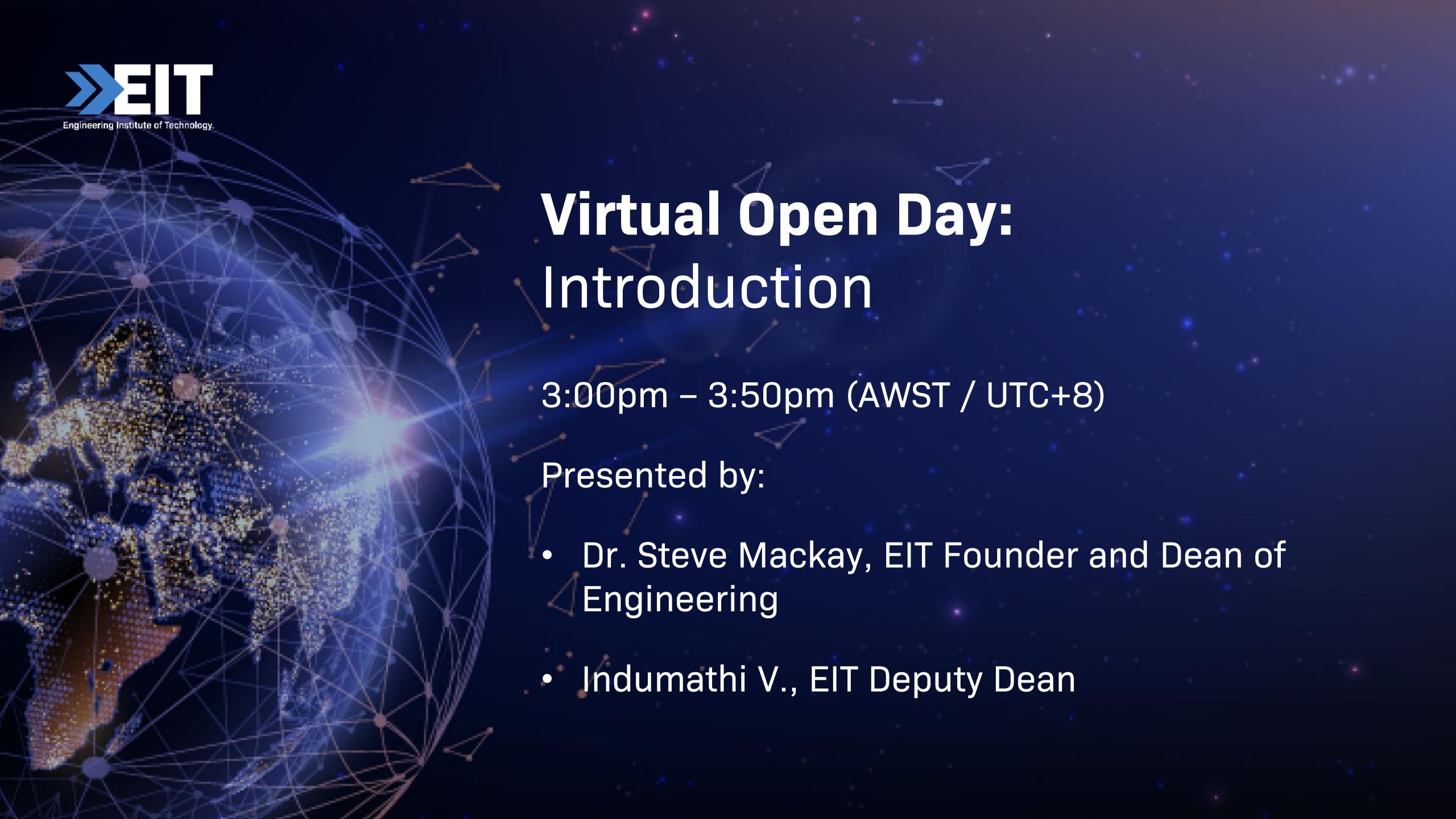

EIT
Engineering Institute of Technology.
Welcome to EIT's first-ever Virtual Open Day!
Thursday, 27 October 2022
3:00pm – 7:00pm (AWST / UTC+8)
Presented by:
EIT Staff and Academics
Watch Recording Here
CRICOS Provider Number: 03567C | Higher Education Provider Number: 14008 | RTO Provider Number: 51971

Agenda

(AWST)	Welcome and Introduction
Now	Hear from EIT's Dean and Deputy Dean of Engineering
4:00pm	Academic/technical session
5:00pm	Short courses and VET (such as Advanced Diplomas)
6:00pm	Higher Education: Online and On-Campus
7:00pm	End of Virtual Open Day



Virtual Open Day: Introduction

3:00pm – 3:50pm (AWST / UTC+8)

Presented by:

- Dr. Steve Mackay, EIT Founder and Dean of Engineering
- Indumathi V., EIT Deputy Dean

Introduction - Presenter

Dr. Steve Mackay | EIT Dean of Engineering

- Founder of EIT
- His leadership has inspired EIT's unique and distinctive approach to engineering education.
- Since inception, three core objectives define the essence of the institute:

1. *Collaborating comprehensively with industry to ensure graduates are job ready*
2. *Employing online platforms of learning to facilitate student accessibility and engagement*
3. *Keeping the business of education student-centric*

"Education is the most powerful weapon which we can use to change the world."

Nelson Mandela

Our History

- IDC Technologies began delivering short courses in 1991, with over 530,000 attendees worldwide, including corporate clients such as Rolls Royce, NASA, BP, Rio Tinto, and BHP.
- EIT was born in 2008, delivering job-focused engineering certificates, advanced diplomas, bachelor and master degrees, and now of course, a Doctor of Engineering.
- We employ the latest online technologies in engineering education (with remote labs and live sessions).
- We have 300+ highly experienced lecturers who stream into our classrooms from cities around the world, including London, Perth, New York, Sydney, Houston, Toronto and Kalgoorlie.
- Our students are based in over 160 countries.
- We won the National award for Education in 2021 for Export.

Our History

- Dec ’91: the very first course - data comms – presented in Perth.
- Courses presented to NASA in Houston, Rolls Royce in Derbyshire and most blue chip companies around the world.
- Peaking at 60-70 on-site courses, plus 40-50 public courses, per month.
- 50 instructors travelling the world each month.
- 300,000 brochures mailed each month.
- Dot Com collapse, followed by the 2008 crash saw the birth of EIT and the first online course: an Advanced Diploma in Industrial Automation in 2008.
- In 2012, the higher education regulator, TEQSA, refused the online master’s application (unworkable and online!).
- Now 4500+ students for 2022 from certificates, dips, ad dips, bachelor, master and doctoral degrees.

About EIT

We are dedicated to ensuring that you receive a world-class education and gain skills that you can immediately implement in the workforce.

Engineering Specialists

EIT is one of the only institutes in the world specializing in Engineering. We deliver professional certificates, diplomas, advanced diplomas, undergraduate and graduate certificates, bachelor's and master's degrees, and a Doctor of Engineering.

Industry Oriented Programs

Our programs are designed by industry experts, ensuring you graduate with cutting-edge skills that are valued by employers. Our program content remains current with rapidly changing technology and industry developments.

World-Class Australia Accredited Education

Our vocational programs and higher education degrees are registered and accredited by the Australian Government. We have programs that are also recognized under three international engineering accords.

Industry Experienced Lecturers

Our lecturers are highly experienced engineers and subject specialists with applied knowledge. The technologies employed by EIT, both online and on-campus, enable us to source our lecturers from a large, global pool of expertise.

Unique Delivery Model

We deliver our programs via a unique methodology that makes use of live and interactive webinars, an international pool of expert lecturers, dedicated learning support officers, and state-of-the-art technologies such as hands-on workshops, remote laboratories, and simulation software.

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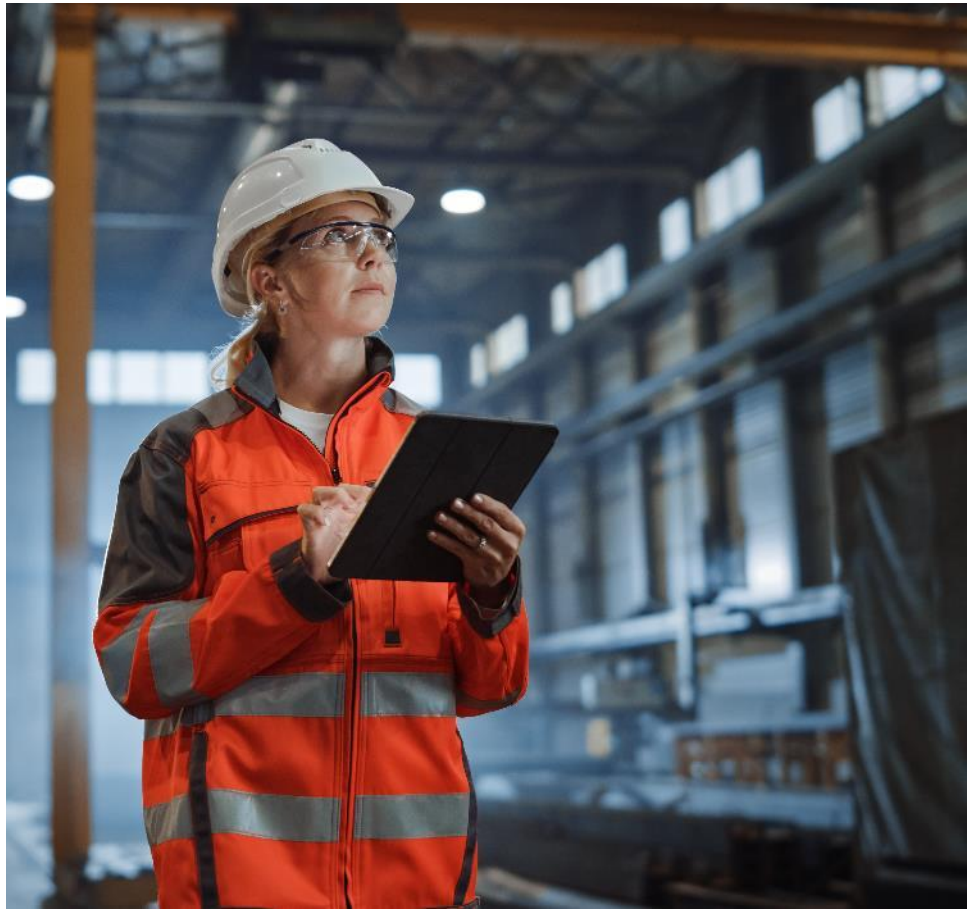
Why Undertaking an Engineering Qualification is a Great Decision

“Education is what remains after one has forgotten what one has learned in school.”
Albert Einstein

State of Play

- Engineering is a tough but worthwhile degree.
- Hands-on practical career.
- Remuneration is good.
- You can work anywhere in the world.
- Achieve something significant in your career.
- Novel, cutting edge and interesting problems in work.
- Ongoing learning for the rest of your life.
- Distinguish yourself from other engineers.
- Create new industries, services and products.



Introduction - Presenter

Indumathi V.| EIT Deputy Dean

Indu is a Chartered Professional Engineer and a Fellow of Engineers Australia with over 18 years of experience in Engineering, Leadership and Engineering Education and is currently working on her PhD in Engineering Education.

As a passionate educator, her current PhD project focuses on using EEG brainwaves to empower student engagement and participation in the classroom.

“EIT has grown very strongly since I started at the beginning of 2019. Their innovative approach to accessible, flexible, and high-quality education is like no other in the world. The success is strongly attributed to the passionate team of lecturers and staff here at EIT.”

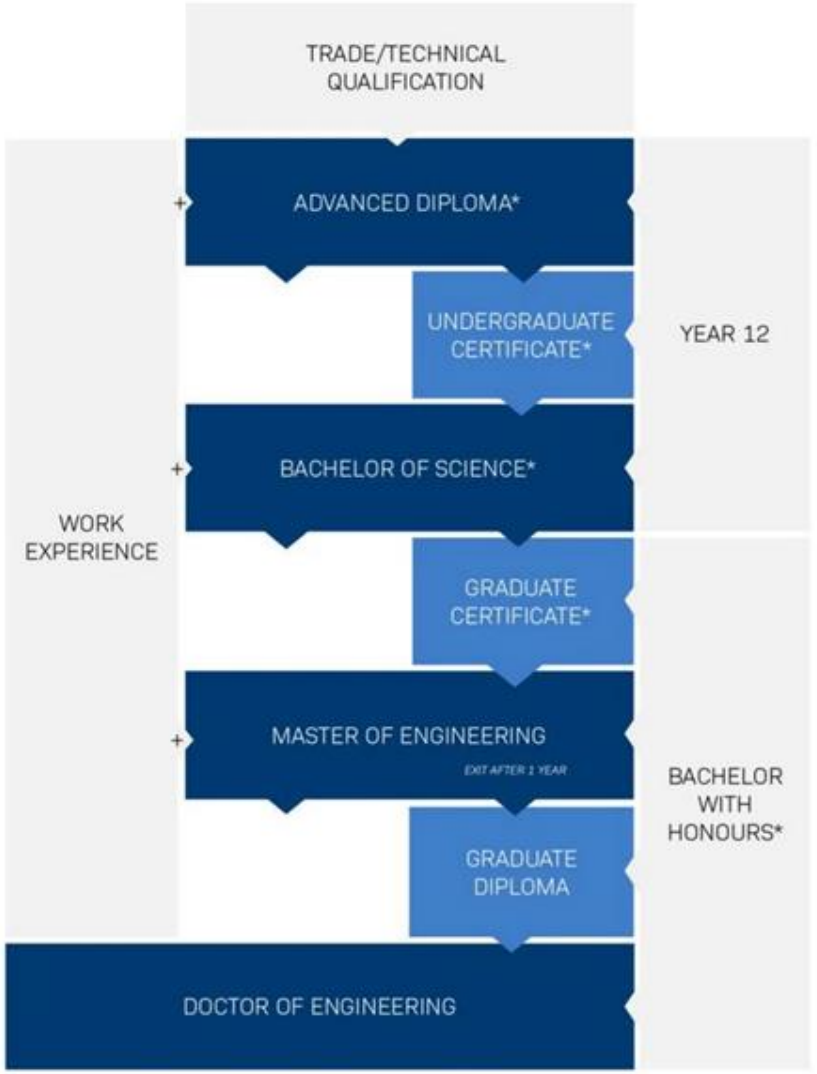
Lifelong Learning

EIT provides clear study pathways to allow you to progress from one qualification to another and transition your career from technician, technologist to professional engineer.

We deliver pathways for students with recent secondary education, to those working in industry who wish to formalize their practical experience for career advancement or upskill for evolving technology and industry requirements.

Your Lifelong Learning Journey Pathways & Articulation at EIT

EIT Programs – Lifelong Learning Journey



Professional Certificate of Competency
3-month, non-accredited courses that provide professional development in specific areas of interest.

Diploma
12-month Diploma of Leadership and Management.

Advanced Diplomas
18 to 24-month Advanced Diplomas for those wanting to formalize trade qualifications and/or relevant work experience.

Undergraduate Certificate
6-month full-time (or part-time equivalent) undergraduate qualification containing four units from our Bachelor's degree.

Bachelor of Science
3 years full-time (or part-time equivalent).

Graduate Certificate
Upskill in 6 months full-time (or part-time equivalent) with these postgraduate qualifications containing four units from our Master's degrees.

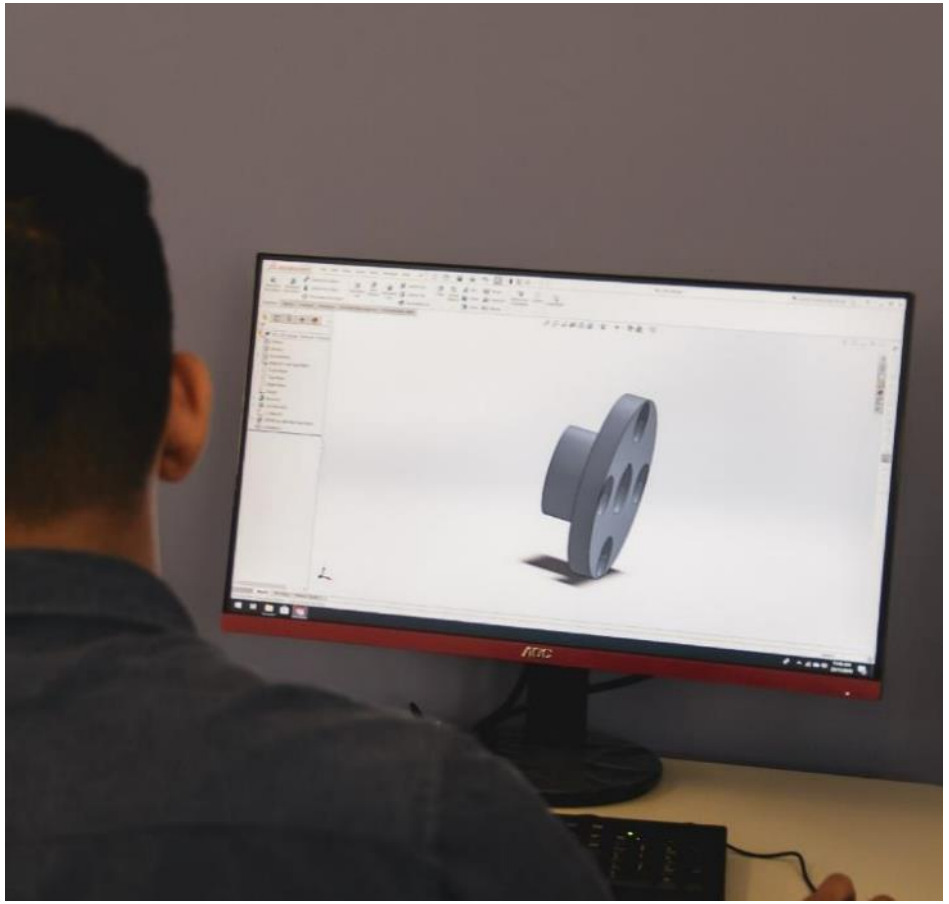
Graduate Diploma
Study 8 units from our Master's degrees over 12 months.

