE when applicable.

18. What do I need to bring with me to the workshop?

IQY Technical College enforces a strict policy regarding WHS. You will need to be:


- Wearing your safety boots
- Bring your hand tools (Note: Your tools will be inspected by IQY Technical College for safety purposes prior to use)

Note: IQY Technical College will provide PPE when applicable



UEE62220
**Advanced Diploma of Electrical
Engineering**





This qualification covers competencies to design and validate/evaluate electrical equipment and systems, manage risk, estimate and manage projects and provide technical advice/sales. It develops competencies in the ethical and responsible application of mathematics, science, engineering techniques, standards and codes of practice, engineering design practices, supervision and management of physical, human and financial resources in engineering.

The core competencies of this qualification meet the prescribed requirements for Engineering Associate membership of Engineers Australia.

Course outcomes and pathways

On successful completion of this course, graduates will be issued with UEE62220 Advanced Diploma of Electrical Engineering (or successor).

On issuance of a with UEE62220 Advanced Diploma of Electrical Engineering (or successor), graduates may work as electrical engineering associate or electrical engineering technician which are also named generically as electrical engineer and seek the membership admission by Engineers Australia.

Entry and selection process

Entrants to the UEE62220 Advanced Diploma of Electrical Engineering must

- hold a UEE30820 Certificate III in Electrotechnology Electrician (or successor or predecessor or equivalent electrical trade course leading to electrician licence)
- The holders of overseas electrical trades qualifications or electrical engineering qualifications will need to undergo the skills assessment under TRA Guideline to be issued with OTSR and Certificate III in Electrotechnology or Electrician Licence. Minimum Australian Context Gap (MACG) is the pathway followed by most overseas trained electricians or the holders of overseas electrical engineering qualifications.



Course duration

Most students will be working full time and studying part time.


You study across 7 terms that are usually completed between 2 months per term.

We allow up to 18 months for completion of the UEE62220 Advanced Diploma of Electrical Engineering program.




Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.



Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an IQY Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.



Self-paced online learning: In your own time average 5 hours per week



You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the IQY Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time. You will also use this IQY Moodle to log your work performance on the job.

UEE62220 units of competency

Core Units:



- 1 UEECD0003 Apply industry and community standards to engineering activities
- 2 UEECD0004 Apply material science to solving electrotechnology engineering problems
- 3 UEECD0005 Apply physics to solving electrotechnology engineering problems
- 4 UEECD0010 Compile and produce an energy sector detailed report
- 5 UEECD0014 Develop design briefs for electrotechnology projects
- 6 UEECD0017 Establish and follow a competency development plan in an Electrotechnology engineering discipline
- 7 UEECD0024 Implement and monitor energy sector WHS policies and procedures
- 8 UEECD0026 Manage risk in electrotechnology activities
- 9 UEECD0036 Provide engineering solutions for problems in complex, multiple-path circuits

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- 10 UEECD0039 Provide solutions to basic engineering computational problems*
 - 11 UEECD0056 Apply methods to maintain currency of industry developments
 - 12 UEECD0059 Write specifications for electrical engineering projects
 - 13 UEECS0033 Use engineering applications software on personal computers
 - 14 UEEEL0015 Manage large electrical projects*
 - 15 UEEEL0058 Plan large electrical projects*
 - 16 UEEEL0062 Provide engineering solutions to problems in complex polyphase power circuits
 - 17 UEERE0013 Develop strategies to address environmental and sustainability issues in the energy sector

Elective Units

- 1 UETDRIS032 Solve problems in network equipment*
- 2 UETDRIS033 Solve problems in network protection*
- 3 UEEIC0042 Solve problems in single-phase electronic power control circuits*
- 4 UETDRIS026 Diagnose and resolve faults in electrical apparatus*
- 5 UETDRIS027 Diagnose and resolve faults in transmission systems*
- 6 UEECD0049 Use advanced computational processes to provide solutions to energy sector engineering problems*
- 7 UEECO0003 Manage contract variations
- 8 UEEEL0043 Develop engineering solutions for induction machine and control problems*
- 9 UEEIC0016 Diagnose and rectify faults in a.c. motor drive systems*
- 10 UEEIC0017 Diagnose and rectify faults in d.c. motor drive systems*

