Engineering Institute of Technology.

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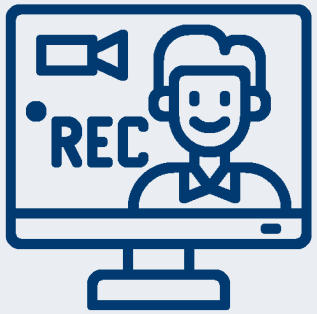
Industry-Focused Advanced Diplomas: DEI & DMN Explained

07:00am – 08:00am (UTC)

Presented by:
Paul Celenza | College Manager
Dr. Hossein Tafti | On-Campus Lecturer

Common Questions/FAQs



Copy of slides/video recording

Everyone registered for this webinar will receive a copy of the PDF slides and a link to the video recording within the next two business days via email. Please monitor your junk email folder.

Introduction – Presenter

Paul Celenza | College Manager

Paul Celenza is the College Manager at the Engineering Institute of Technology (EIT); he has worked for the college for fifteen years. Paul has a Bachelor of Business Degree, a Graduate Diploma in Business Administration and a Certificate IV in Training and Assessment.

Paul is very passionate about training and the impact that quality training can have on the lives of students. Upon a recent visit to South Africa, Paul reflected on fifteen years of change and innovation in the education sector and revealed more about EIT's novel approach to the future of engineering education and training

Agenda

1. Different types of Advanced Diplomas
2. Learning Management System (Moodle)
3. Student support
4. Resources
5. Webinars
6. Entry Requirements
7. Accreditation
8. Remote & Virtual labs
9. DEI Spotlight
10. DMN Spotlight
11. Conclusion

What is an Advanced Diploma?

Our Advanced Diplomas deliver practical knowledge, technical expertise and aim to enhance the capabilities of those already in the industry.

EIT's vocational programs are designed with extensive industry input and accredited by the Australian government and some programs are also recognized under the Dublin Accord.

Featuring live interactive webinars delivered by seasoned industry experts and dedicated learning support, these programs are designed to help trade-qualified professionals take the next step in their career or to formalize industry experience.

Completion of the Advanced Diploma programs also opens up a range of further study pathways with advanced standing towards professional certificates of competency courses and a bachelor's degree.

Types of Advanced Diploma Courses

Engineering Institute of Technology.

52886WA - Advanced Diploma of Industrial Automation Engineering

52883WA - Advanced Diploma of Applied Electrical Engineering (Electrical Systems)

52884WA - Advanced Diploma of Mechanical Engineering Technology

52873WA - Advanced Diploma of Civil and Structural Engineering

52882WA - Advanced Diploma of Electrical and Instrumentation (E&I) Engineering for Oil and Gas Facilities

52885WA - Advanced Diploma of Biomedical Engineering

52932WA - Advanced Diploma of Plant Engineering

52892WA - Advanced Diploma of Electrical and Instrumentation (E & I) Engineering in Mining