Master of Engineering
2 years part-time intensive.

Doctor of Engineering
Make your own contribution to the wider body of professional engineering knowledge and solve industry problems.

Studying Online at EIT

Delivery



Our Online Learning Methodology

Our unique online delivery methodology makes use of:

- Live and interactive tutorials.
- An international pool of expert lecturers.
- Dedicated learning support officers, and
- State-of-the-art technologies such as hands-on workshops, remote and virtual laboratories, and simulation software.

As an online student, you will benefit from EIT's unique personalized synchronous delivery methodology that encourages you to advance your technical and technological knowledge, while forming global networks and balancing life and work commitments.

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.

This means that even though you are studying online, you are not missing out on your hands-on, practical experience.

For the on-campus students, workshops and work integrated learning via an internship is incorporated into the student journey.

Real World Ready

Through these hands-on exercises using simulation software, remote laboratories, practical based assignments and interactive discussion groups, students can grasp new knowledge and apply it successfully to the real world.

Each hosted engineering software and hardware can be controlled in real time; it's as simple as logging in and selecting an available lab and timeslot!

Student Support

“As an LSO I love supporting our students on their learning journey and ensuring their experience with EIT is a positive and rewarding one”
Arjun Danee
Higher Education LSO

"As an LSO it is rewarding to start a course then follow, encourage and support the students through to the end and see them achieve their qualification."
Sharon Bowler
VET LSO

- 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 support, encouragement and go-to person for any question relating to a student’s studies.
- One LSO is dedicated to the student for the duration of either a professional certificate or VET program.
- One LSO is dedicated to each unit in Higher Education studies at EIT.
- EIT has LSOs based in: South Africa, Switzerland, Zimbabwe, New Zealand and Australia.

Why study with us?

EIT
Engineering Institute of Technology.

*2020/2021 aggregated data from the Student Experience Survey – qilt.edu.au

Quality of Entire Educational Experience for Undergraduate Engineering Programs*

Quality of Entire Educational Experience for Postgraduate Engineering Programs*

Student Support for Undergraduate and Postgraduate Engineering Programs*

Teaching Quality for Undergraduate and Postgraduate Engineering Programs*

Accreditation

Registered Training Organisation (RTO) – RTO 51971

- Since 2008
- Diploma, Advanced Diploma, Grad Cert
- Registered and regulated by the Australian Skills Quality Authority (ASQA)

Institute of Higher Education – PRV14008

- Since 2014.
- Undergrad Cert, Grad Cert, Grad Dip, Bachelor, Masters, Doctorate.
- Registered and regulated by the Tertiary Education and Quality Standards Agency (TEQSA).

CRICOS (Commonwealth Register of International Courses for Overseas Students) – 03567C

- Since 2018.
- Higher Education only .
- Registered and regulated by TEQSA.

FEE-HELP Provider (Higher Education)

- Since 2017.

VET Student Loans approved provider (VET).

- Since 2021.

Engineers Australia

- Accreditation for 3 x Advanced Diplomas, 4 x Bachelors and 2 x Masters.

Internationally Recognized Programs

Programs accredited and currently offered at the level of engineering associate Dublin Accord		
Advanced Diploma of Industrial Automation (52886WA). *Formerly (52708WA), (52403WA). This accredited program must include the "Fundamentals of Professional Engineering" (FPE) module introduced from August 2013.*	2013 (August entry)	F
Advanced Diploma of Applied Electrical Engineering (52883WA). *Formerly (52726WA), (52465WA). This accredited program must include the "Fundamentals of Professional Engineering" (FPE) module introduced from August 2013.*	2013 (August entry)	F
Advanced Diploma of Mechanical Engineering Technology - (52884WA). *Formerly (52810WA).*	2020	P
Only the online delivery mode is accredited		

These qualifications are recognized (through the Dublin Accord) by leading professional associations and societies in Australia, Canada, Ireland, Korea, New Zealand, South Africa, United Kingdom and the United States. This professional recognition greatly improves the global mobility of graduates, and offers you the opportunity of a truly international career.

Internationally Recognized Programs

Programs accredited and currently offered at the level of engineering technologist Sydney Accord		
Bachelor of Science (Electrical Engineering)	2017	F
Bachelor of Science (Mechanical Engineering)	2016	F
Bachelor of Science (Civil and Structural Engineering)	2017	F
Bachelor of Science (Industrial Automation Engineering)	2016	F
Accredited for online delivery and for on-campus delivery at the Perth Campus *Formerly on campus at 180 Royal Street East Perth*		

These qualifications are recognized (through the Sydney Accord) by leading professional associations and societies in Australia, Canada, Chinese Taipei, Hong Kong China, Ireland, Korea, New Zealand, South Africa, United Kingdom and the United States.

Internationally Recognized Programs

Programs accredited and currently offered at the level of professional engineer Washington Accord		
Master of Engineering (Electrical Systems)	2017	F
Accredited for on-line delivery and on-campus delivery at the Perth campus		
Master of Engineering (Industrial Automation)	2017	F
Accredited for on-line delivery and on-campus delivery at the Perth and Melbourne campuses *The Bentley Campus offering was formerly delivered at 180 Royal Street East Perth*		

These qualifications are recognized (through the Washington Accord) by leading professional associations and societies in Australia, Canada, China, Chinese Taipei, Hong Kong China, India, Ireland, Japan, Korea, Malaysia, New Zealand, Russia, Singapore, South Africa, Sri Lanka, Turkey United Kingdom, United States and Pakistan.

Why Choose EIT

EIT
Engineering Institute of Technology.

- Internationally endorsed Australian qualification
- Practical, relevant courses driven by industry and aligned to it
- Presented by engineering professionals from around the world
- Various programs accredited by Engineers Australia
- Access to an enormous depth of reference and research materials
- Very supportive learning environment
- Specialist in engineering
- Lifelong learning journey all the way to a Doctor of Engineering
- Committed to women in engineering

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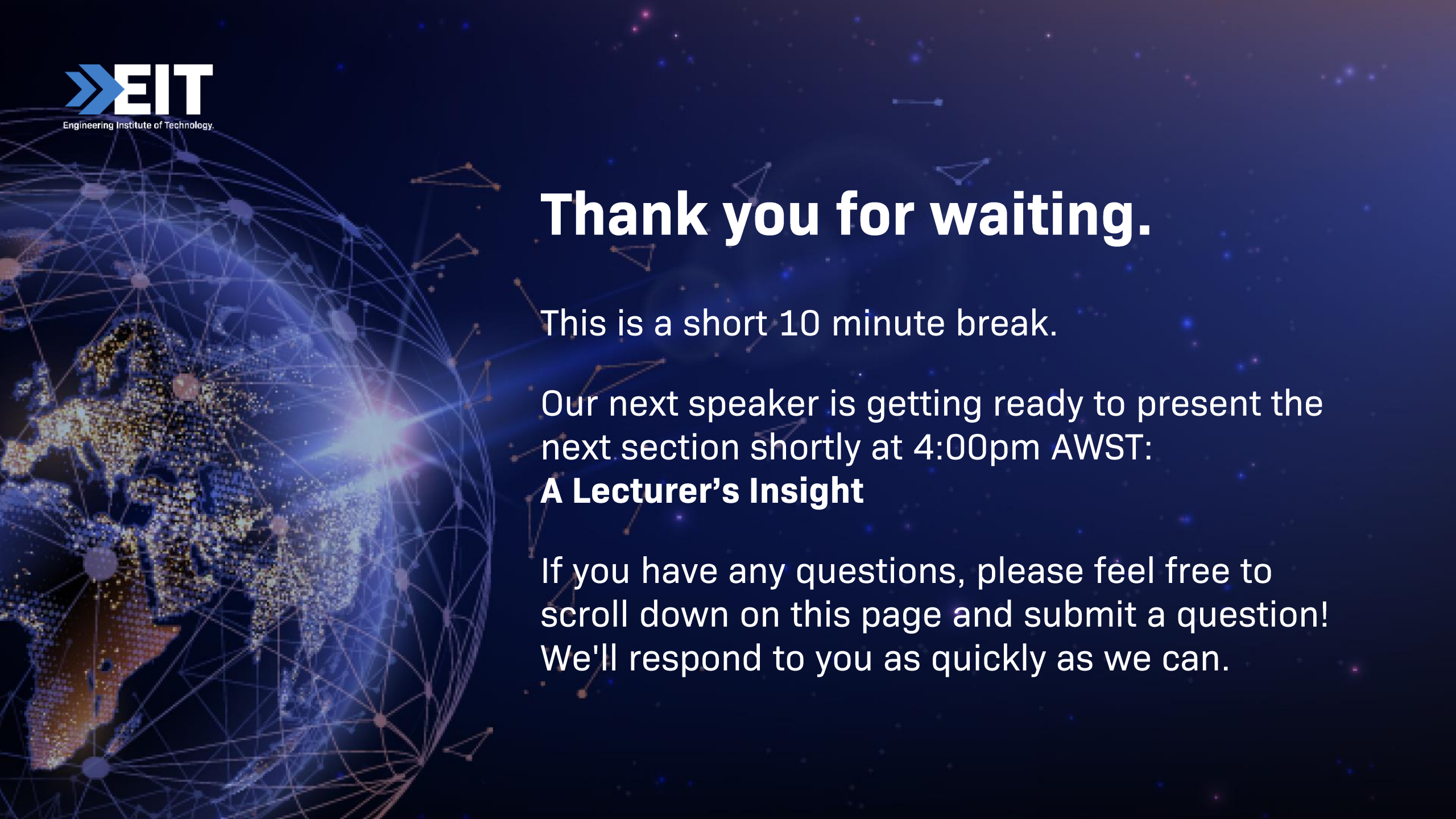
Q&A



Thank you for waiting.

This is a short 10 minute break.

Our next speaker is getting ready to present the next section shortly at 4:00pm AWST:
A Lecturer's Insight

If you have any questions, please feel free to scroll down on this page and submit a question! We'll respond to you as quickly as we can.

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Engineering Institute of Technology.

Virtual Open Day:
A Lecturer's Insight

4:00pm – 4:50pm (AWST / UTC+8)

Presented by:
Dr. Milind Siddhpura
Course Coordinator & Lecturer
(Mechanical Engineering)

Introduction - Presenter

Dr. Milind Siddhpura | Course Coordinator and Lecturer

- Over 18 years of experience as an academic in top Australian and overseas universities.
- PhD in Mechanical Engineering from UWA.
- Received prestigious awards from the Australian government and published in high-ranking international journals and conferences.
- Course Coordinator in Mechanical Engineering at EIT.
- Responsible for developing and maintaining highest quality in the Bachelor's, Master's and Doctorate of Engineering courses.

Agenda – A Lecturer's Insight

1	Mechanical Engineering
2	Civil & Structural Engineering
3	Electrical Engineering
4	Industrial Automation
5	Other Courses and Information
6	Q & A

Mechanical Engineering

What is Mechanical Engineering Field?

Engineering Institute of Technology.

Mechanical engineering is a broad discipline that applies the principles of engineering for the **design, manufacture,** and **operation** of **machines** and their **parts**.

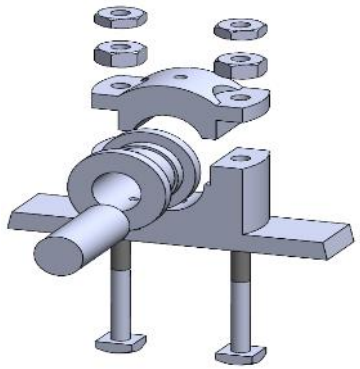
Mechanical Engineering – Potential Job Areas

- Computer Aided Design (CAD)
- Manufacturing Engineering
- Automobile Engineering
- Aerospace Engineering
- Air Conditioning
- Materials Engineering
- Power-plant Engineering
- Mechatronics/Robotics Engineering
- Agricultural Engineering
- Industrial Engineering
- Mining Engineering
- Oil and Gas Engineering
- Marine Engineering







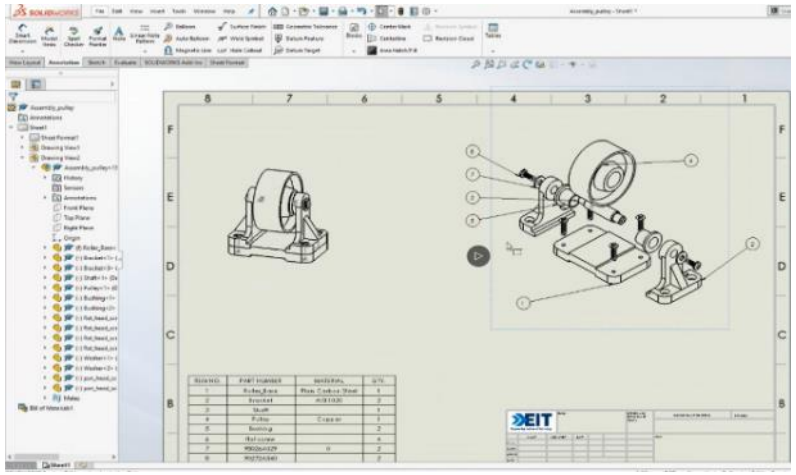
Mechanical Engineering – Trending topics

Trending Topics	Courses covering the trending topics
Computer Aided Design (CAD):	BSC203C Engineering Design/Drawing; BME204S Mechanical Design; MME602 CAD/CAM BSC307C Final Year Project
Computer Aided Manufacturing (CAM);	BME306S Manufacturing Technologies; MME602 CAD/CAM
Finite Element Analysis (FEA)	BME204S Mechanical Design; MME603 Finite Element Method
Computational Fluid Dynamics (CFD)	BME206S Fluid Mechanics MME506 Advanced Fluid Dynamics
Aerospace/Aerodynamics Applications	MME604 Introduction to Aerodynamics

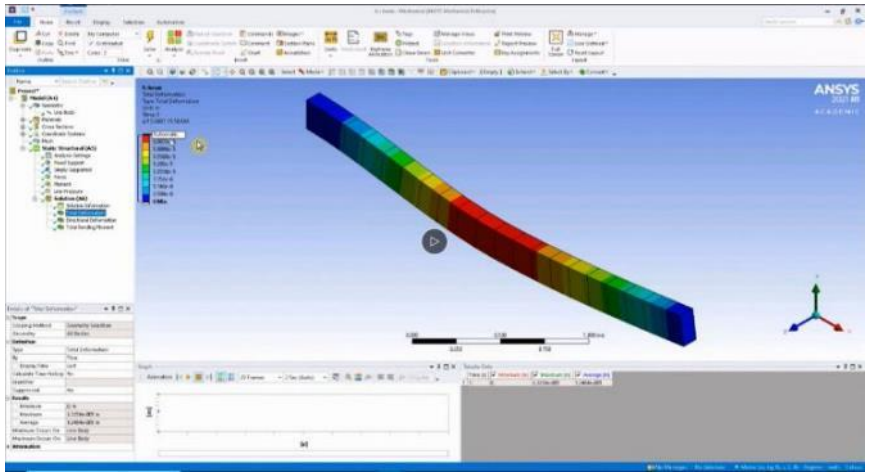
Delivery of Trending topics – Mechanical Engineering

Engineering Institute of Technology.

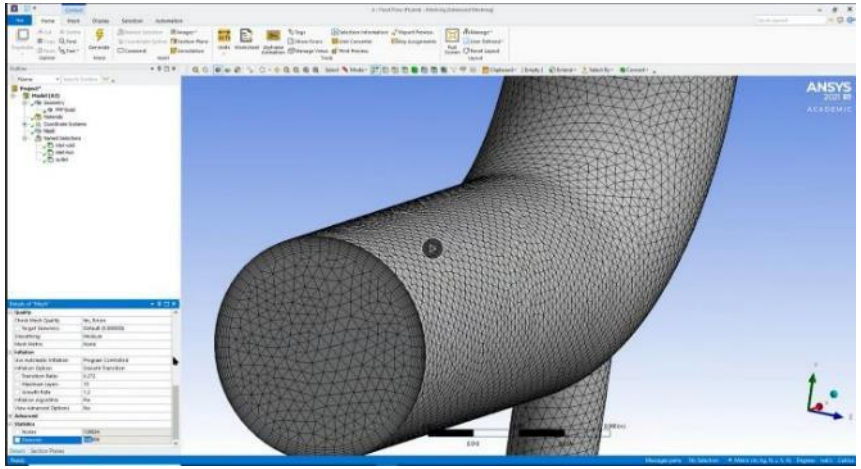
CAD/CAM:



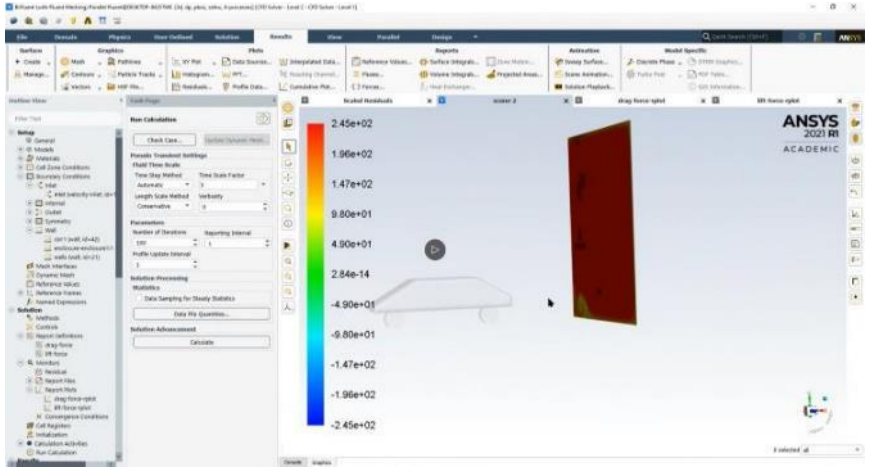
FEM/FEA:



Advanced Fluid Mechanics: CFD



Aerodynamics: Vehicles, Aircrafts,



Civil and Structural Engineering

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What is Civil Engineering Field?