Plan	Times	Units * (See below)
Introduction	First week/s	Introductory
Term 1	2 months	UEECD0024 UEERE0013 UEECD0017
Term 2	2-3 months	UEECD0005 UEECD0004 UEECS0033
Term 3	2-3 months	UEEEL0043 UEEIC0016 UEEIC0017 UEECD0003 UEECD0056
Term 4	2-3 months	UEECD0036 UEECD0039



Term 5	2-3 months	UEEEL0062 UETDRIS033 UETDREL005 UETDRIS032
Term 6	2-3 months	UEEIC0042 UEECD0049 UETDRIS026 UETDRIS027
Term 7	2-3 months	UEECD0059 UEECO0003 UEEEL0015 UEEEL0058 UEECD0010



Sample Program

For UEECD0024 Implement and monitor energy sector WHS policies and procedures

Three sessions of 10 hours PLUS Additional Reading hours to fulfil the unit delivery volume. One 4 hr Session for Lecture+Discussion PLUS one 4 hrs session for Discussion on Assignment Plus assistance for online research task.



IQY Technical College uses a range of assessment methods for each unit that are validated by the industry.

They are

- Knowledge tests
- Assignments
- Practical/ Laboratory
- Projects


Student support

IQY is a specialist college with manageable numbers of students. Every student is known to the trainers and all students work through an individual training plan. Our unique support process is tried and tested.

We are technology driven, using laptops and an online system.

But we also have excellent workshop facilities where we demonstrate, and you practice skills at your own pace.

You can come into the College for classroom tutorial support and workshop practice on extra days to suit your work life.



Completion of the UEE62220 course – Issued your transcript results and certificates

Once you have successfully completed the UEE62220 program, Electrical Trades College will issue diplomas:

- ☑ UEE62220 – Advanced Diploma of Electrical Engineering (or its successor)

Progress to your goal as electrical engineer, electrical engineering associate, electrical engineering technician

Current industry require advanced skills electricians to design, commission, operate and fault finding the advanced electrical control, systems and equipment.

UET60222 Advanced Diploma of ESI Course Guide

Qualification description

This qualification provides the skills and knowledge to work in the electricity supply industry within distribution and transmission networks. The qualification allows individuals to specialise in one of the following areas.

Design and Drafting

This specialisation covers the skills and knowledge for designing and drafting transmission and distribution networks, and the use of CAD software and drawing management systems.

Design

This specialisation covers the skills and knowledge for designing transmission and distribution networks.

System Operations Distribution

This specialisation covers the skills and knowledge for monitoring, operating, coordinating and maintaining distribution networks.

System Operations Transmission

This specialisation covers the skills and knowledge for monitoring, operating, coordinating and maintaining transmission networks.

Protection (Testing)

This specialisation covers the skills and knowledge for commissioning, maintaining, diagnosing faults of complex protection and control systems.

Protection and Metering (Testing)

This specialisation covers the skills and knowledge for commissioning, maintaining, diagnosing faults of metering systems.

Please note: RTO to insert on the testamur, the specialisation selected from the specialist group choice below.

Licensing/regulatory information

The skills and knowledge described within the units in this qualification may require a licence or permit to practice in the workplace.

Additional and/or other conditions may also apply under state and territory legislative and regulatory licensing requirements which must be confirmed prior to commencing the qualification.

Entry requirements

There are no entry requirements for this qualification

APPLICATION INTERVIEWS

When we have confirmed you meet the selection criteria the next step is the selection interview and enrolment process.

What happens if you have met criteria

IQY Technical College

We will interview you to validate your original documents you completed on the self-check survey. Recognition of Prior Learning and credit transfer are also discussed at this point.

Where you meet all criteria, the next stage is enrolment.

Course Units

Core units

UEECD0007	Apply work health and safety regulations, codes and practices in the workplace
UEECD0044	Solve problems in multiple path circuits*
UEECD0046	Solve problems in single path circuits*
UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications*
UEEEL0020	Solve problems in low voltage a.c. circuits*
UEEEL0021	Solve problems in magnetic and electromagnetic devices*

Electives

Group B: Design

UEECS0033	Use engineering applications software on personal computers
UETDRDS015	Assess distributed energy resource connections to a distribution network*
UETDRDS016	Coordinate and perform line and easement surveys*
UETDRDS017	Design customer substations*
UETDRDS018	Design distribution protection systems*
UETDRDS019	Design distribution substations*
UETDRDS020	Design overhead distribution systems*

[UETDRDS021](#)

Design public lighting systems*

[UETDRDS022](#)

