

# Inside EIT's Bachelor of Science (Mechanical Engineering) Course

6:30 AM - 7:30 AM (UTC)

[Watch Webinar Recording Here](#)

Presented by:

Dr. Milind Siddhpura | Senior Lecturer (Mechanical Engineering)

Daniel White | EIT Student



# Introduction – Presenter

## Dr. Milind Siddhpura | Senior Lecturer (Mechanical Engineering)

Dr Milind Siddhpura has gained over 20 years of substantial & internationally significant experience as a mechanical engineer, academic, researcher & consultant in top Australian and overseas organizations & universities. He has accomplished a PhD in Mechanical Engineering from the University of Western Australia (UWA) & has won many prestigious awards. He has published articles & served as a reviewer, keynote speaker & guest editor in international journals/conferences.



# Agenda

---

1. About EIT's Bachelor Courses
2. Fields of Engineering
3. Study Modes
4. Program Structure Snapshot
5. Course Overview
6. Graduate Outcomes
7. Potential Job Outcomes
8. Program details
9. Learning Outcomes
10. Entry Requirements
11. Fees & Payments
12. Accreditation
13. Software Used
14. Time Commitment & Duration
15. Student Support
16. Remote & Virtual Labs
17. The EIT Program
18. Hear From a Past Student
19. Conclusion



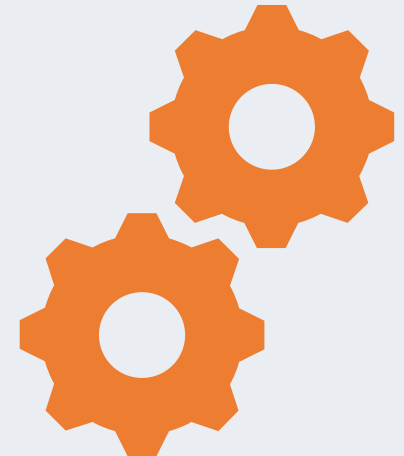
# About EIT's Bachelor Courses

Experts from industry and academia designed our **three-year** Bachelor of Science degrees to ensure you gain the theoretical and practical knowledge required to enter the workforce job-ready as an Engineering Technologist.

EIT's bachelor's degrees are **available both online and on-campus** (in Perth and Melbourne).

EIT's bachelor's degrees are accredited by Engineers Australia and internationally recognized under the Sydney Accord for delivery in Perth and online.

They are also offered at the Melbourne campus; however, they are currently not accredited by Engineers Australia for delivery at this location.





# Fields of Engineering

---

Bachelor of Science (Civil and Structural Engineering)

---

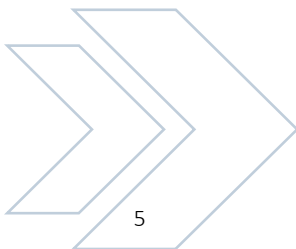
Bachelor of Science (Mechanical Engineering)

---

Bachelor of Science (Electrical Engineering)

---

Bachelor of Science (Industrial Automation Engineering)



# Study Modes



Online Delivery



On-Campus Delivery

The BME program is offered at our **Perth and Melbourne** campuses.

# Study Modes: Online Snapshot

## Bachelor of Science (Mechanical Engineering)

Duration: 3 Years Full-Time

Study Mode: Online

Intakes: 20 July 2026

Fees: For Australia:  
Per 3CP Unit AUD \$1,404.00  
Per 9CP Unit (BSC307) AUD \$4,212.00  
Total Course Fees AUD \$37,908.00

\*Fees are subject to change



# Study Modes: On-Campus Snapshot

## On-Campus - Bachelor of Science (Mechanical Engineering)

CRICOS Course Code: 095815G

Duration: 3 Years Full-Time

Study Mode: On-campus

Location: Perth & Melbourne

Intakes: 27 July 2026

Fees: Domestic Per Year : AUD \$9,000.00  
Domestic Total : AUD \$27,000.00  
International Per Year : AUD \$25,850.00  
International Total : AUD \$77,550.00

\*Fees are subject to change



# Course Overview

The Bachelor of Science (Mechanical Engineering) will equip you with the practical skills and technical knowledge needed to meet the demands of the modern mechanical engineering industry.