Civil engineering is a broad discipline and one of the oldest profession...

Transport

Structural

Environmental

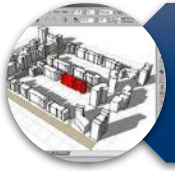
Construction

Geotechnical

Water resources

Civil-Structural Engineering – Potential Job Areas

- Structural Engineer.
- Construction project manager.
- Construction supervisor.
- Site engineer.
- Design engineer.
- Transport Engineer.
- Surveying Engineer.
- Geotechnical Engineer.
- Computer Aided Design and Drafting (CAD) – Designer.



Plan and design transportation or hydraulic systems or structures using computer assisted design or drawing tools

Using a range of computer software for developing detailed designs

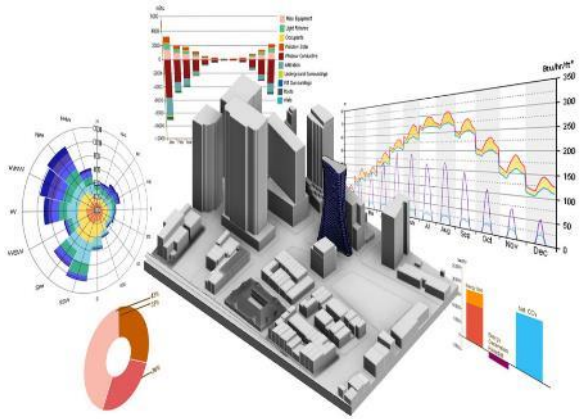
Create graphical representations of civil structures.

Liaising with clients and a variety of professionals including architects and subcontractors

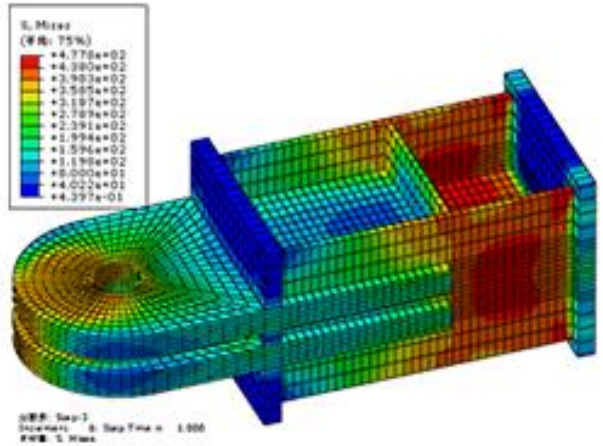
Compute load and grade requirements, water flow rates, or material stress factors to determine design specifications.

Civil / Structural Engineering – Trending topics

Digital Engineering

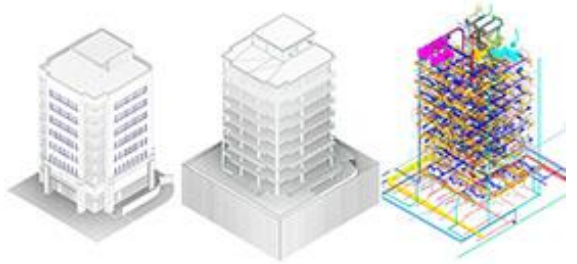


Finite Element Analysis



Sustainability

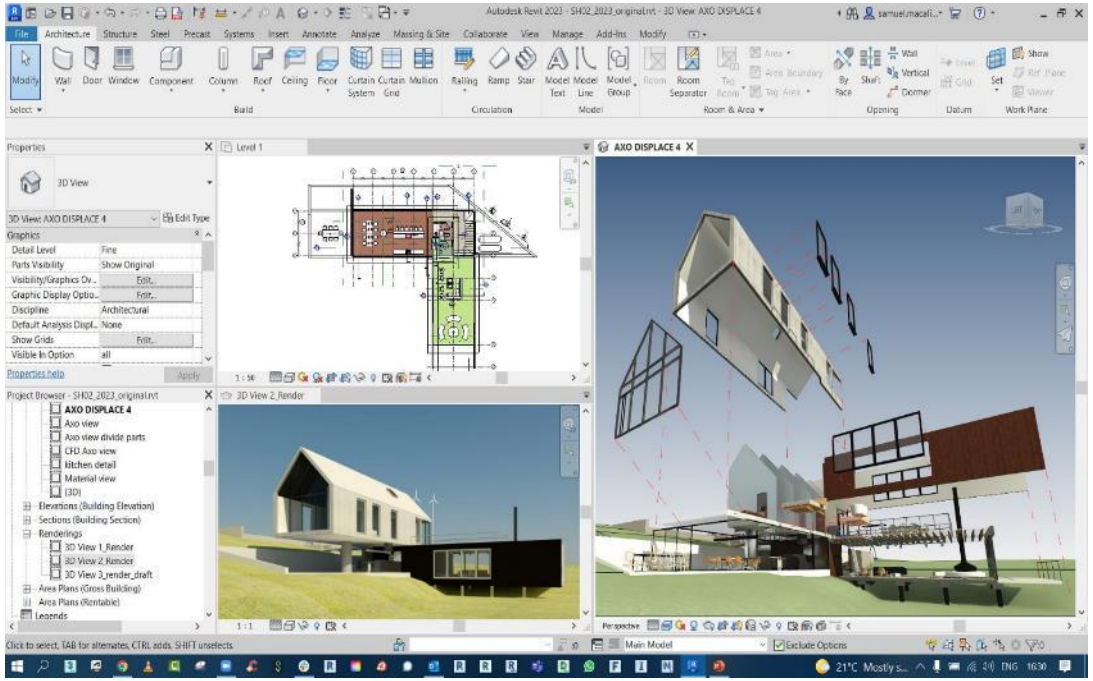
Building Information Modelling



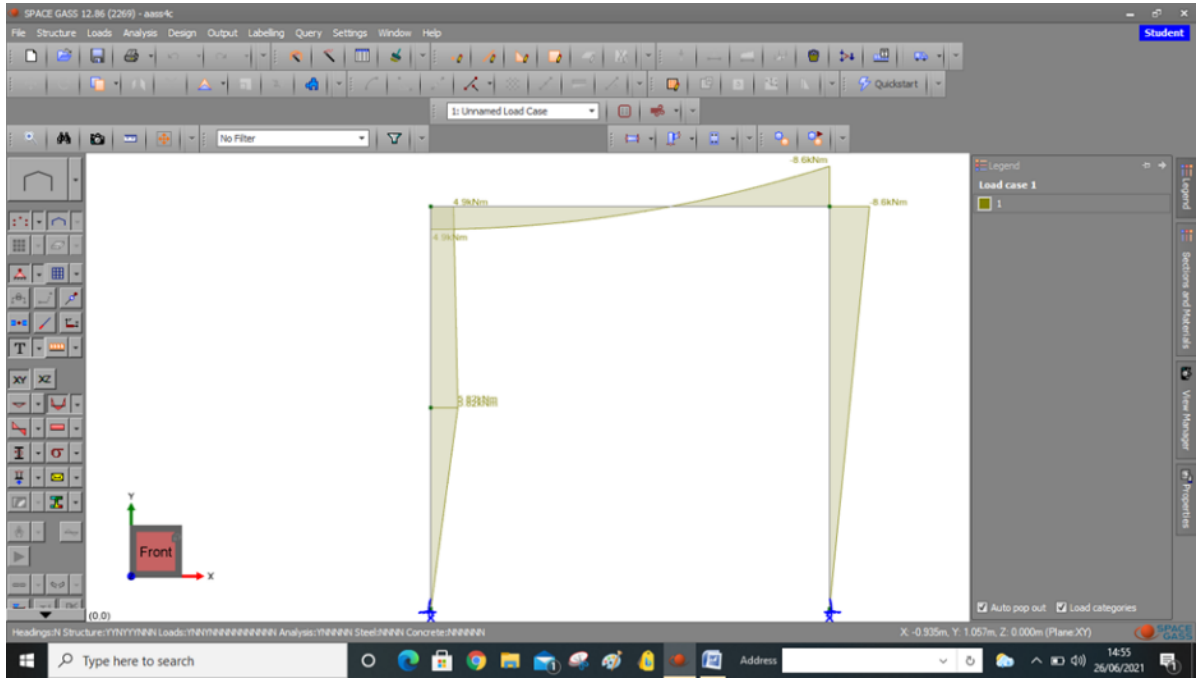
Delivery of Trending topics – Civil/Struct Engineering Engineering Field?

Engineering Institute of Technology.

Course: Prof. Cert. BIM
Bachelor of Science (Civil: Structural Engineering) (BCS)



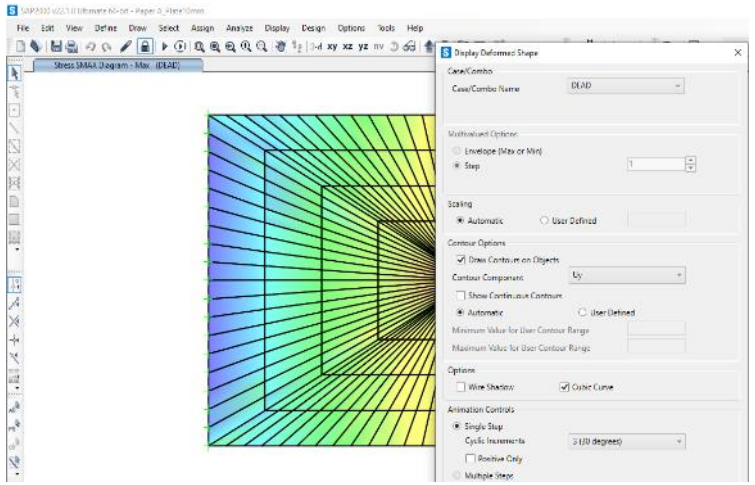
Course: Master of Engineering (Civil: Structural) (MCS)



Delivery of Trending topics – Civil/Struct Engineering Engineering Field?

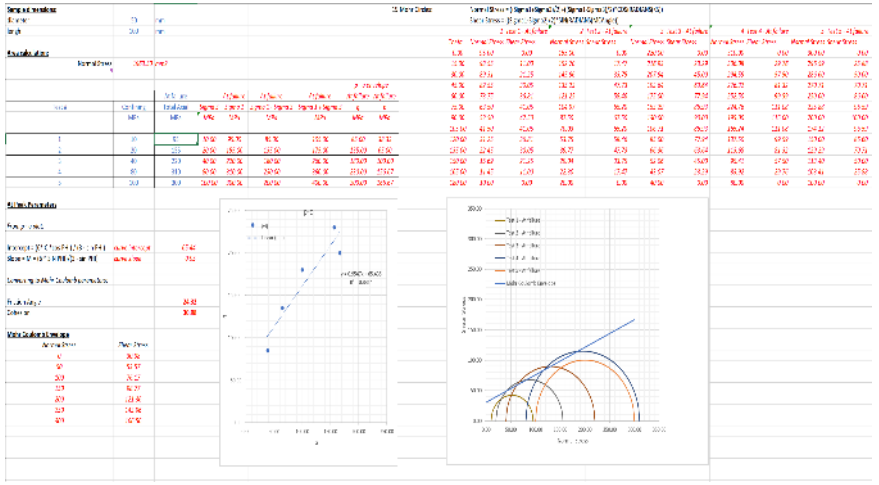
Engineering Institute of Technology.

Course: Master of Engineering (Civil: Structural Engineering) (MCS)

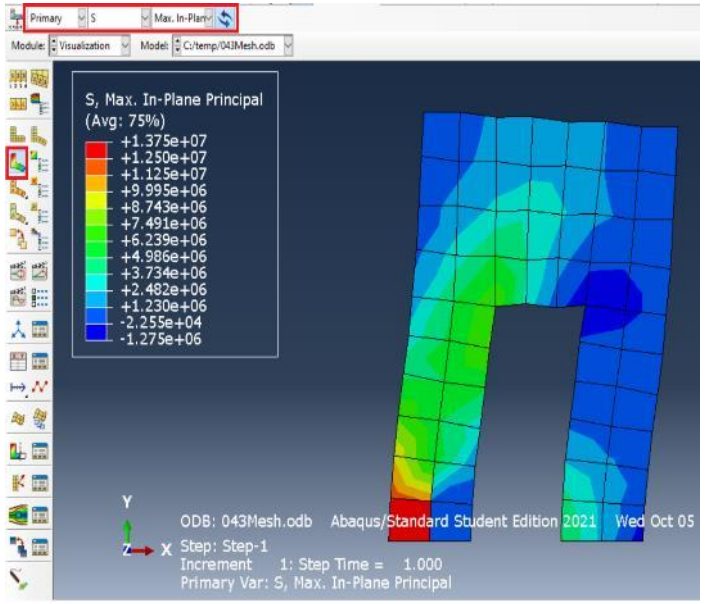


Course: Bachelor of Science (Civil & Structural Engineering) (BCS)

Adv. Diploma Civil & Structural Engineering (DCS)



Course: Master of Civil & Structural Engineering (MCS) Doctor of Engineering (DEng)



Electrical Engineering

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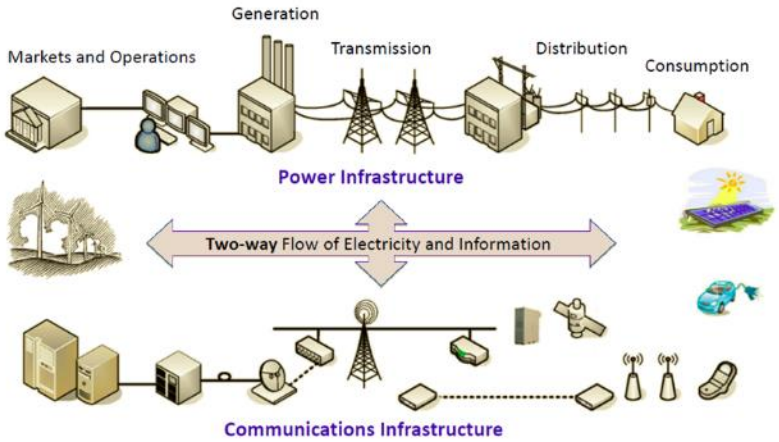
What is Electrical Engineering Field?

Electrical engineering is an engineering discipline concerned with the study, design and application of equipment, devices and systems which use electricity, electronics, and electromagnetism.

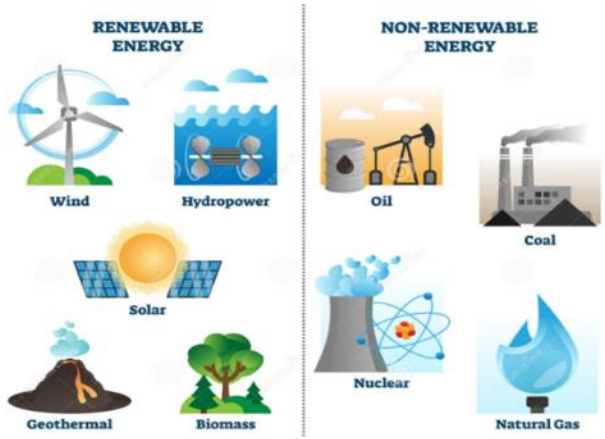
Electrical Engineering – Potential Job Areas

- Electrical system planning, design, and development.
- Power supply, distribution, and transmission.
- Electrical commissioning and power production management.
- Renewable energy.
- Electrical instrumentation and control.
- Electronics research, design, and testing.
- Operations, maintenance, field services, and technical support.
- Electrical project management and business development.
- Radio and television broadcasting.
- Mining.
- Advanced Automation & Robotic Systems.
- Space Defense Systems.