Design underground distribution systems*

[UETDRDS027](#)

Investigate quality of supply issues*

[UETDRDS028](#)

Prepare and manage construction plans for electrical infrastructure*

[UETDRELO05](#)

Work safely in the vicinity of live electrical apparatus*

SAMPLE DELIVERY OVERVIEW

Term 1		
1 a	UETDRELO05	Work safely in the vicinity of live electrical apparatus
2	UEECD0007 (prerequisite)	Apply work health and safety regulations, codes and practices in the workplace
3	UEECD0051	Use drawings, diagrams, schedules, standards, codes and specifications
Holiday break		
Term 2		
7	UEECS003 3	Use engineering applications software on personal computers
8	UEEEL0021	Solve problems in magnetic and electromagnetic devices
Holiday break		
Term 3		
24	UEECD0046	Solve problems in single path circuits
25	UEECD0044	Solve problems in multiple path circuits
Holiday break		
Term 3		
14	UEECD0046	Solve problems in single path circuits
Holiday break		
Term 4		
19	UEEEL0020	Solve problems in low voltage (a.c.) circuits

IQY Technical College

	Holiday break	
	Term 5	
18	UETDRDS015	Assess distributed energy resource connections to a distribution network
	Holiday break	
	Term 6	
21	UETDRDS017	Design customer substations
13	UETDRDS018	Design distribution protection systems
	Holiday break	
	Term 7	
12	UETDRDS019	Design distribution substations
9	UETDRDS022	Design underground distribution systems
	Holiday break	
	Term 8	
24	UETDRDS028	Prepare and manage construction plans for electrical infrastructure

Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.

Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an IQY Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.

Self-paced online learning: In your own time average 5 hours per week

You will need to supply your own lap top which is WIFI enabled for internet access. You will be given a username and password to log onto the IQY Learning Moodle. On this Moodle you are given access to online content and assessments.

You will use this in class and on average 5 hours per week self-study during term time.

You will also use this IQY Moodle to log your work performance on the job.


Work performance: On the job captured in e-Log books

No, you do not need to do Exemplar Profiling (e Profiling) in UET60222 course

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UET60222 Advanced Diploma of ESI



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This specialisation covers the skills and knowledge for designing and drafting transmission and distribution networks, and the use of CAD software and drawing management systems.

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System Operations Transmission

This specialisation covers the skills and knowledge for monitoring, operating, coordinating and maintaining transmission networks.

Protection (Testing)

This specialisation covers the skills and knowledge for commissioning, maintaining, diagnosing faults of complex protection and control systems.

Protection and Metering (Testing)

This specialisation covers the skills and knowledge for commissioning, maintaining, diagnosing faults of metering systems.

Course outcomes and pathways

On successful completion of this course, graduates will be issued with UET60222 Advanced Diploma of ESI(or successor).

Entry and selection process

Entry requirements

There are no entry requirements for this qualification

APPLICATION INTERVIEWS

When we have confirmed you meet the selection criteria the next step is the selection interview and enrolment process.

What happens if you have met criteria

We will interview you to validate your original documents you completed on the self-check survey. Recognition of Prior Learning and credit transfer are also discussed at this point.

Where you meet all criteria, the next stage is enrolment.



Course duration

Most students will be working full time and studying part time.


You study across 7 terms that are usually completed between 2 months per term.

We allow up to 18 months for completion of the UEE62220 Advanced Diploma of Electrical Engineering program.




Course delivery methods

The course is run in a blended delivery which encompasses online learning, face to face learning and laboratory and practical work.



Face-to-face learning/tutorials and assessment: 4 hrs x 8 sessions per month

You will be trained in a classroom/workshop/online environment lead by your Trainer with up to 16 students per group. You use an ETC Moodle – and refer to the standards and are expected to interact with the Trainer throughout the sessions. You practice in a simulated workshop when required. Teaching and learning are done at the same time. Assessment is conducted when you are ready.



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UEE62220 units of competency

Core Units:

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

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UEECD0046 Solve problems in single path circuits*

UEECD0051 Use drawings, diagrams, schedules, standards, codes and specifications*

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Elective Units

Group B: Design

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UETDRDS022 Design underground distribution systems*

UETDRDS027 Investigate quality of supply issues*

UETDRDS028 Prepare and manage construction plans for electrical infrastructure*

UETDREL005 Work safely in the vicinity of live electrical apparatus*

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	Holiday break	
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Sample Program

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