Aspiring engineering technologists and professionals interested in industries such as manufacturing, transport, energy, and advanced technology will especially benefit from this program as it prepares them for diverse career opportunities in mechanical engineering.

Upon completion of this qualification, you will gain knowledge and hands-on experience in materials, energy, motion, and modern mechanical engineering technologies, enabling you to improve safety, efficiency, and innovation across a wide range of engineering applications.



# Graduates of this Program will be able to:

- Apply principles of physics, materials science, and mechanics to analyze and solve mechanical engineering problems using established technologies and standards.
- Integrate mathematical reasoning, computational tools, and programming to model, simulate, and evaluate mechanical engineering systems and processes in global engineering contexts.
- Exercise sound engineering judgement in mechanical design by incorporating safety, sustainability, manufacturability, cost, societal needs, and relevant regulatory frameworks.



# Learning Outcomes Snapshot

## Bachelor of Science (Mechanical Engineering)

Mapping of Program Learning Outcomes with Graduate Attributes and Engineers Australia Stage-1 Competencies for Engineering Technologists

EA Stage 1 Competencies - Engineering Technologist	Program Learning Outcomes	BSc Graduate Attributes
<b>Knowledge and Skill Base</b>		
<b>EA 1.1</b> Systematic, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the technology domain.	<b>1.</b> Apply principles of physics, materials science, and mechanics to analyse and solve mechanical engineering problems using established technologies and standards. (EA 1.1)	<b>GA 1.1</b> Demonstrate competence in mathematics, natural sciences and engineering fundamentals.
<b>EA 1.2</b> Conceptual understanding of mathematics, numerical analysis, statistics, and computer and information sciences which underpin the technology domain.	<b>2.</b> Integrate mathematical reasoning, computational tools, and programming to model, simulate, and evaluate mechanical engineering systems and processes in global engineering contexts. (EA 1.2, 1.3)	<b>GA 1.4</b> Use numerical analysis, statistics, computer and information technology to develop solutions.
<b>EA 1.3</b> In-depth understanding of specialist bodies of knowledge within the technology domain.		<b>GA 1.2</b> Possess specialized engineering knowledge appropriate to the discipline.
<b>EA 1.4</b> Discernment of knowledge development within the technology domain.	<b>3.</b> Exercise sound engineering judgement in mechanical design by incorporating safety, sustainability, manufacturability, cost, societal needs, and relevant regulatory frameworks. (EA 1.4, 1.5)	<b>GA 4.2</b> Independent self-directed learner in work and study who keeps up with advancements in their domain and professional practice.
<b>EA 1.5</b> Knowledge of engineering design practice and contextual factors impacting the technology domain.		<b>GA 4.3</b> Recognise the impact of engineering within the broader public interest.
<b>EA 1.6</b> Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the technology domain.	<b>4.</b> Adapt theoretical knowledge in thermodynamics, fluid mechanics, and manufacturing, to develop practical, innovative and sustainable mechanical engineering solutions that meet global best practices. (EA 1.4, 1.6)	<b>GA 2.2</b> Apply reflective practice to social, economic, global, cultural and environmental factors to devise sustainable engineering solutions.

Read More: [Mapping of Program Learning Outcomes](#)

# Online - Bachelor of Science (Mechanical Engineering)

## [Program Structure](#) – Year 1

Unit Code	Subjects	Credit Points
<a href="#">BSC101</a>	Engineering Mathematics 1	3
<a href="#">BSC102</a>	Electrical Circuit Theory and Analysis	3
<a href="#">BSC103</a>	Engineering Physics and Materials	3
<a href="#">BSC104</a>	Engineering Drawing and CAD	3
<a href="#">BSC105</a>	Engineering Ethics and Professional Practice	3
<a href="#">BSC106</a>	Engineering Mathematics 2	3
<a href="#">BSC107</a>	Engineering Programming	3
<a href="#">BSC108</a>	Engineering Statics	3
<a href="#">BSC109</a>	Fluid Mechanics	3