Electrical Engineering – Trending topics



DATA & MACHINE LEARNING



NO

YES

Sustain-ability

Industrial Automation Engineering

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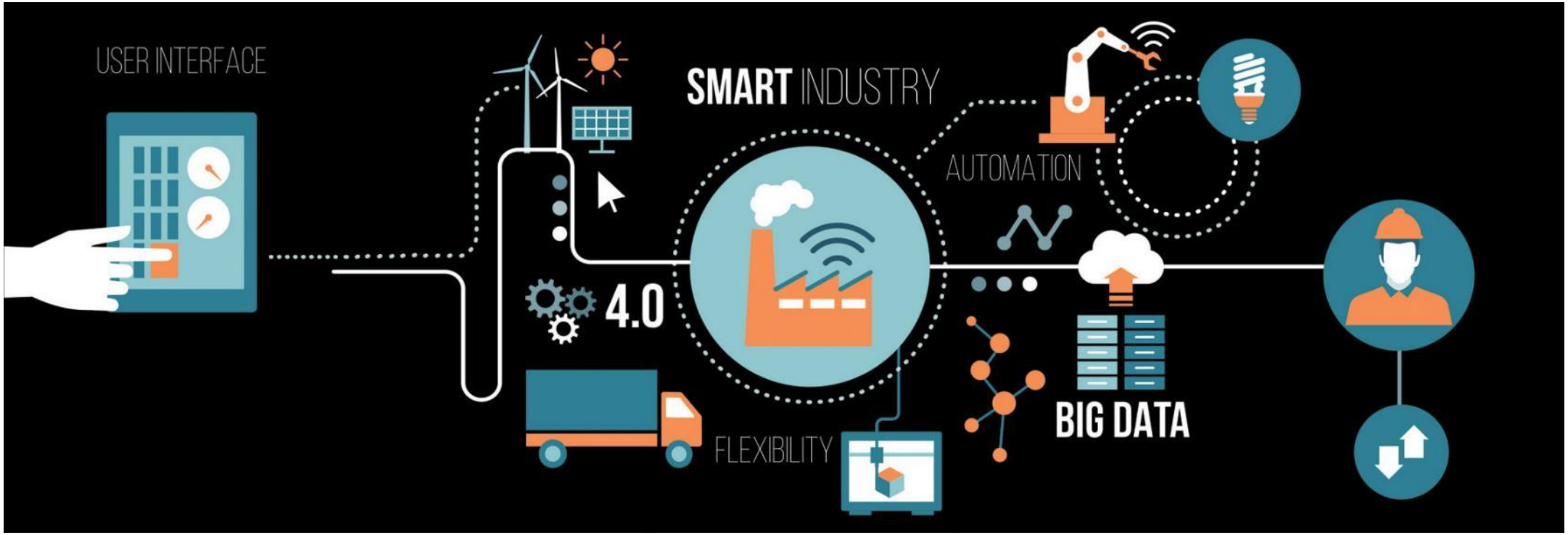
What is Industrial Automation Field?

Industrial automation (IA) is the use of control systems, such as computers or robots, and information technologies for handling different processes and machineries in an industry to assist a human being and takeover their responsibilities.



Industrial Automation – Potential Job Areas

- Mechatronics/Robotics Engineering
- Industrial Engineering
- Control Engineering
- Electrical Engineering
- Process Engineering
- Industrial Communication
- Oil and Gas Instrumentation
- IT/OT Security Convergence

4 Pillars/Trends in Industrial Automation

Fig 1. Programmable Logic Controller (PLC)

Course: Masters of Industrial Automation (MIA)

Additional Course: GCIA & GCPLC
(Graduate Certificate)

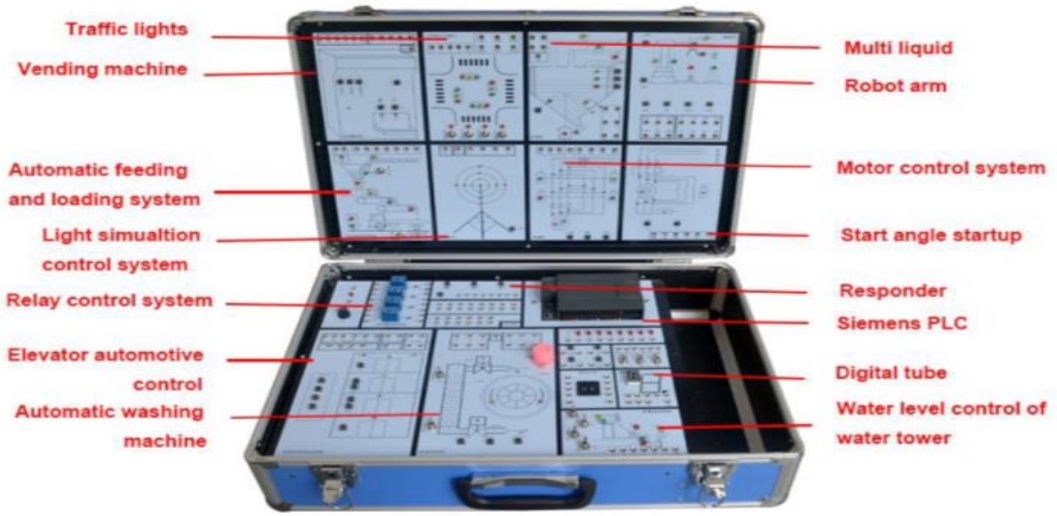
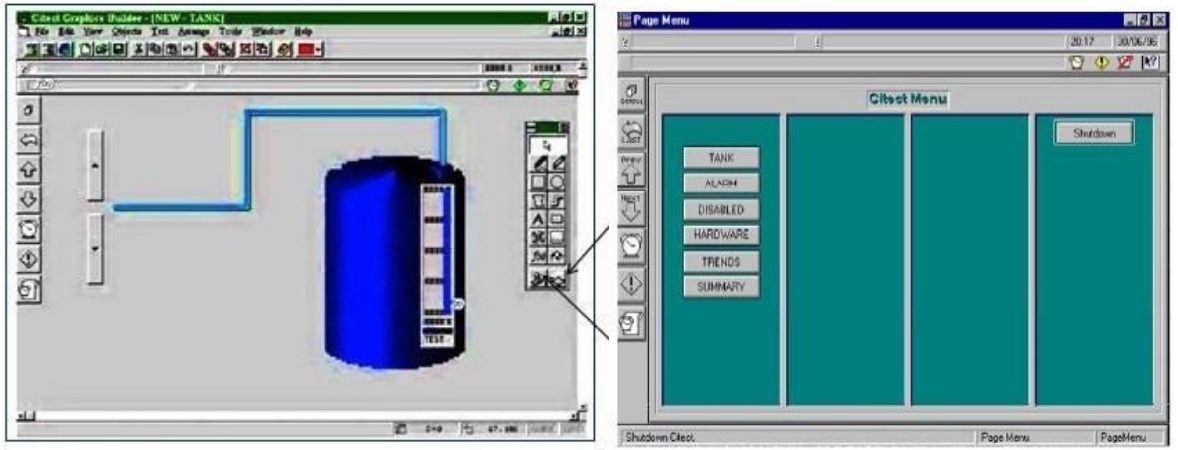


Fig 2. Design and run of a SCADA system

Course: Bachelor of Industrial Automation (BIA)



4 Pillars/Trends in Industrial Automation

Fig 3. Ideal vs Real PID Controller (Control and Instrumentation)

Course: Adv. Diploma in Industrial Automation (DIA)

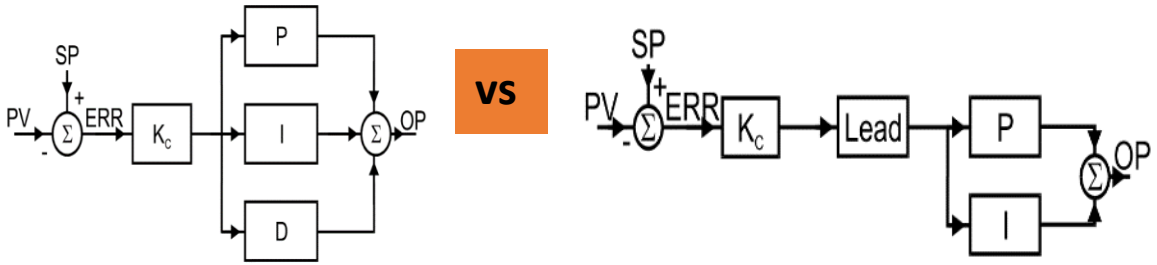
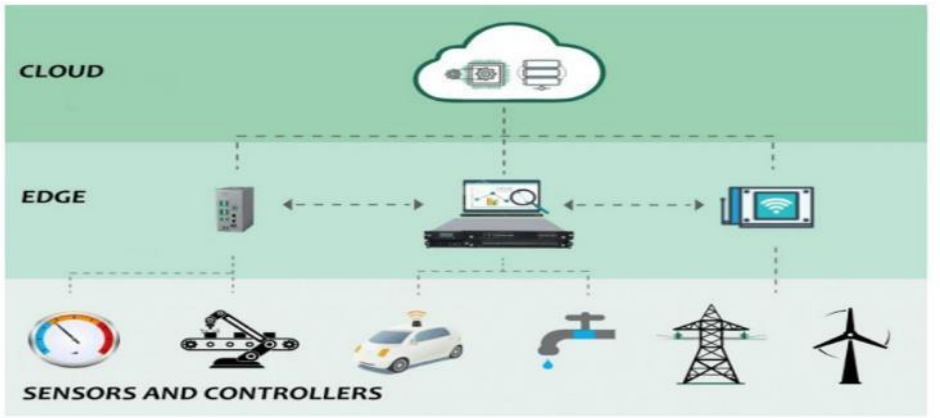


Fig 4. Industrial IoT System and Communication Setup (Industry 4.0)

Course: Prof. Cert. in Industrial Internet of Things (CII)



Safety, Risk and Reliability Engineering

CRICOS Provider Number: 03567C | Higher Education Provider Number: 14008 | RTO Provider Number: 51971

What is Safety, Risk and Reliability Engineering Field?

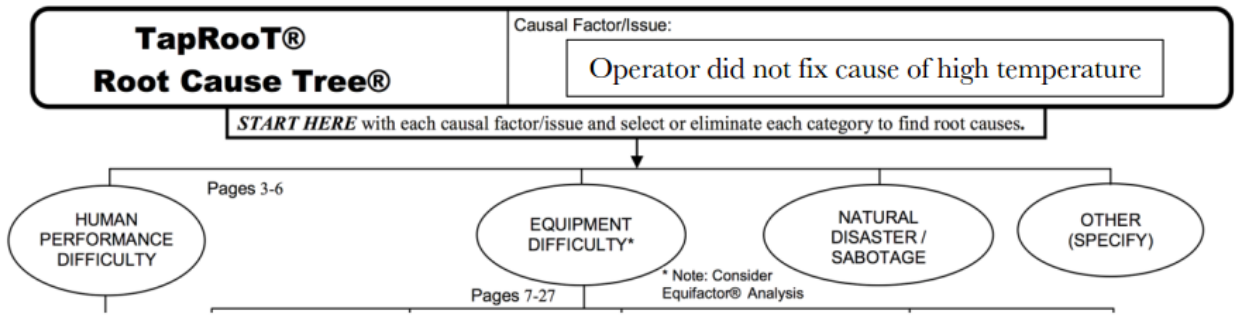
The issues of plant safety, OH&S, reliable designs and what constitutes acceptable risk have become the main focus to any practical application of engineering. A wide range of techniques available to assess risk and reliability compliant with local and international safety standards form the key part of this field.

Safety, risk and reliability engineering – Potential Job Areas

- Project Manager
- Principal Risk Analyst
- Work environment coordinator
- Safety and Reliability Engineer
- Head of Safety and Risk
- Senior Safety Engineer

Content Delivery Examples – Safety, risk and reliability Engineering

TapRoot Analysis



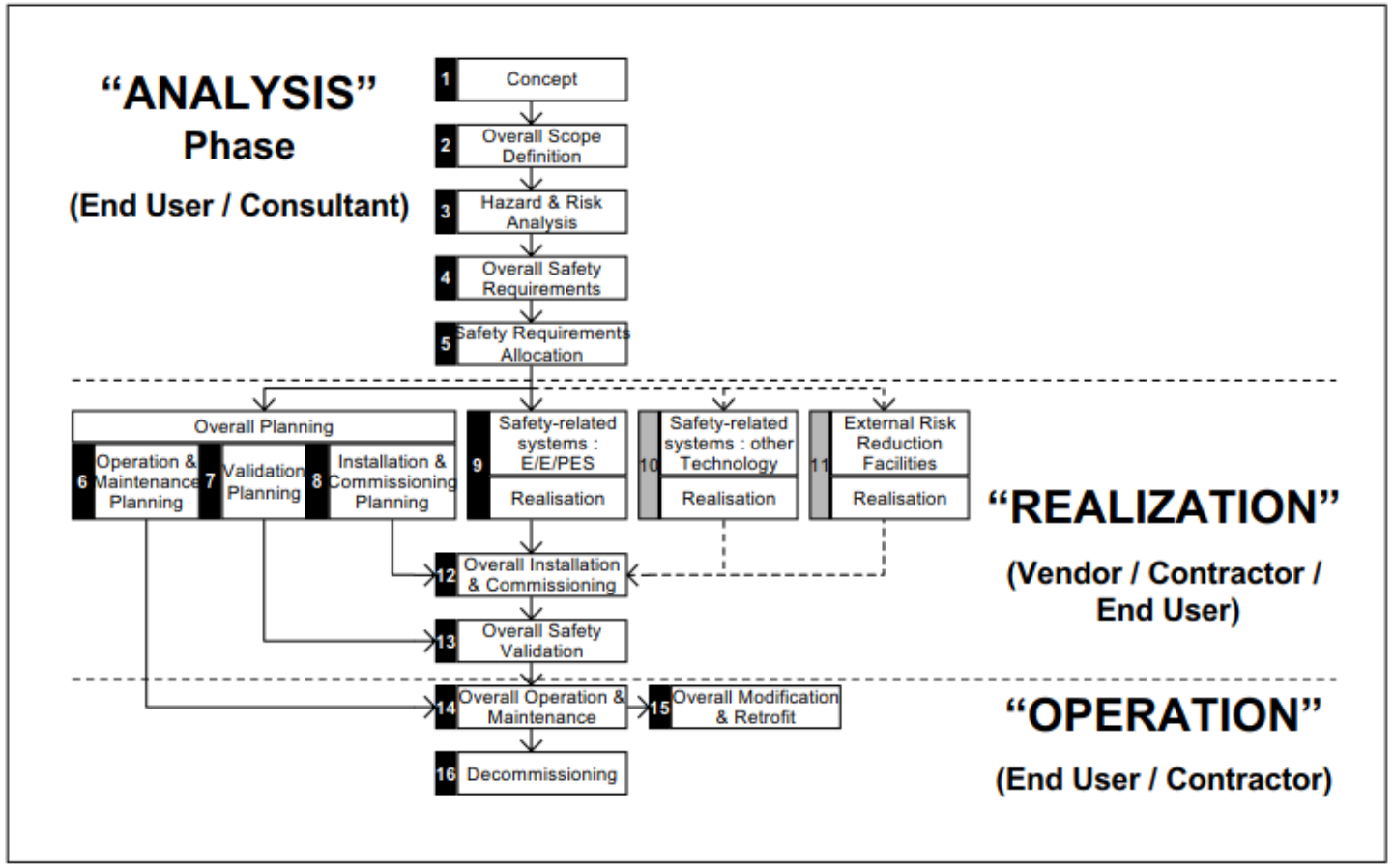
Energy/Barrier Analysis

Hazard 1: Earthquake			
Barriers	How did barrier perform	Why did the barrier fail?	How did the barrier effect the accident?
Structural Barrier [design and operation of the tank]	After the first earthquake, the braces failed and after the aftershock the legs failed which led to a complete collapse of the tank	The tank at the time earthquake struck was filled with water for maintenance purposes as a common practice the tank legs and braces were not designed to withstand the water load in case of a seismic shock.	The failure of the tank caused pipes damage and connections breaking.
Human Barrier [checking and inspection]	On-site workers did check the tanks visually, However, it was difficult to inspect all the LPG farm.	The LPG farm contains large number of tanks and most of the workers were evacuated due to tsunami warning, insufficient number of workers.	Being not aware of the tank condition after the earthquake led the explosion after 1 h.

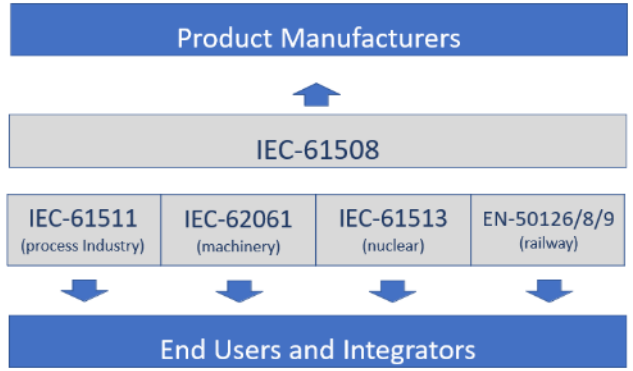
Hazard 2: Tsunami			
Barriers	How did barrier perform	Why did the barrier fail?	How did the barrier effect the accident?
Structural Barrier [seawall]	The seawall managed to prevent the tsunami wave to overtop the building and protect the facility.	–	The seawall managed to prevent extensive damage that might have increased the loss and damage.