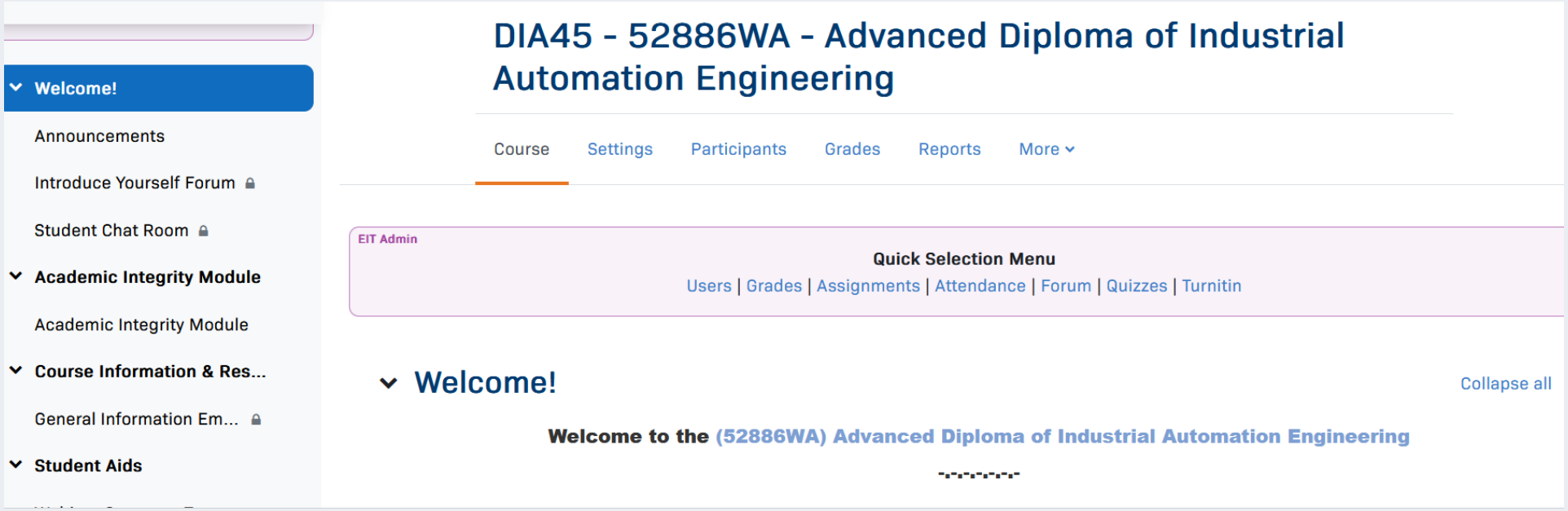
Typical Advanced Diploma Structure

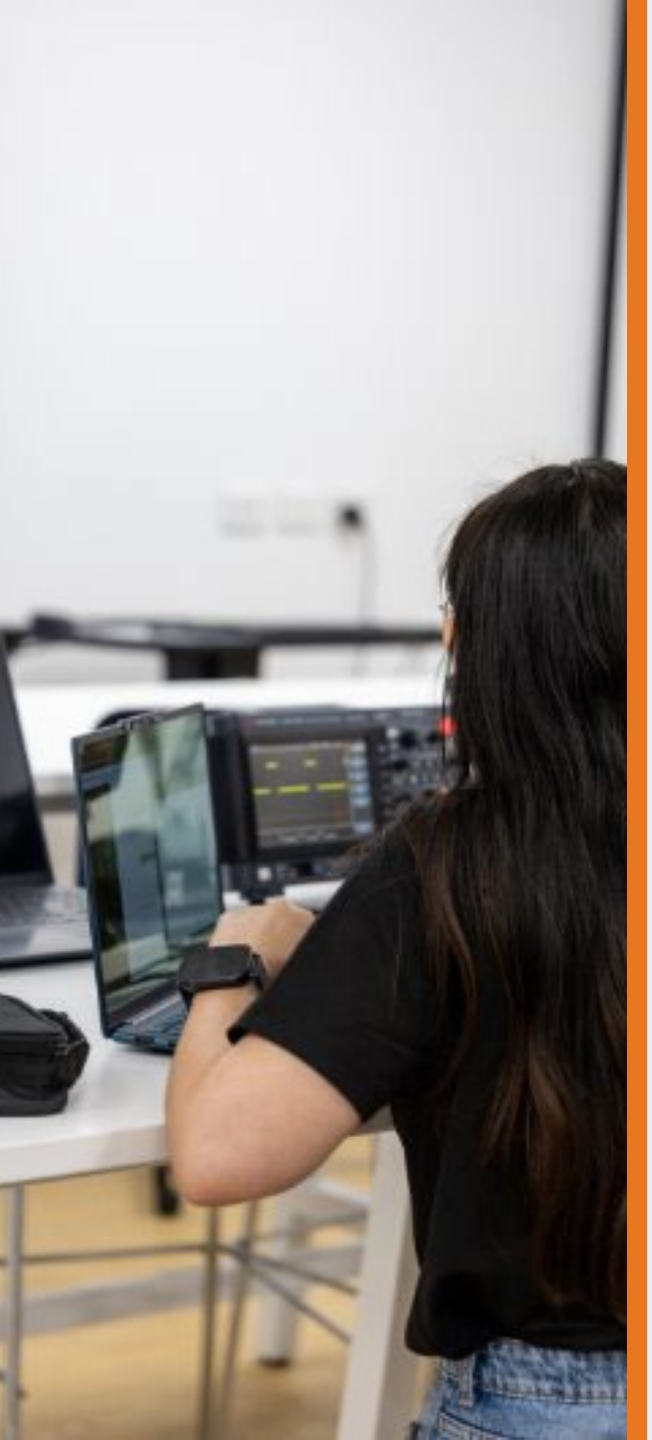
Unit code	Unit title	Duration
DCMCMT601	Apply construction materials testing fundamentals	2 Weeks
MSL924006	Use laboratory application software	2 Weeks
DCMCEP603	Apply basic principles in civil engineering projects	2 Weeks
DCSBME604	Use basic mathematics in engineering	6 Weeks
DCSCON605	Use basic construction in engineering	3 Weeks
DCSPHY606	Use physics in engineering	3 Weeks
DCSSTA607	Use statics in engineering	4 Weeks
DCSMAT608	Use materials in engineering	2 Weeks
DCSOEE609	Operate in an engineering environment	2 Weeks
DCSMTH610	Use mathematics in engineering	4 Weeks
DCMBST611	Interpret basic soil testing	3 Weeks
DCMSST612	Use soil stabilisation techniques	3 Weeks
DCSBFE613	Use basic fluids in engineering	3 Weeks
DCMCTP614	Interpret basic concrete tests	3 Weeks
DCSSOM615	Use strength of materials in engineering	4 Weeks
DCMCAT616	Interpret basic aggregate tests	2 Weeks
DCMQAM617	Assure quality assurance in materials testing	2 Weeks
DCSENV618	Use basic environmental concepts in engineering	2 Weeks
DCSBSA619	Use basic structural analysis in engineering	2 Weeks
DCMSTP620	Determine basic steel properties, applications and tests	3 Weeks
DCMPRM621	Apply principles of rock mechanics	3 Weeks