## Online - Bachelor of Science (Mechanical Engineering) Program Structure – Year 2

Unit Code	Subjects	Credit Points
<a href="#">BSC201</a>	Engineering Management	3
<a href="#">BME202</a>	Fluid Machines	3
<a href="#">BME203</a>	Thermodynamics	3
<a href="#">BME204</a>	Machine Dynamics	3
<a href="#">BME205</a>	Manufacturing Processes and Technology	3
<a href="#">BME206</a>	Hydraulics and Pneumatics	3
<a href="#">BME207</a>	Heat and Mass Transfer	3
<a href="#">BME208</a>	Mechanical Design	3
<a href="#">BME209</a>	Machine Condition Monitoring	3

## Online - Bachelor of Science (Mechanical Engineering)

### Program Structure – Year 3

Unit Code	Subjects	Credit Points
<u>BME 301</u>	Process Plant layout, piping and pipeline systems	3
<u>BME 302</u>	Automation, Measurement and Control	3
<u>BME 303</u>	Computer Aided Technologies	3
<u>TBA</u>	Elective-1*	3
<u>TBA</u>	Elective-2*	3
<u>BSC306</u>	Technology, Sustainability and Society	3
<u>BSC307</u>	Engineering Capstone Project	3

\*Electives are on the following page

## Additional Mandatory Unit

Unit Code	Subjects	Credit Points
<u>BXX001-004</u>	Hands –On Workshop 1	0
	Hands –On Workshop 2	0
	Hands –On Workshop 3	0
	Hands –On Workshop 4	0
	Industrial experience	0

### List of electives\* (2 Electives to be selected)

Unit Code	Subjects	Credit Points
<u>BSC202</u>	Engineering Mathematics 3	3
<u>BME304</u>	Heating, Ventilation and Air-conditioning systems	3
<u>BME 306</u>	Renewable Energy Technologies	3
<u>BIA206</u>	Data Analytics and Artificial Intelligence	3

### Work-Integrated Learning

EIT's Bachelor of Science programs require students to undertake 240 hours of paid or unpaid professional work-integrated learning. This can incorporate paid or unpaid internships, site visits, contributing to industry projects, and networking activities. In undertaking an internship, students will interact with employees and become exposed to organizational policy and culture. You will familiarize yourself with organizational communication procedures, a variety of engineering disciplines, and obtain insight and practical aptitude in projects from the planning phase to completion. If you already have some work experience in the relevant engineering field, you may apply to have credit granted by completing the associated recognition of prior learning form.

# Potential Job Outcomes

Potential job roles include engineering and management positions in the following areas of expertise:

- Mechanical design and manufacturing
- Material fabrication
- Mechanical power
- Thermal power and diesel
- Mechanical engineering contracts, sales, commissioning and consultation
- Building systems
- Industrial operations and maintenance
- Mechanical project management and business development
- Automotive engineering
- Acoustics
- Fluid mechanics, hydraulics, pumps and piping
- Lubrication

# Entry Requirements

Entry is available to applicants who hold one of the following:

1. Year 12: Australian Senior Certificate of Education ([or equivalent](#)), completed within the past 3 years, with a minimum score of 60% in Maths;
  - Applicants who have completed Yr 12 ([or equivalent](#)) more than 3 years ago will also need to demonstrate relevant work experience in the field of study applied for.
2. A relevant (to the sub-discipline) Engineering AQF Diploma or higher or a relevant (to the sub-discipline) overseas qualification equivalent to an Engineering AQF Diploma or higher which was completed within the last 10 years with successful completion of all Maths units/modules + recent industry work experience in a relevant field.