Content Delivery Examples – Safety, risk and reliability Engineering

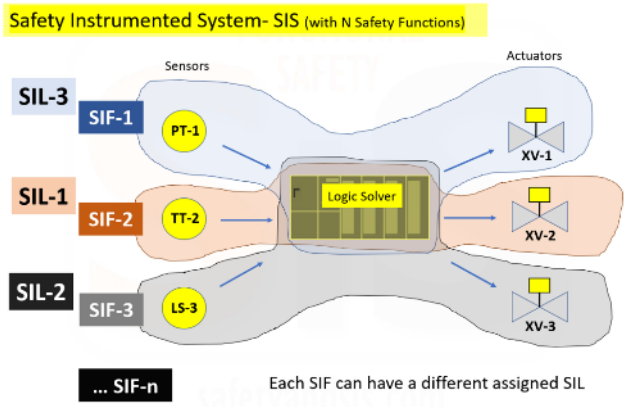
IEC 61508 Safety Lifecycle



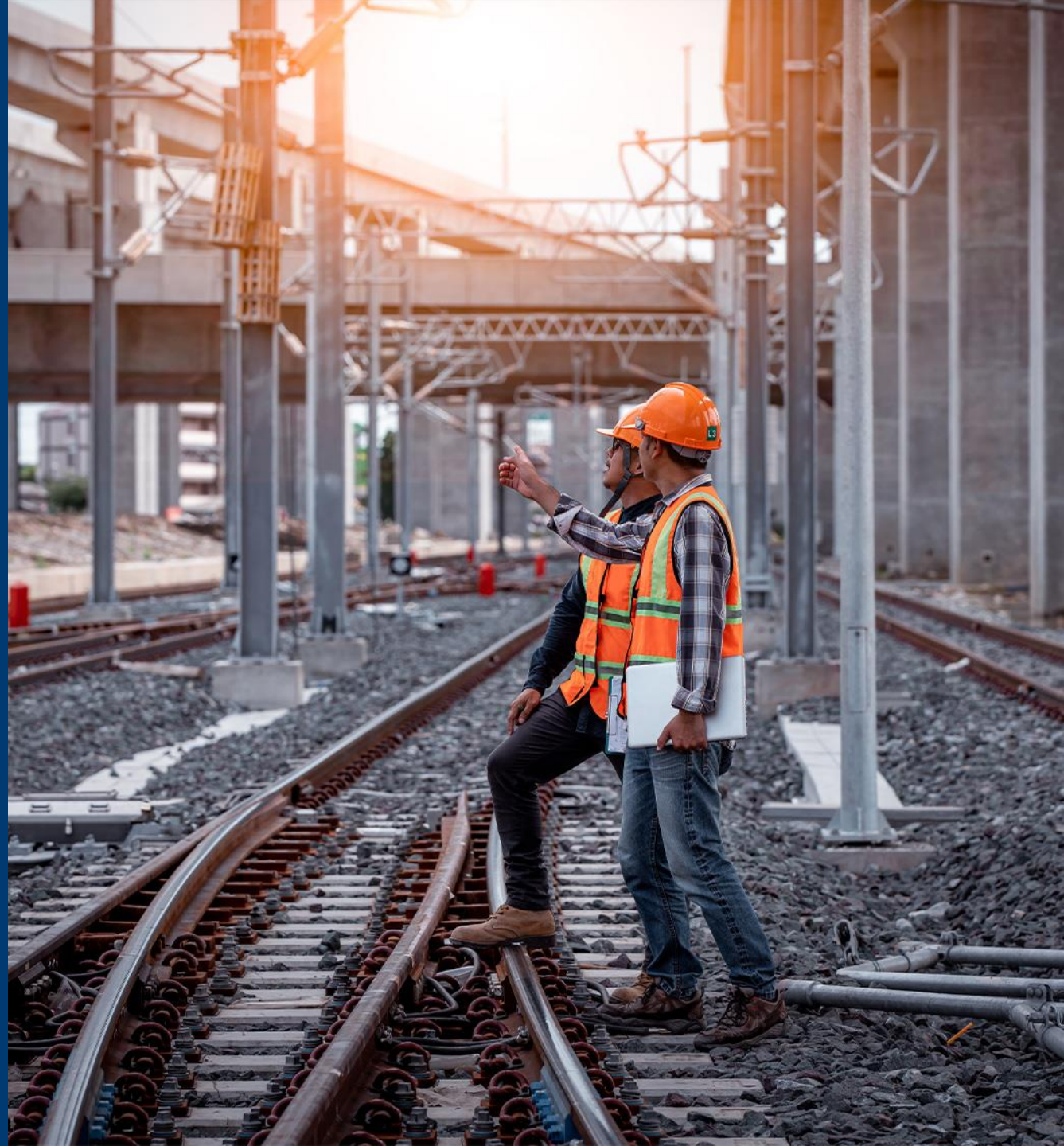
International Safety Standards



Safety Instrumented System – SIS

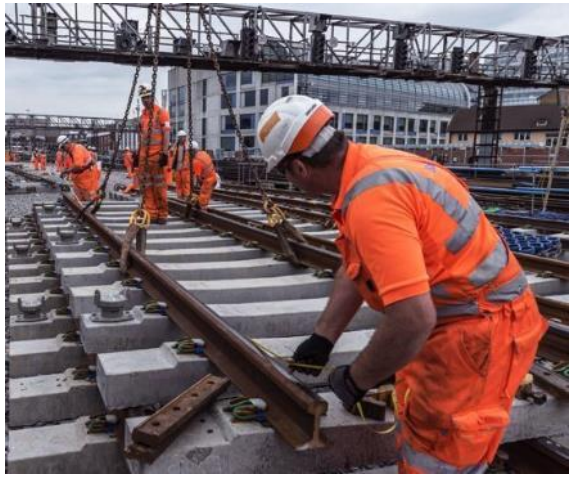


Civil: Railway Infrastructure



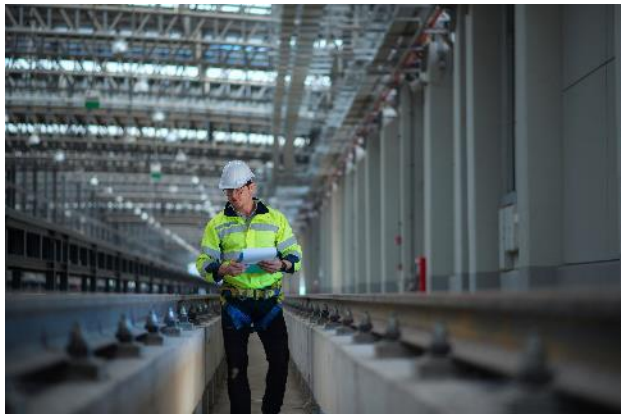
What is Railway Engineering Field?

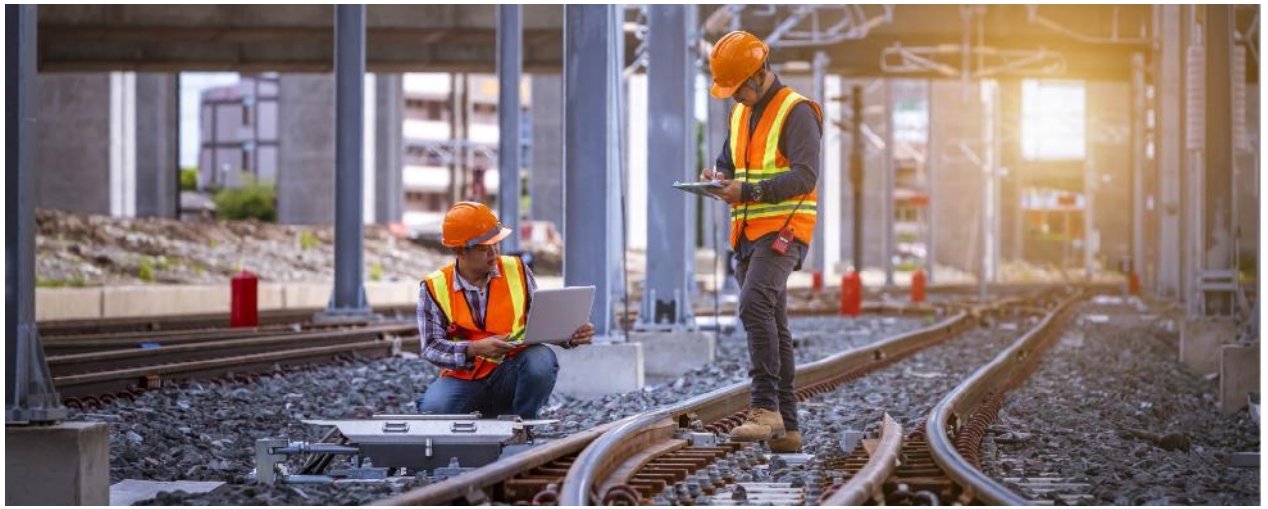
Railway engineering is an engineering discipline that deals with the design, construction, operation and maintenance of railway tracks for safe and efficient operation of the railway system.



Railway Engineering – Potential Job Areas

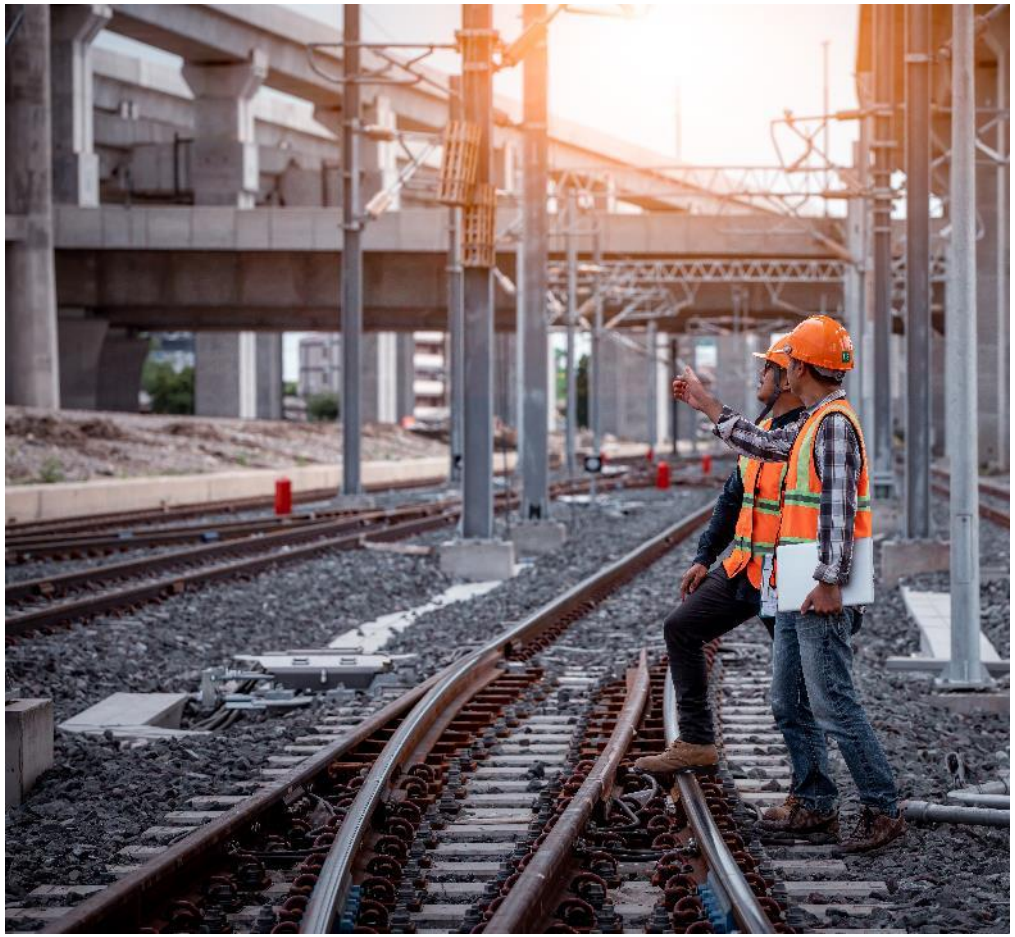
- Project Engineer
- Asset Manager
- Project Manager
- Perway Engineer
- Senior Civil Engineer
- Rail Project Engineer
- Senior Track Designer
- Track Engineer
- Safety assurance engineer
- Chief estimator





Railway Engineering – Trending topics

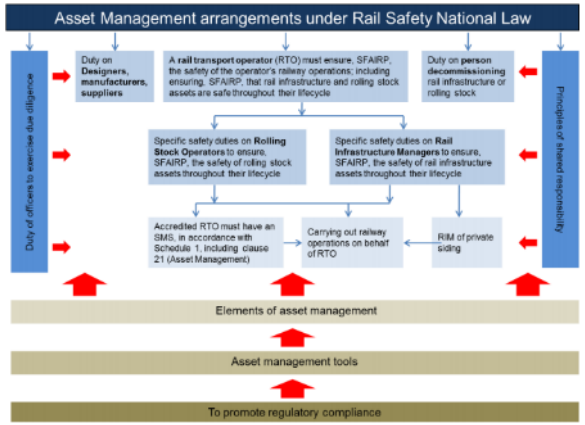
- Practical railway operation simulation
- iFBS software
- Local regulations and Standards
- Digital Engineering and Asset management for railway



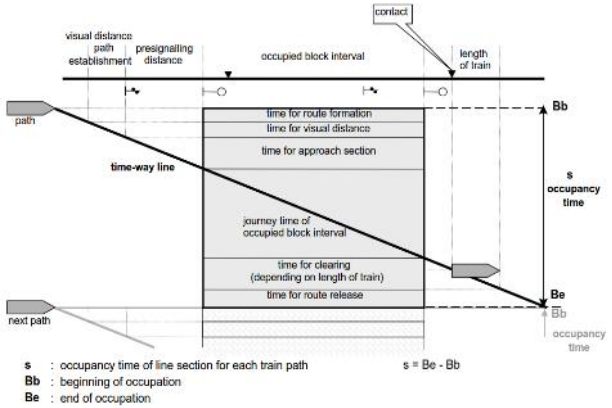
Delivery of Trending topics – Railway Engineering

Engineering Institute of Technology.