**This is an extract from the 52896WA Advanced Diploma of Civil and Structural Engineering (Materials Testing) course.

Moodle

- Learning Management System





Student Support

Learning Support Officers (LSOs) are in addition to the academic support (instructors/lecturers).

LSOs guide the students from the onboarding process through to graduation.

LSOs are the go-to person for students, offering support, encouragement and answering any questions relating to a student's studies.

One LSO is dedicated to the student for the duration of either a professional certificate or VET program.

They provide guidance on non-content related information such as :

- Live tutorial information
- Assessment dates, times and extensions
- Grades
- Health and well-being information

Resources

- Readings
- Slides
- Remote Labs
- Assessments
- Videos

Webinars

Live Interactive Webinars

Instructors

Entry Requirements

Student applications are considered on a case-by-case basis, and the following minimum entry requirements are to be strictly adhered to:

Applicants must have at least a Year 12 or Cert III trade qualification or equivalent in a related field;

AND

- They must have at least 2 years' work experience in a related field

OR

- At least 4 years' work experience in a related field – subject to acceptance of an application for Credit to Entry **

AND

- Satisfactory English language proficiency at an English pass level in a Senior Certificate of Education or equivalent; OR
- A specified level of achievement in a recognized English language test such as: IELTS (or equivalent) at a score of at least 5.5 (with no individual band score less than 5.0); or equivalent; OR
- Satisfactory completion of another course offered by EIT, or by another tertiary institution, in English.
- **These are the general entry requirements and each course page should be checked for any additional requirements, over and above this.**

Accreditation & Recognition

The Engineering Institute of Technology (EIT) Australia is a nationally accredited / recognized institution in Australia. SAQA generally recognizes the Engineering Institute of Technology Australia qualifications that are registered by the Tertiary Education Quality and Standards Agency (TEQSA), Australian Skills Quality Authority (ASQA) and the National Register of Vocational Education and Training (VET).

EIT is also a Registered Training Organization (RTO) in the Vocational Education and Training (VET) sector – provider number 51971, registered with and regulated by the Australian Skills Quality Authority (ASQA).