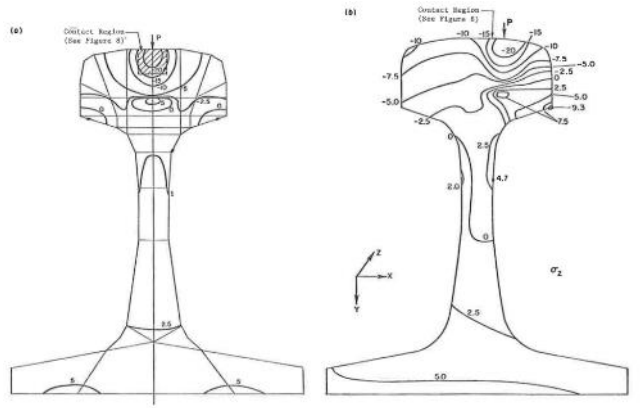
Railway Asset management



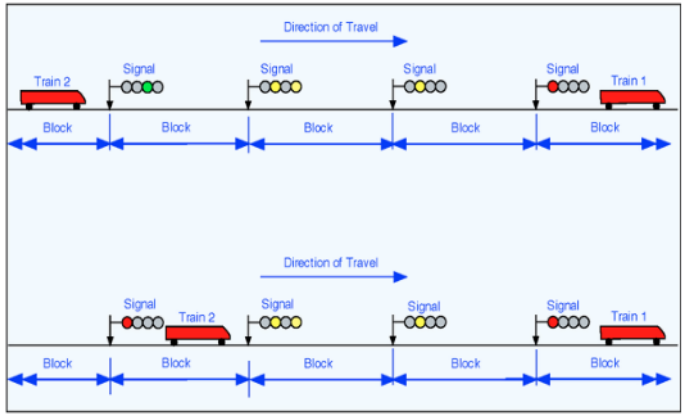
Railway Timetabling



Rail Stress Analysis



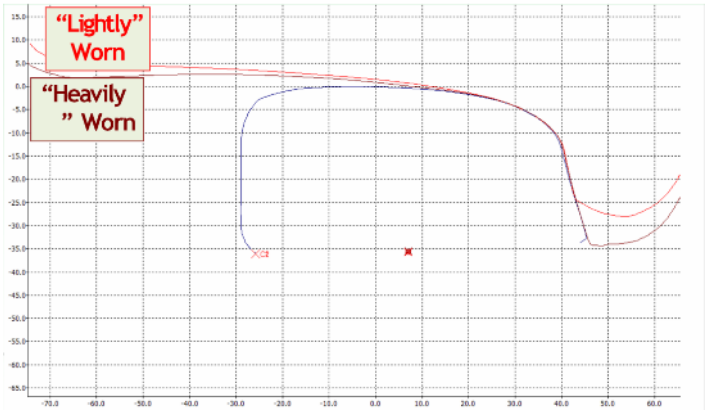
Signalling



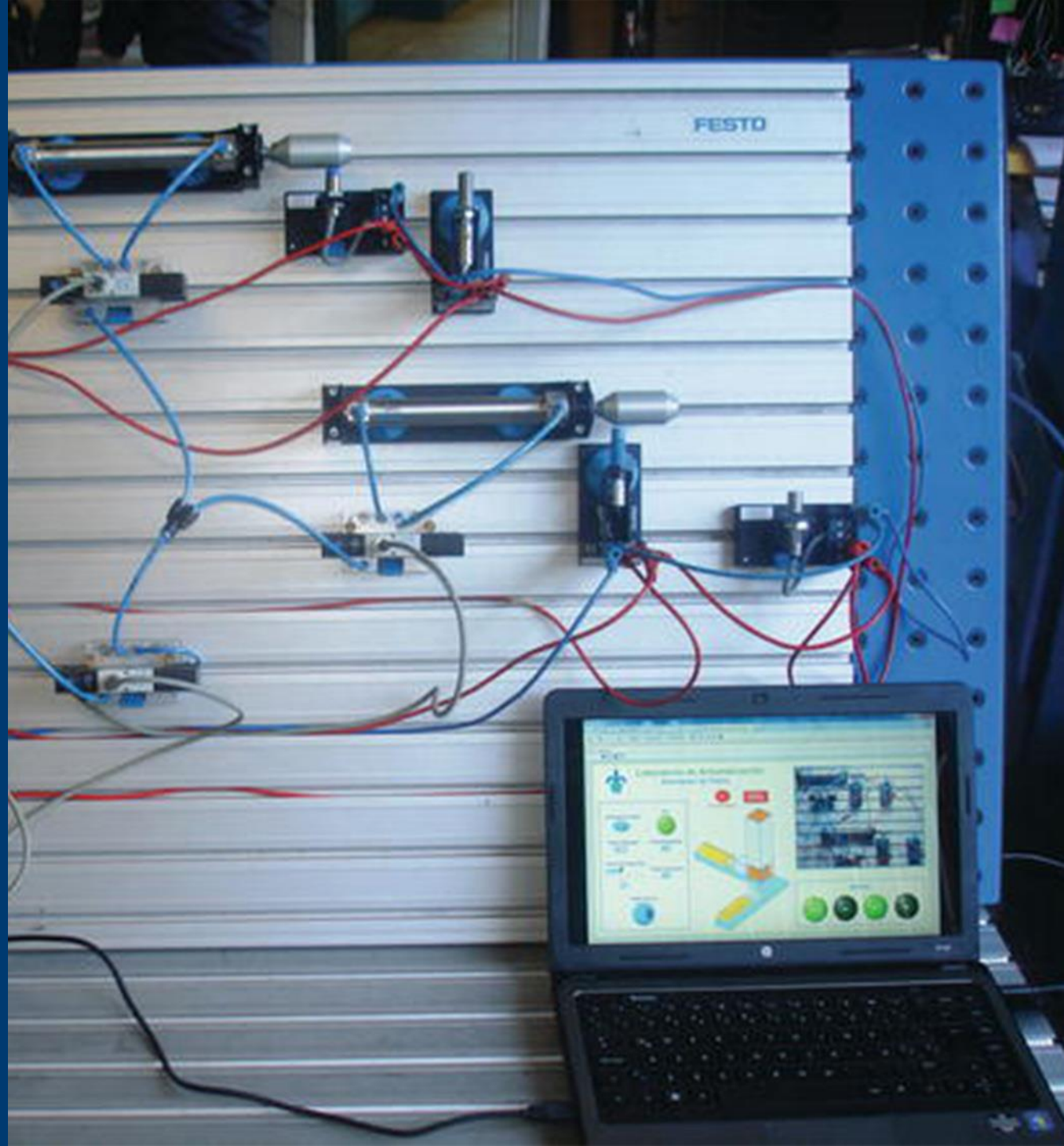
Rail Installation Requirements

Rail Section Kg/m	Original dimensions		Category 1 (White Rail)		Category 2 (Blue Rail)		Category 3 (Red Rail)		Category 4 (Green Rail)	
	Rail Width mm	Rail Depth mm	Rail Width mm	Rail Depth mm	Rail Width mm	Rail Depth mm	Rail Width mm	Rail Depth mm	Rail Width mm	Rail Depth mm
60 Kg/m	70	44	≥ 66.5	≥ 35	≥ 63.5	≥ 35	> 46	> 26	≤ 46	≤ 26
53 Kg/m *	70	40	≥ 66.5	≥ 35	≥ 63.5	≥ 35	> 46	> 22	≤ 46	≤ 22
50 kg/m	70	40	≥ 66.5	≥ 35	≥ 63.5	≥ 35	> 47	> 22	≤ 47	≤ 22
47 Kg/m *	70	37	≥ 66.5	≥ 33	≥ 63.5	≥ 33	> 46	> 24	≤ 46	≤ 24
41 Kg/m *	63	35	≥ 60	≥ 30	≥ 57	≥ 30	> 41	> 23	≤ 41	≤ 23
80 lb/ yard AS (1937) "B" (new)	64		≥ 60	≥ 30	≥ 57	≥ 30	> 41	> 23	≤ 41	≤ 23
80 lb/ yard AS (1928) "A" (old)	70		≥ 66.5	≥ 27	≥ 63.5	≥ 30	> 46	> 23	≤ 46	≤ 23
80 lb/ yard AS (1916) (old)	70		≥ 66.5	≥ 27	≥ 63.5	≥ 30	> 46	> 23	≤ 46	≤ 23
80 lb/ yard AA (1907)	64		≥ 60	≥ 30	≥ 57	≥ 35	> 41	> 23	≤ 41	≤ 23

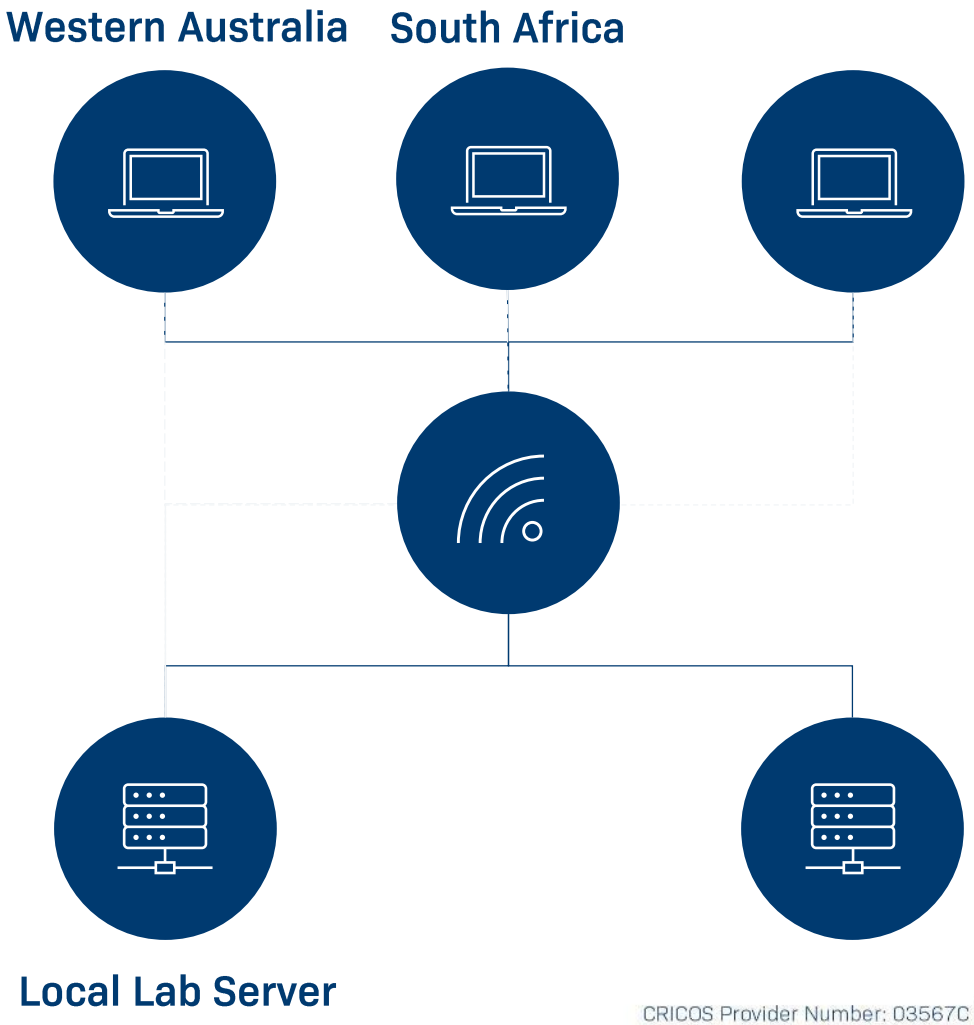
Wheel Rail Interaction



Remote and Virtual Labs



Remote and Virtual Labs

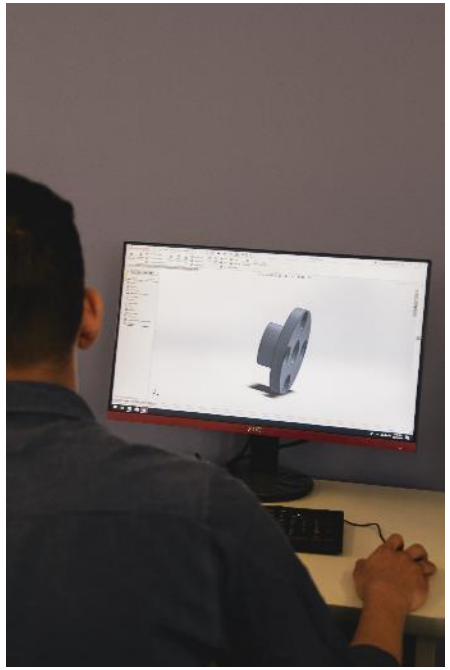


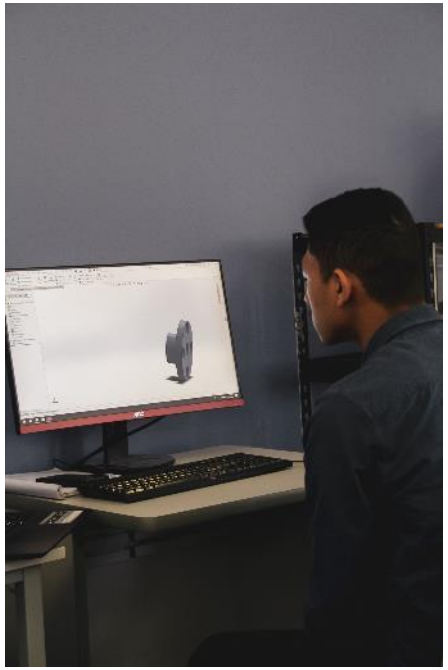
1. Traditional lab at a distance operating in real time.
2. Accurate representation of current industry hands-on.
3. Interfacing to equipment is digital and data driven.
4. High availability and Asynchronous – anytime
5. Access to specialized equipment in a safe and near-limitless testing environment.
6. No geographical barriers with diverse and global teams.
7. Bandwidth requirements can be demanding.

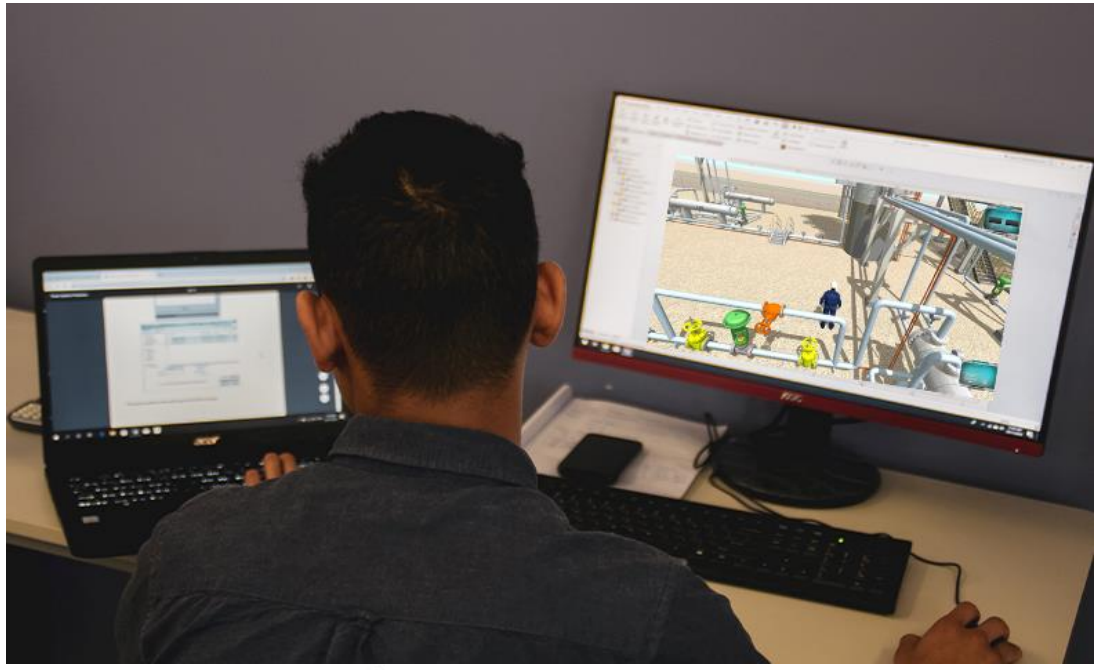
Traditional Learning Experience

Virtual and Remote Experiments – 3 Ways

- Simulated Experiments.
- Traditional Experiments > Recorded Interactive Experiments.
- Traditional Experiments > Remote Access.







Simulated Experiments: Electrical Isolation Procedure

Engineering Institute of Technology.

Students conduct a simulated procedure to isolate electrical equipment prior to performing the work.

Electrical Isolation Simulation

Select 10 items for the electrical isolation work

Open the cabinet to start

Switch off the isolators and flip the breaker

Click to select tools

Testing that circuit is dead

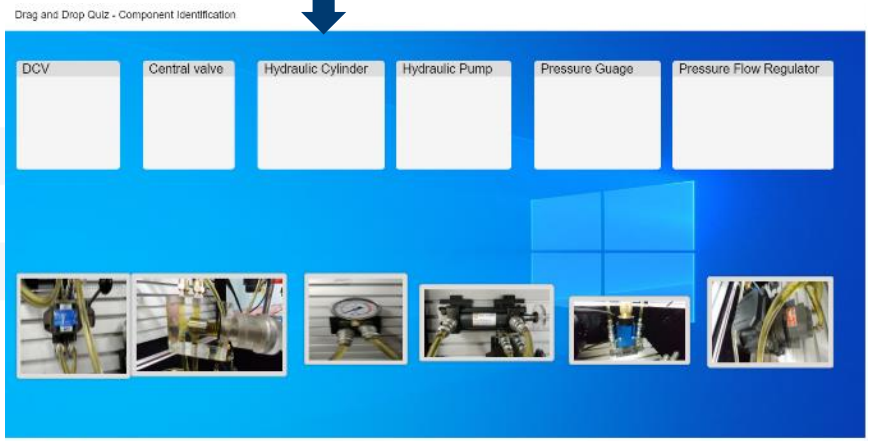
Recorded Interactive Experiments: Hydraulic Circuits

Students perform a hydraulic circuit interactive exercise and use FluidSim simulation.

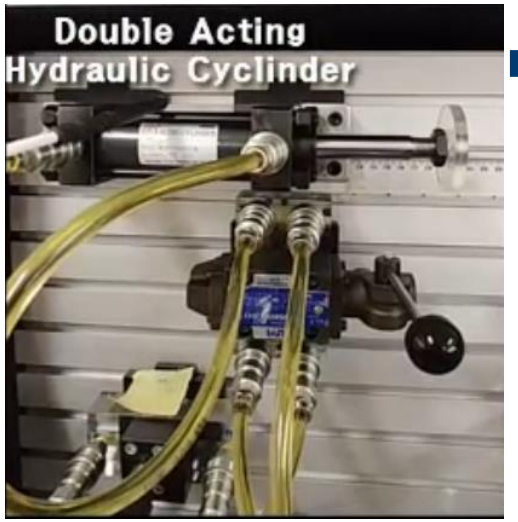
Hydraulic Circuit

- Aim and Basic Concept
- MCQ-1
- Fill in the Blanks
- True/False Question
- Hydraulic Circuit Component Identification
- Drag and Drop Quiz - Component Identification
- Hydraulic Circuit Connections Explained
- Hydraulic Circuit Operation
- FluidSim Demo
- Assignment
- FluidSim Instructions and Tasks
- FludiSim Task submission

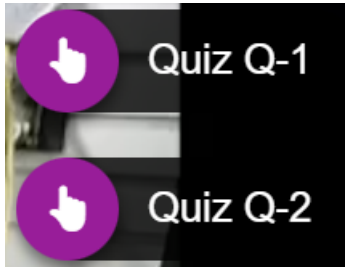
Student to read and complete the quiz related to theory.
We can monitor the progress via checklist.



Drag and Drop Quiz to evaluate students knowledge



Interactive video provides identification of components



Compulsory quiz at the end of the video

Recorded Interactive Experiments: Hydraulic Circuits

Students perform a hydraulic circuit interactive exercise and use FluidSim simulation.

Hydraulic Circuit

- Aim and Basic Concept
- MCQ-1
- Fill in the Blanks
- True/False Question
- Hydraulic Circuit Component Identification
- Drag and Drop Quiz - Component Identification
- Hydraulic Circuit Connections Explained
- Hydraulic Circuit Operation
- FluidSim Demo
- Assignment
- FluidSim Instructions and Tasks
- FludiSim Task submission

Connection explained with interactive content in the video.

Hydraulic circuit operation performance.

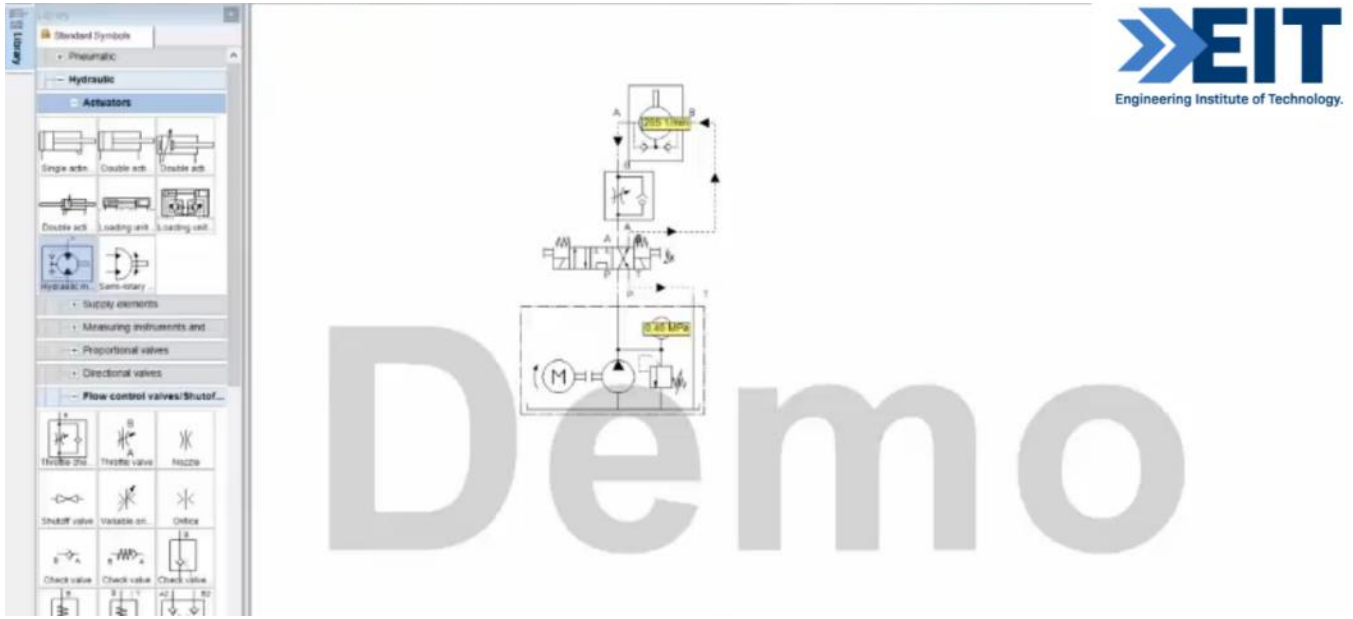
Recorded Interactive Experiments: Hydraulic Circuits

Students perform a hydraulic circuit interactive exercise and use FluidSim simulation.

Hydraulic Circuit

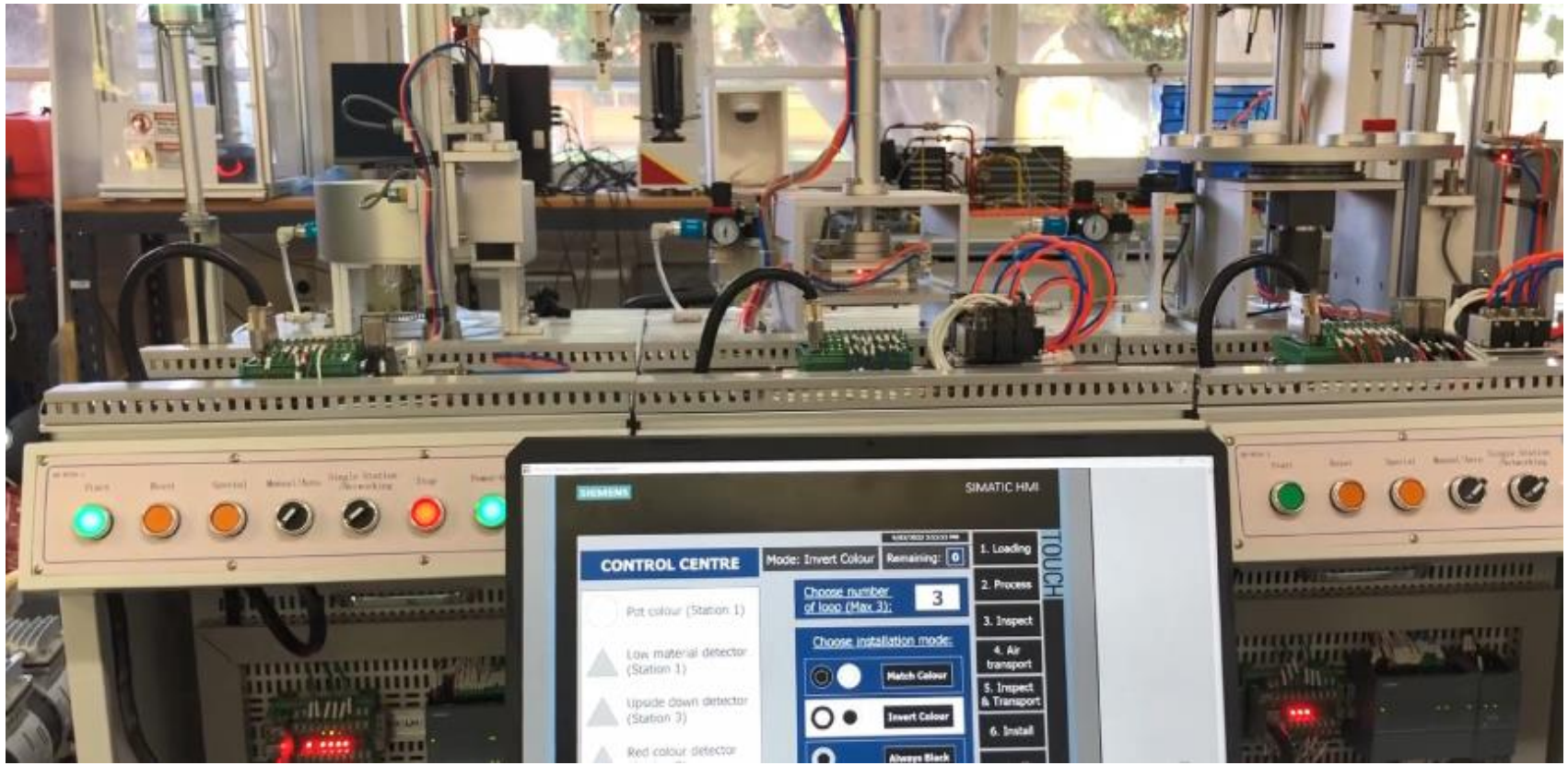
- Aim and Basic Concept
- MCQ-1
- Fill in the Blanks
- True/False Question
- Hydraulic Circuit Component Identification
- Drag and Drop Quiz - Component Identification
- Hydraulic Circuit Connections Explained
- Hydraulic Circuit Operation
- FluidSim Demo
- Assignment
- FluidSim Instructions and Tasks
- FludiSim Task submission

FluidSim Demo followed by practical assessment of FluidSim and hydraulic circuit experiment.

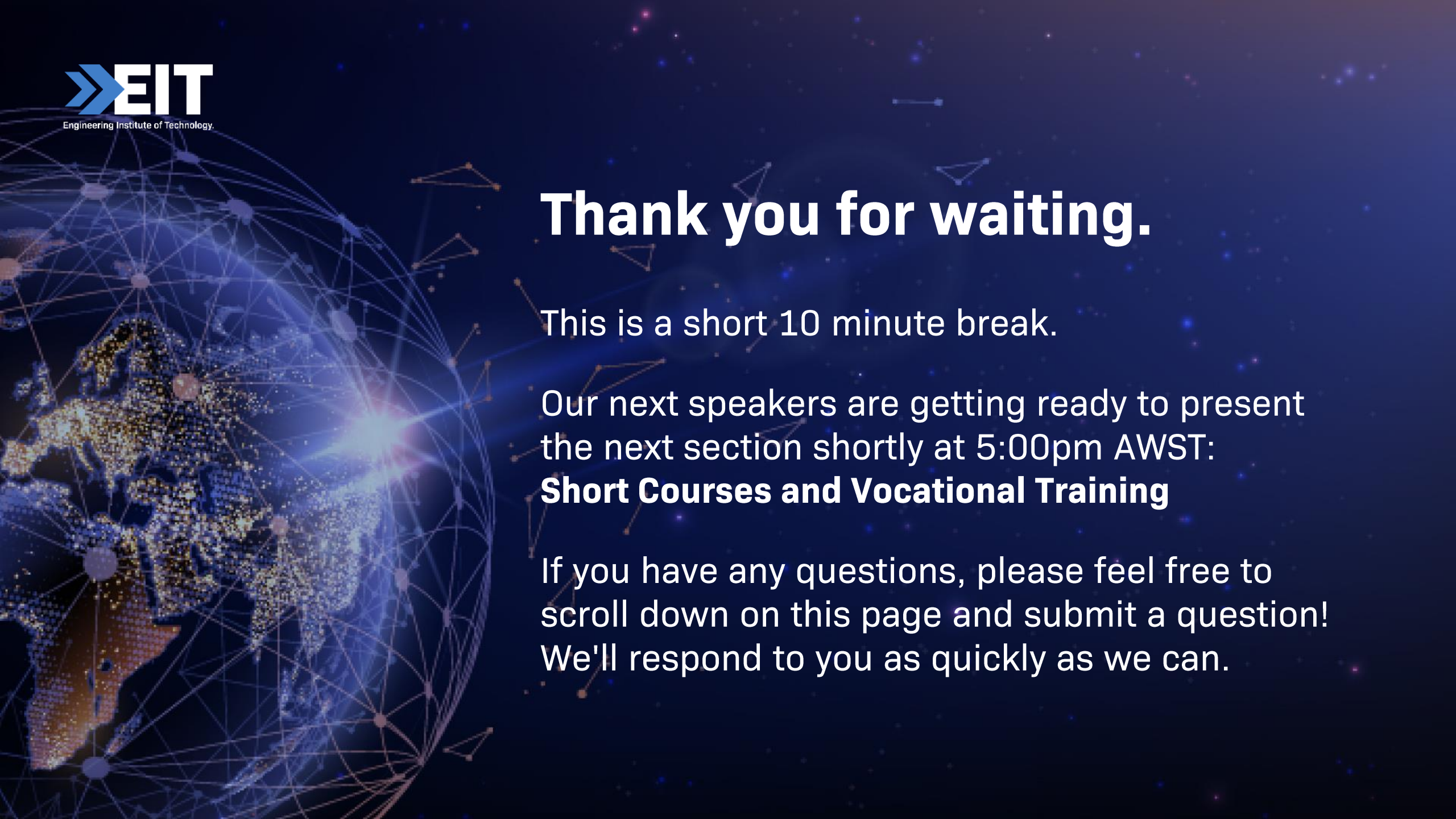


Remotely Accessible Labs: Production Line Training System

Students conduct a experiments with production line training system remotely



Q&A



Thank you for waiting.

This is a short 10 minute break.

Our next speakers are getting ready to present the next section shortly at 5:00pm AWST:
Short Courses and Vocational Training

If you have any questions, please feel free to scroll down on this page and submit a question! We'll respond to you as quickly as we can.

Virtual Open Day: Short Courses and Vocational Training

5:00pm – 5:50pm (AWST / UTC+8)

Presented by:

- Paul Celenza – College Manager
- Cameron Gill – Group Training Coordinator

Professional Certificate of Competency Courses

Engineering Institute of Technology.

Popular Professional Certificate of Competency Courses

- Professional Certificate of Competency in Programmable Logic Controllers (PLCs) & SCADA Systems
- Professional Certificate of Competency in Instrumentation, Automation & Process Control
- Professional Certificate of Competency in Safety Instrumentation Systems for Process Industries
- Professional Certificate of Competency in Fundamentals of Road Construction
- Professional Certificate of Competency in Big Data and Analytics in Electricity Grid
- Professional Certificate of Competency in Power Distribution
- Professional Certificate of Competency in Hydrogen Energy – Production, Delivery, Storage and Use
- Professional Certificate of Competency in Electrical Power System Protection

Engineering Institute of Technology.

EIT Group Training

- Online & Onsite group training
- Customisable content & delivery
- Pricing discounts
- Collaborative learning with practicals - including remote labs access
- Industry-experienced instructors

Q&A

Advanced Diploma Courses

Engineering Institute of Technology.

Types	Resources	Remote Labs	Entry Criteria	Entry Criteria
Length	Length	Accreditation	Assessments	Structure
Instructors/ Assessors	Time commitment	Moodle	Instructors/ Assessors	Webinars
Learning Support Officers (LSOs)				

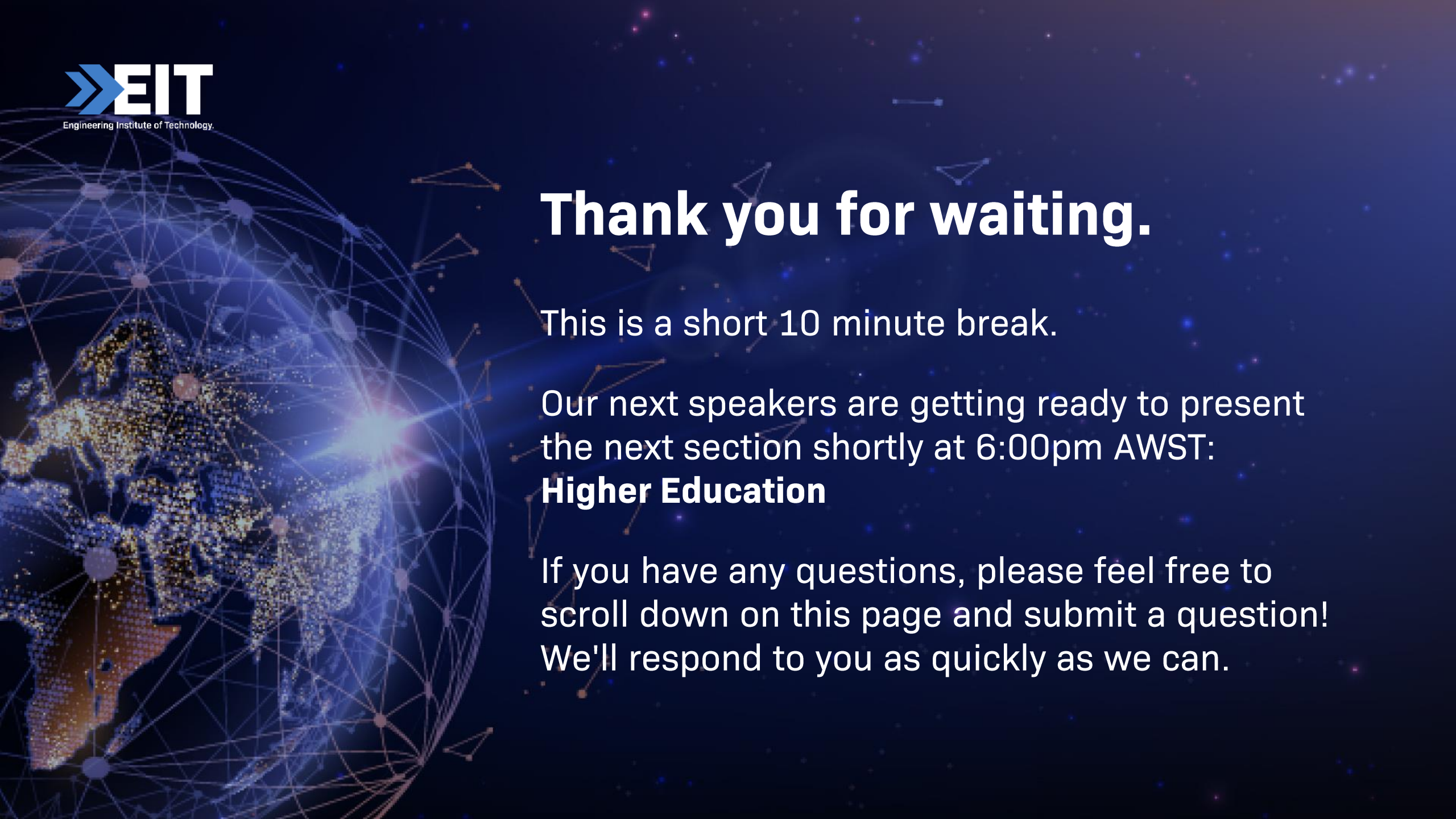
Popular Advanced Diploma Programs

- 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
- 52867WA - Advanced Diploma of Industrial Data Communication, Networking and IT

Other Qualifications

- 52859WA - Graduate Certificate in Renewable Energy Technologies
- BSB50420 - Diploma of Leadership and Management
- UET50221 Diploma of ESI - Power Systems

Q&A

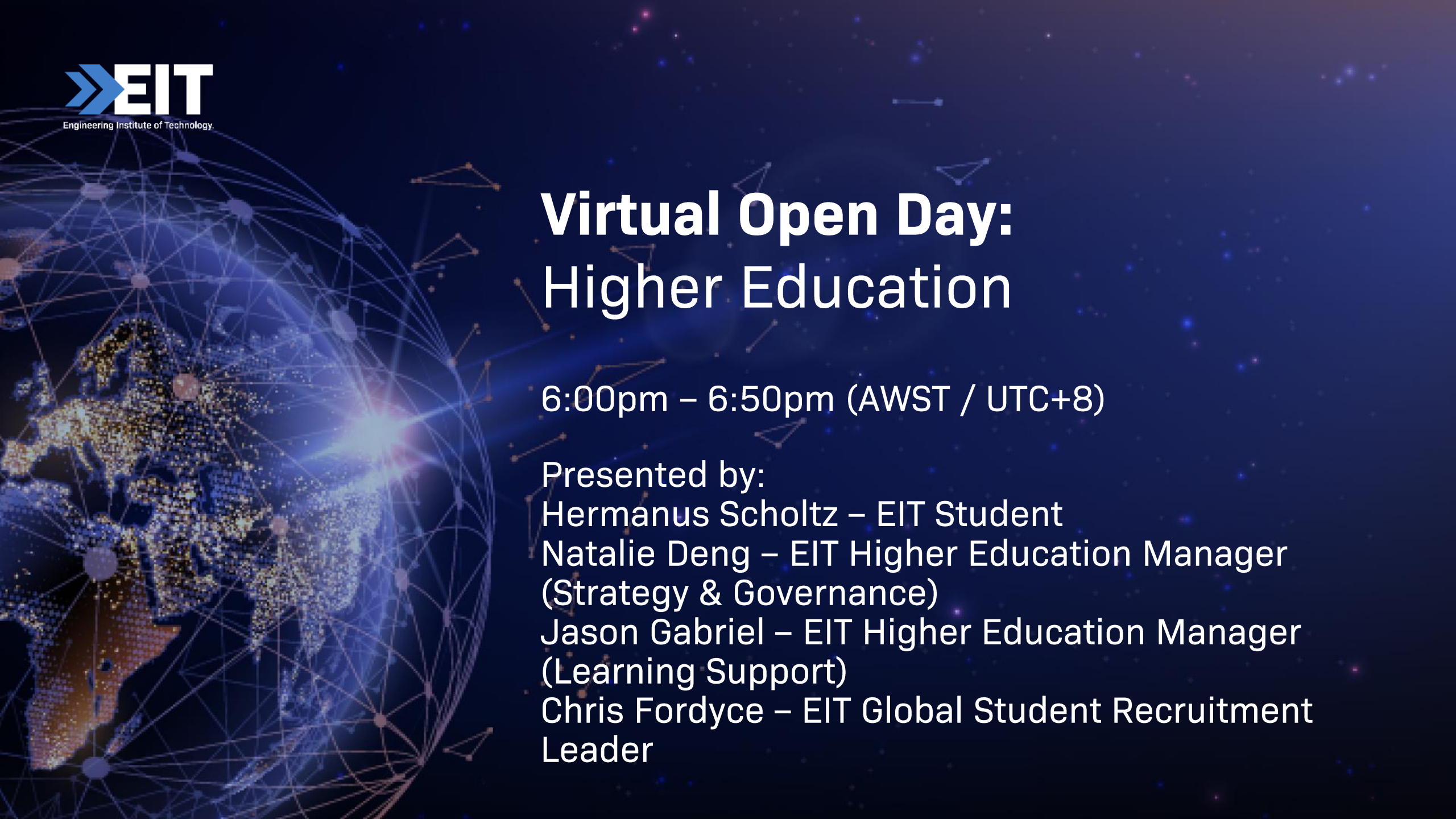


Thank you for waiting.