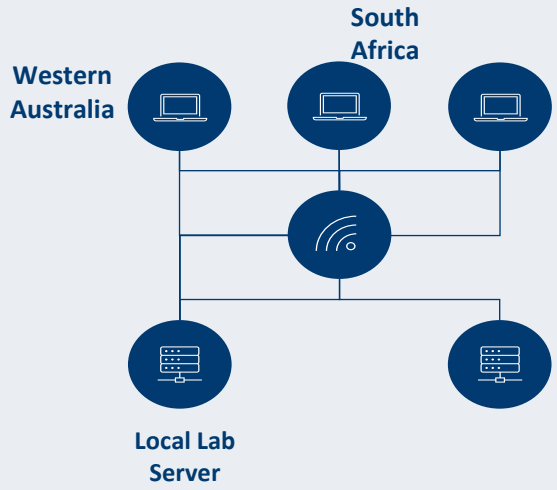
Some of EIT's online Advanced Diplomas are fully or provisionally accredited by Engineers Australia and internationally recognized under the Dublin Accord. Please see full details about the international accords and eligible programs on our website.

Remote and Virtual Labs

When studying at EIT, students complete practical exercises using a combination of remote and virtual laboratories and simulation software.

Practical Experience

In these remote and virtual laboratories students can control physical equipment and sensors equivalent to the traditional university engineering lab.



1. Traditional, physical labs at a distance, but operating in real time.
2. Accurate representation of current industry hands-on.
3. The interface to equipment is digital and data-driven.
4. High availability and asynchronous – anytime.
5. Access to specialised equipment in a safe and near-limitless testing environment.
6. Diverse student cohorts.
7. Bandwidth requirements can be demanding.
8. Support

Fees & Payments

VET Student Loan (VSL) Program is available for this course:

VSL approved course, maximum tuition fee for Australian students: AUD $12,112.00

This means eligible students can use a VET Student Loan to pay their tuition fees up to a maximum loan cap amount, to be repaid through the Australian Taxation System.

If you have been approved for a VET Student Loan, the borrowed amount will be incurred as a debt that is repayable to the Commonwealth government.

Click here to learn more about your eligibility and applying for VET Student Loan (VSL) on this course.

Payment Methods

Learn more about payment methods, including payment terms & conditions and additional non-tuition fees.

Introduction – Presenter

Dr. Hossein Tafti| Senior Lecturer, Program Leader

- Over 10 years of experience as an academic in top Australian and overseas universities.
- PhD in Electrical Engineering from NTU, Singapore.
- Senior Member of IEEE
- Associate Fellow of AdvanceHE
- Involved in developing and maintaining the highest quality in the Advanced Diplomas, Bachelor's, Master's and Doctorate of Engineering courses.

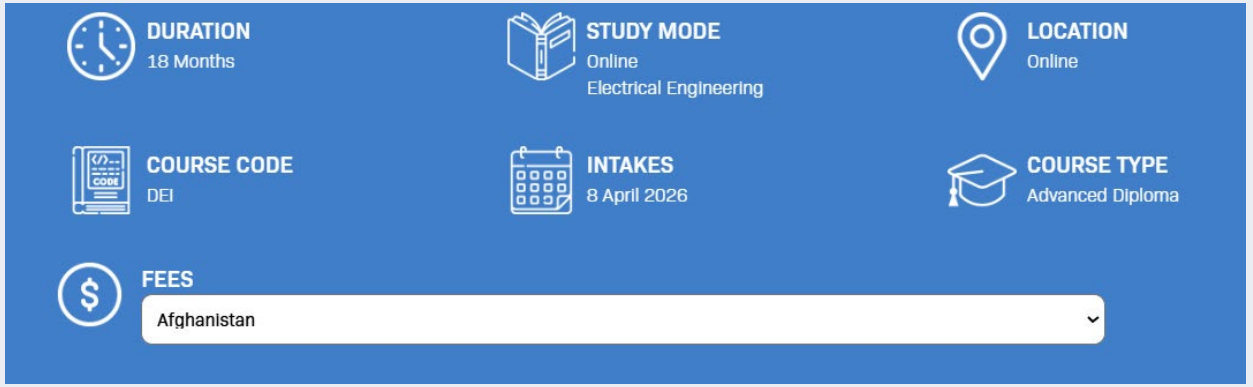
Engineering Institute of Technology.

52882WA Advanced Diploma of Electrical and Instrumentation (E&I) Engineering for Oil and Gas Facilities

EIT CRICOS Provider Number: 03567C | EIT Institute of Higher Education: PRV14008 | EIT RTO Provider Number: 51971

Overview

This advanced diploma is delivered with a strong practical focus and covers a variety of skills such as electrical engineering and instrumentation and control engineering. Upon completion of this program, you will gain skills and knowledge in the latest and developing technologies in electrical and instrumentation (E&I) engineering for oil and gas facilities.



Course Benefits:

- Skills in the latest electrical and instrumentation technologies
- Practical guidance from experts in the field
- Global networking contacts in the industry

*Fees vary by country.

https://www.eit.edu.au/courses/advanced-diploma-of-electrical-and-instrumentation-ei-engineering-for-oil-and-gas-facilities/

Program Structure

The course includes 19 modules and 2 units of competency.

Module Code	Module Title	Duration
DEIFEP601	Fundamentals of Electrical Engineering and Power Distribution	6 Weeks
DEIFPI602	Fundamentals of Process Instrumentation	6 Weeks
DEIEDS603	Electrical Drawings, Documentation and Schematics	2 Weeks
DCSBME604	Use basic mathematics in engineering	6 Weeks
DEITRN605	Transformers	2 Weeks
DEISGR606	Switchgear for Power Distribution	2 Weeks
DEICAB607	Cables and Wires – Maintenance and Installation Practice	1 Week
DEIELS608	Safety, Earthing, Bonding, and Lightning Protection	4 Weeks
DEIPQP609	Power Quality and Power Protection	4 Weeks
DEIEMD610	AC Electrical Motors and Variable Speed Drives	5 Weeks
DEIHAZ611	Electrical Equipment in Hazardous Areas	3 Weeks
DEIISD612	General Instrumentation Standards and Best Practice in Drawings	3 Weeks
DEIPCB613	Process Control Basics	5 Weeks
DEICIM614	Calibration, Installation and Maintenance of Instruments	2 Weeks
DEICVS615	Control Valve Sizing, Selection and Maintenance	3 Weeks
DITPLC611	Create PLC programs using IEC 61131-3	6 Weeks
DEISCA617	SCADA and Distributed Control Systems	4 Weeks
DEIIDC618	Industrial Data Communications	3 Weeks
DEISIS619	Safety Instrumentation and Emergency Shutdown Systems (IEC 61511 and IEC 61508)	2 Weeks
DEIWFC620	Wellhead and Flowline Control Systems	1 Week
DEIFPS621	Oil and Gas Specific Applications for FPSO Facilities	2 Weeks

Learning Outcomes

- Evaluate contemporary issues in electrical and instrumentation in the oil and gas industry
- Differentiate and identify appropriate electrical distribution equipment and protection systems
- Assess and implement relevant earthing and safety regulations
- Develop appropriate procedures necessary to operate and maintain electrical equipment and process instrumentation
- Analyse process control systems
- Differentiate and justify appropriate process control equipment and protection systems related to valves, SCADA, instruments, shutdowns and flowlines
- Formulate engineering solutions to typical scenarios related to electrical and instrumentation systems in the industry.
- Manage complex projects on time and within budget
- Manage self-autonomy to achieve objectives within organizations that have outputs based on technological application and develop professional practice in the field
- Communicate professionally and effectively

Potential Job Outcomes

Graduates of this program may find roles as:

- Instrumentation technician
- Electrical technician
- Service technician
- E&I technician
- Automation technician
- Engineering associate
- Project Supervisor
- Senior technician
- Field service technician
- Electrical Supervisor
- Industrial field service technician
- Production technician
- Oil & Gas technician
- Reservoir engineering associate

Program Value & Distinctiveness

- Designed with Industry Input
- Strong Hazardous Area & Safety Focus
- Integrated Electrical + Instrumentation Approach
- Practical, Application-Oriented Learning
- Flexible for Working Professionals
- Pathway to Higher Engineering Qualifications