This is a short 10 minute break.

Our next speakers are getting ready to present the next section shortly at 6:00pm AWST:
Higher Education

If you have any questions, please feel free to scroll down on this page and submit a question! We'll respond to you as quickly as we can.


EIT
Engineering Institute of Technology.
Virtual Open Day:
Higher Education
6:00pm – 6:50pm (AWST / UTC+8)
Presented by:
Hermanus Scholtz – EIT Student
Natalie Deng – EIT Higher Education Manager (Strategy & Governance)
Jason Gabriel – EIT Higher Education Manager (Learning Support)
Chris Fordyce – EIT Global Student Recruitment Leader

Higher Educations courses offered online for 2023

Undergraduate courses

Undergraduate Certificates

- Civil Engineering
- Electrical Engineering
- Engineering Foundations
- Industrial Automation Engineering
- Mechanical Engineering

Structure

- 4 units taken simultaneously
- 1 semester
  - 12 study weeks +
  - 2 week mid-sem break +
  - Study break +
  - Exams

Bachelor of Science

- Civil Engineering
- Electrical Engineering
- Industrial Automation Engineering
- Mechanical Engineering

- 27 units + workshops & work experience
  - Take 1-5 per semester (2 semesters per year)
- Study periods same as above
  - 3 years full time
  - 4-8 years part time
- Workshop and experience units required for completion
  - Students encouraged to apply for recognition of prior learning

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
- AQF Level 2 – Certificate II
- AQF Level 3 – Certificate III
- AQF Level 4 – Certificate IV
- AQF Level 5 – Diploma
- Level 6 – Advanced Diploma, Associate Degree
- AQF Level 7 – Bachelor Degree
- Undergraduate Certificate
- Level 8 – Bachelor Honours Degree, Graduate Certificate, Graduate Diploma
- AQF Level 9 – Masters Degree
- AQF Level 10 – Doctoral Degree

Higher Educations courses offered online for 2023

EIT Engineering Institute of Technology.

Postgraduate courses

Graduate Certificates

- CAD and Computational Techniques
- Civil Engineering: Structural
- Civil Engineering: Structural Analysis and Design
- Industrial Automation Engineering
- Industrial Instrumentation and Process Control
- Programmable Logic Controllers and SCADA
- Industrial Automation and Machine Learning
- Mechanical Engineering
- Chemical and Process Engineering
- Power System Analysis and Design
- Process and Thermal Engineering
- Safety, Risk and Reliability Engineering

Structure

- 4 units total usually:
  - 2 units in first term
  - 2 units in second term

- Each term 12 study weeks with no breaks

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
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Higher Educations courses offered online for 2023

EIT Engineering Institute of Technology.

Postgraduate courses

Graduate Diploma of Engineering

- Civil: Structural
- Civil: Railway Infrastructure
- Electrical Systems
- Mechanical
- Industrial Automation
- Safety, Risk and Reliability

Master of Engineering

- Civil: Structural
- Civil: Railway Infrastructure
- Electrical Systems
- Mechanical
- Industrial Automation

Structure

- 8 units total, usually:
  - 2 units in each term
  - Over 4 terms (1 year)
- Each term 12 study weeks with no breaks
- Makes up the first year of the related master degree

- 13 units total (inc thesis) + workshops + work experience:
  - 2 units in each term
  - Over 8 terms (2 years to max 5 years)
- Each term 12 study weeks with no breaks
  - Thesis takes place in the final 2 terms
- Workshop and experience units required for completion
  - Students encouraged to apply for recognition of prior learning

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
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- Level 8 – Bachelor Honours Degree, Graduate Certificate, Graduate Diploma
- AQF Level 9 – Masters Degree
- AQF Level 10 – Doctoral Degree

Higher Educations courses offered online for 2023

Postgraduate courses

Doctor of Engineering

Structure

- 6* coursework units + 3 research units
  - * option for 3 elective units from a relevant 2nd year Master unit
  - 2 units in each term
  - Over 12 terms / 3 year (Full-time)
  - Doctoral dissertation – 3rd year

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
- AQF Level 2 – Certificate II
- AQF Level 3 – Certificate III
- AQF Level 4 – Certificate IV
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- Level 8 – Bachelor Honours Degree, Graduate Certificate, Graduate Diploma
- AQF Level 9 – Masters Degree
- AQF Level 10 – Doctoral Degree

Learning support

Learning Support Officers (LSO)

Provide guidance on non content related information such as -

- Live tutorial information
- Assessment dates and times
- Assessment extensions
- Unit and assessment grades
- Course related questions e.g progression
- Personal circumstances

Student Support Services

- Support workshops – time management etc
- Health and well being information
- Academic related resources - revision techniques

Learning support

Software used throughout course -

- **Moodle** - unit material, assessments, grades.
- **Blackboard** - hosts live tutorial sessions.
- **IRIS** - invigilation software for timed assessments eg exams.
- **Remote Labs** – various engineering software for assessments.
- **Microsoft Office** – EIT email account, online Word, Excel etc versions.
- **TRUSS** - invoices, contact and payment information, upcoming units.

You control your learning

Fees and payments

Options for fees

- Scholarships for a single study period, or whole course
  - examples

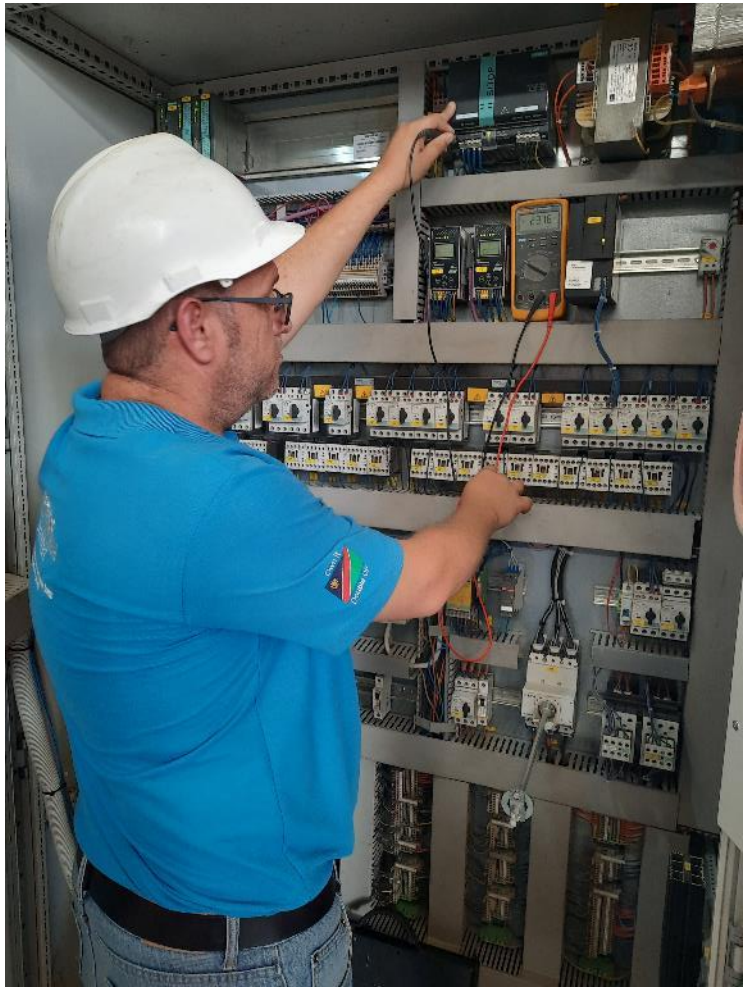
- Fees are issued per study period, depending on the number of units taken:
  - Installments split over each study period by credit card.
  - Paid at the beginning of each study period by credit card or direct deposit.
  - FEE-HELP (for Australian Citizens) .

Student experience

Hermanus Scholtz

- Based in Namibia – Tsumeb
- Career: Senior Automation Technician
- Programs studied with EIT:
  - 52886WA Advanced Diploma of Industrial Automation Engineering
  - Finishing his Bachelor of Science (Industrial Automation Engineering)
  - Enrolled to start his Master of Engineering (Industrial Automation) next year.

Hermanus Scholtz



Student experience

Hermanus Scholtz

- Why did you choose EIT?
- How have you found the online learning?
- How has EIT helped you with your career?

Q&A

Engineering Institute of Technology.

Higher Education at EIT
On Campus

This session will cover our on-campus programs, application process and benefits to studying on-campus

CRICOS Provider Number: 03567C | Higher Education Provider Number: 14008 | RTO Provider Number: 51971

Our On-Campus Programs

Engineering Institute of Technology.

Undergraduate Programs	CRICOS Code	Campus
Bachelor of Science (Industrial Automation Engineering)	095814J	Perth
Bachelor of Science (Electrical Engineering)	095813K	Perth
Bachelor of Science (Mechanical Engineering)	095815G	Perth
Bachelor of Science (Civil and Structural Engineering)	095812M	Perth

Postgraduate Programs	CRICOS Code	Campus
Master of Engineering (Industrial Automation)	094185G	Perth & Melbourne
Master of Engineering (Electrical Systems)	0100462	Perth & Melbourne
Master of Engineering (Mechanical)	0100463	Perth & Melbourne
Master of Engineering (Civil: Structural)	0100461	Perth & Melbourne
Doctor of Engineering	102709C	Perth & Melbourne

Perth Campus

Melbourne Campus

Scholarships and Payment Options

We offer a range of future and current student scholarships.

- Students are required to formally apply via an application form. You can find more information on our scholarship's page: https://www.eit.edu.au/how-to-apply/scholarships/

- Fees are issued per study period:
  - Paid at the beginning of each study period by credit card or direct deposit

Higher Education courses offered on campus for 2023

Undergraduate courses – Perth campus only

Bachelor of Science

- Civil Engineering
- Electrical Engineering
- Industrial Automation Engineering
- Mechanical Engineering

Structure

- 27 units + workshops & work experience
- Workshop and experience units required for completion
  - Workshops delivered in break weeks
- 4-5 units taken in each study period
  - 9 per year is 'full time'
  - 3 years full time (CRICOS)
  - 4-8 years part time
- 1 semester is:
  - 12 study weeks +
  - 2 week mid-sem break +
  - 1 week study break +
  - Exams

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
- AQF Level 2 – Certificate II
- AQF Level 3 – Certificate III
- AQF Level 4 – Certificate IV
- AQF Level 5 – Diploma
- Level 6 – Advanced Diploma, Associate Degree
- AQF Level 7 – Bachelor Degree
- Undergraduate Certificate
- Level 8 – Bachelor Honours Degree, Graduate Certificate, Graduate Diploma
- AQF Level 9 – Masters Degree
- AQF Level 10 – Doctoral Degree

Higher Education courses offered on campus for 2023

Postgraduate courses – Perth and Melbourne Campuses

Master of Engineering

- Civil: Structural
- Electrical Systems
- Mechanical
- Industrial Automation

Structure

- 13 units (including thesis) + workshops & work experience
- Workshop and experience units required for completion
  - Workshops delivered in break weeks
- 4 units taken in each study period
  - 8 per year is 'full time'
  - 2 years full time (CRICOS)
  - 3-5 years part time
- 1 semester is:
  - 12 study weeks +
  - 2 week mid-sem break

Doctor of Engineering

- 16 credit points (four units) and one Research Project Proposal in the first year.
- The Research Project Proposal is the equivalent of 12 credit points.
- The second year has a further four units totaling 44 credit points. Two of these units are research-based.
- The third year is fully occupied with the doctoral Dissertation, which is 48 credit points.

AQF qualifications

- AQF specification for the Senior Secondary Certificate of Education
- AQF Level 1 – Certificate I
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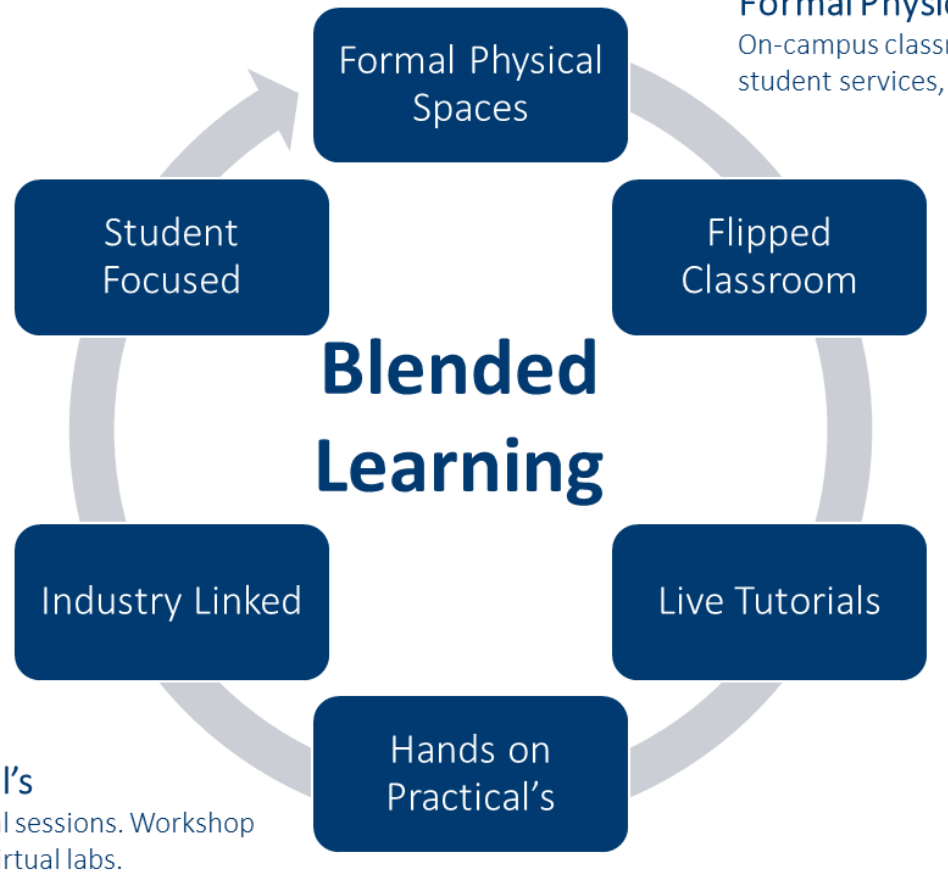
Benefits to studying on-campus



Formal Physical Space
On-campus classrooms, study spaces, laboratory, lecturers, student services, dedicated Learning Support Officers (LSOs).

Flipped Classrooms
Listen to pre-recorded lecturers prior to live tutorials or practicals

Live Tutorials
High-quality synchronous interaction and learning experience.

Hands-on Practical's
Access to block practical sessions. Workshop activities, remote and virtual labs.

Industry Linked
Industry site visits, internships guests speakers, expos, project-based learning.

Student Focused
Student support from academic assistants, student services, LSOs, Lecturers.

Work Integrated Learning for On-Campus

240 hours of work integrated learning (full-time or part-time) *

Physical, virtual or hybrid placement

Gain Australian experience to improve employability

Duration of degree not affected

**Internships are conducted post the successful completion of the first year of your program for Bachelors and Masters. You must have passed (grade of 50% or more) all first-year units and have good financial standing. It is a prerequisite of graduation that EIT's on-campus bachelor's and master's students complete 240 hours of work integrated learning.*

Application Process

On-campus students can apply direct or with a registered education agent.

Students are to provide the following documents to start an assessment:

- Relevant academic transcripts and certificates
- English Language Proficiency test
- CV/Resume
- Passport

EIT's dedicated Admissions team will begin to assess applications and aim for a 2-3 business day turnaround for a conditional offer to be issued.

Please note: All applications will be assessed on a case-by-case basis.

Q&A

EIT
Engineering Institute of Technology.

Thank you for attending.

Contact Us:

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Email
webinars@eit.edu.au

Courses
www.eit.edu.au/schedule/