Highlight of a Unit: **DITPLC611** - Create PLC programs using IEC 61131-3

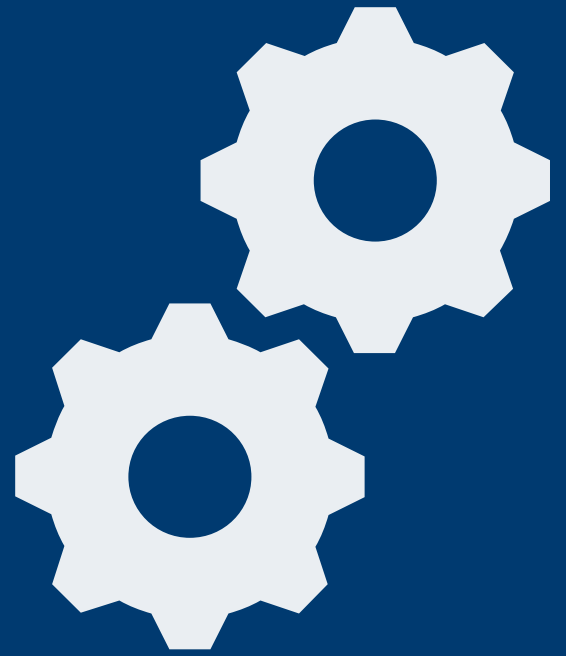
- Programming based on the international IEC 61131-3 standard used globally in industrial automation
- Hands-on development of PLC logic using Ladder Diagrams, Function Blocks and Structured Text
- Design and implementation of control systems for motors, pumps, valves and process equipment
- Practical troubleshooting, debugging and commissioning skills
- Real-world application to oil & gas plant automation and interlocking systems
- High-demand automation competency valued across LNG, refinery and process industries

Highlight of a Unit: **DEIFPS621** - Oil and Gas Specific Applications for FPSO Facilities

- Focuses on practical applications for **Floating Production, Storage and Offloading (FPSO)** facilities, a core asset in offshore oil & gas operations
- Builds on key E&I engineering knowledge with **real-world platform system examples**
- Covers **smart maintenance techniques** used to reduce unplanned downtime on complex offshore systems
- Teaches selection and **evaluation of instrumentation and safety systems** specific to FPSO environments
- Explores process safety and emergency response systems, including alarms and communication systems
- Develops capability in understanding safe operation tools like flare flame front generators and alarm responses, critical for offshore safety performance

Software Tools

- AutoCAD
- ETAP
- Geogebra
- Matlab/Simulink
- PC-Control LAB3
- PicoScope
- Safegrid
- SmartDraw
- VPLabs.



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52892WA Advanced Diploma of Electrical and Instrumentation (E&I) Engineering in Mining

Overview

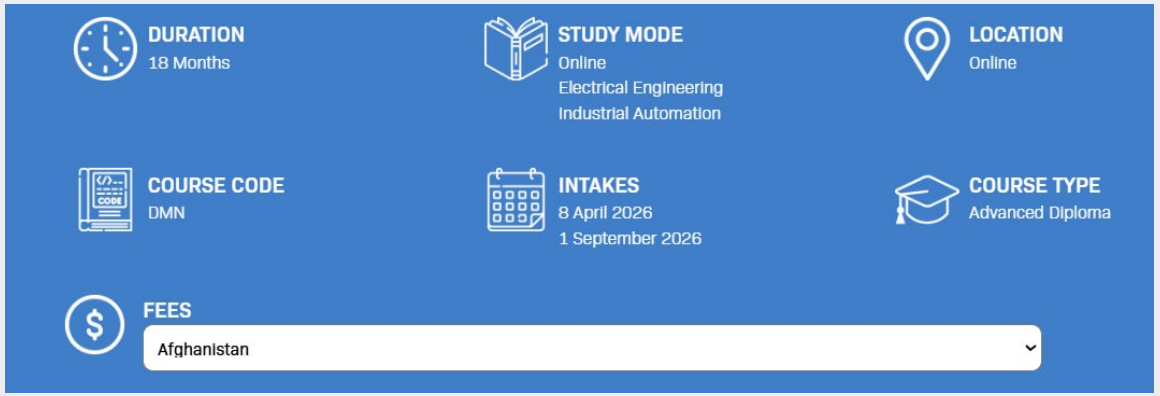
This advanced diploma is delivered with a strong practical focus and covers a variety of skills required in the mining operations industry. Upon completion of this program, you will gain skills and knowledge in the latest and developing technologies in electrical and instrumentation in mining operation. This program aims to impart the necessary electrical and instrumentation engineering skills required in the mining operations industry, and all the theory covered is tied to a practical outcome.

Course Benefits:

- Skills in the latest electrical and instrumentation technologies in mining
- Practical guidance from experts in the field
- A world class Advanced Diploma of Electrical and Instrumentation (E&I) Engineering in Mining

*Fees vary by country.

https://www.eit.edu.au/courses/advanced-diploma-of-electrical-and-instrumentation-ei-engineering-in-mining/



Program Structure

The course includes 18 modules and 1 unit of competency:

Module Number	Module Name	Duration
DEEEDR605	Electrical Drawings	3 Weeks
DCSBME604	Use Basic Mathematics in Engineering	6 Weeks
DEIFEP601	Fundamentals of Electrical Engineering and Power Distribution	6 Weeks
DMNCBS603	Circuit Breakers and Switchgear in Mining	5 Weeks
DEEPSP611	Power System Protection	5 Weeks
DMNMTC606	Motor Control	4 Weeks
DMNDCO607	Data Communications	4 Weeks
DMNETH608	Ethernet	3 Weeks
DMNTCP609	TCP/IP and VoIP	3 Weeks
DMNTMS610	Terrestrial Microwave and Satellite Communications	3 Weeks
DMNLFS611	Leaky Feeder Systems	2 Weeks
DMNWLA612	Wireless LANs and Mesh Networks	5 Weeks
DEIFPI602	Fundamentals of Process Instrumentation	6 Weeks
DMNFBU614	Fieldbuses	3 Weeks
DMNSCD615	SCADA, Data Acquisition and OPC	4 Weeks
DEIPCB613	Process Control Basics	5 Weeks
DIAPLC610	Programmable logic controllers	3 Weeks
DMNDCS618	Distributed Control Systems	2 Weeks
DMNPSS619	Personal Safety Systems	2 Weeks

Learning Outcomes

As engineering paraprofessionals, graduates will be able to:

- Recognize and apply the fundamentals of electrical engineering and process engineering in a variety of mining industries
- Interpret electrical drawings, documentation and schematics
- Identify and explain the fundamental features of power distribution, cabling and protection in mining applications
- Recognize and apply a broad range of industrial data communication concepts and equipment applicable to mining
- Identify the risks associated with electric equipment in hazardous areas
- Manage the efficient and safe operation of a wide range of electrical and instrumentation equipment
- Interpret the basic principles of SCADA and Distributed Control Systems in the context of mining operations
- Interpret the basic features of process control and associated plant instrumentation in the context of mining operations
- Apply the principles required for operation, maintenance and troubleshooting of mining instrumentation
- Identify and analyze contemporary issues in electrical and instrumentation engineering practice
- Identify and suggest solutions to problems with SCADA, radio telemetry, wireless network, satellite network, and fieldbus systems

Potential Job Outcomes

Graduates of this program may find roles as:

- Electrical and Instrumentation Engineering Technician
- Instrumentation Specialist
- Automation Engineering Specialist
- Control Engineering Consultant
- Control Systems Technologist
- Instrument Mechanic
- Process Analyzer
- Energy Technologists
- Operations Manager
- Development & Testing Technician
- Signal Processing Technician
- Electrical & Instrumentation Project Engineer

Program Value & Distinctiveness

- Designed with Industry Input
- Strong Data Communication Focus
- Integrated Electrical + Instrumentation Approach
- Practical, Application-Oriented Learning
- Flexible for Working Professionals
- Pathway to Higher Engineering Qualifications

Highlight a Unit: DMNSCD615 - SCADA, Data Acquisition and OPC

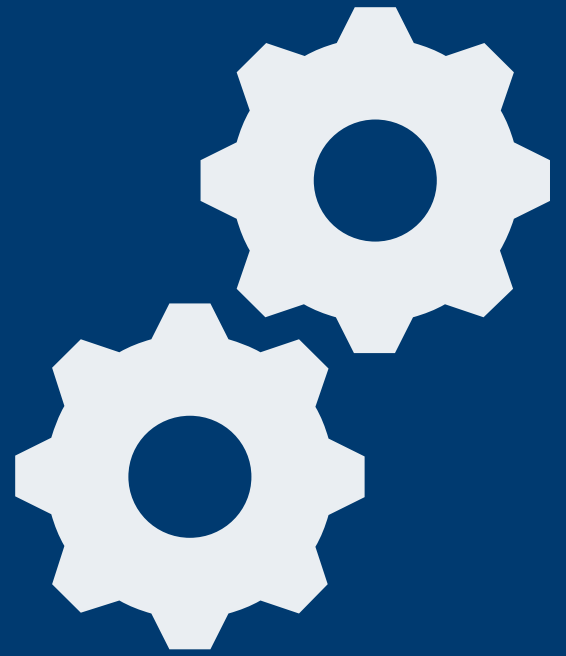
- Supervisory Control and Data Acquisition (SCADA) as used in the mining industry
- Comparison of WAN technologies, data acquisition systems and components
- Application of OPC to SCADA
- Extremely valuable for remote monitoring and control of mining operations

Highlight a Unit: DMNMTC606- Motor Control

- Electric motors types and their control as applicable to mining industries
- Principles of AC and DC motors
- Variable Speed Drives (VSDs)
- Motor gearboxes, brakes and other motor control devices

Software Tools

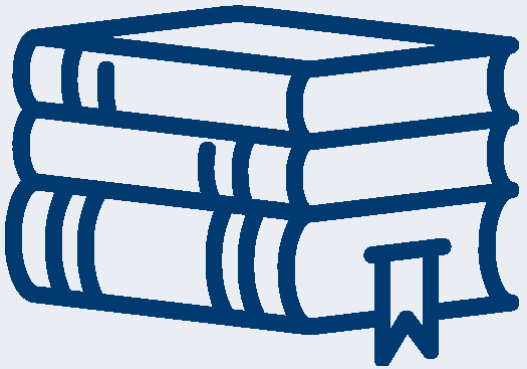
- AutoCAD
- Citect
- Codesys
- EasyPower
- OPC Client
- PC-Control LAB3
- SMARTDRAW
- Wireshark



Thank You!

What courses cover this topic?

- This webinar/topic relates to our school of Electrical Engineering and is particularly found in the following courses:
- 52882WA Advanced Diploma of Electrical and Instrumentation (E&I) Engineering for Oil and Gas Facilities
- 52892WA Advanced Diploma of Electrical and Instrumentation (E&I) Engineering in Mining



Upcoming Courses

Please note courses listed below are subject to their own regulatory requirements—refer to the relevant website for further information.

Engineering Institute of Technology (EIT) *Australian Accredited Qualifications & Short Courses*	Start Date
52932WA Advanced Diploma of Plant Engineering	03/03/2026
Professional Certificate of Competency in 5G Technology and Services	03/03/2026
52883WA Advanced Diploma of Applied Electrical Engineering (Electrical Systems)	08/04/2026
52872WA Advanced Diploma of Robotics and Mechatronics Engineering	08/04/2026
52910WA Graduate Certificate in Hydrogen Engineering and Management	05/05/ 2026
Graduate Certificate in Civil Engineering: (Structural Analysis and Design)	29/06/2026
Graduate Diploma of Engineering (Mechanical)	29/06/2026
Online - Master of Engineering (Industrial Automation)	29/06/2026
Undergraduate Certificate in Industrial Automation Engineering	20/07/2026
On-Campus - Bachelor of Science (Mechanical Engineering)	20/07/2026
Doctor of Engineering	20/07/2026

Enter EIT's Photo Challenge

Showcase engineering from anywhere in the world, one photo, one moment.
Closes: 31 March 2026 (5pm AWST)

How to Enter

- Capture an engineering-related photo
- Post on Instagram, LinkedIn, Facebook or TikTok
- Use **#EITPhotoChallenge2026** and tag EIT

Prizes

1st: US$1,000
2nd: US$750
3rd: US$500
5 × US$100 prizes

Global competition | Winners selected by EIT |
Terms and Conditions apply.

Q&A

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Courses
https://www.eit.edu.au/schedule/

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