## English Language Proficiency Requirements:

Entry to this course requires demonstration of English language proficiency at the level of an IELTS overall score of at least 6.0 (with no individual band score less than 5.5)

The methods of satisfying this English language proficiency requirements are generally through (but not limited to):

- An Australian Senior Certificate of Education or equivalent.
- A specified level of achievement in a recognized English language test, such as IELTS (or equivalent).
- Satisfactory completion of another tertiary course offered in English.
- Work history in an organization where English is the language of communication.



**NOTE:** All CRICOS applicants from non-English speaking countries (as determined by the Australian Department of Home Affairs) are required to provide results from a recognised language test such as IELTS or equivalent.

**NOTE:** All applications will be assessed on a case-by-case basis.

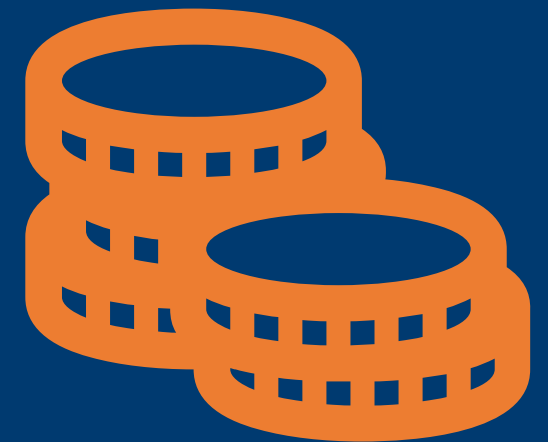
**Please check the Documentation Guidelines for your application.**

# Fees & Payments

For full current fees in your country go to the drop down filter at the top of this page or [visit the Fee pages](#).

## Payment Methods

Learn more about [payment methods](#), including payment terms & conditions and additional non-tuition fees.



# Accreditation

Like all Australian higher education providers, EIT programs are accredited by the exacting standards of the [Australian Government's Tertiary Education Quality and Standards Agency \(TEQSA\)](#).

This course is classified as Level 7 under the [Australian Qualifications Framework \(AQF\)](#).

These online and on-campus bachelor's degrees are fully accredited by **Engineers Australia** under the **Sydney Accord (Perth only for on campus)**. They are internationally recognized through the International Engineering Alliance (IEA) and its signatory countries, ensuring global recognition of the qualification and alignment with international engineering education standards.

While the course is also offered at the Melbourne campus, it is currently not accredited by Engineers Australia for delivery at this location. You can find the accreditation [here](#).

Please visit our website to find out more about [country-specific accreditation](#) and professional recognition.

**\*Students should satisfy themselves through their own research with their local accreditation authority prior to commencing the program.**

# Software Used

This course may use the following software:

- Desmos online calculator
  - National Instruments ELVISmx Instrument Launcher
  - National Instruments Multisim
  - Autodesk Inventor, AutoCAD
  - MATLAB
  - Python 3.10
  - CodeBlocks C/C++ IDE
  - Repl.it (Cloud IDE)
  - ANSYS Fluent
  - REFPROP
  - MechAnalyser
  - Automation Studio
  - Interactive Heat Transfer (IHT) software
  - Autodesk Inventor;
  - SolidWorks
  - PASS Start-Prof
  - Autodesk Inventor
  - ANSYS Workbench
  - Python Jupyter Notebook
  - Google Colab
  - RETScreen (Recommended for financial analysis of energy systems)
  - Pytorch
  - KNIME
  - Apache Mahout
- *Due to ongoing unit and course reviews, software may change from the list provided. Learn more about the Practical Learning at EIT [here](#).*

# Time Commitment & Duration

Our bachelor's degrees take 3 years to complete full-time, and longer for those studying part-time. You will spend approximately 10 hours per week, per unit, learning the program material, completing assessments and attending tutorials. After enrolment the maximum time allowed to complete all units is 8 years.



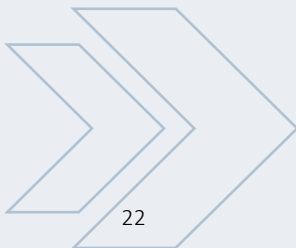


# Student Support

Both online and on-campus students need support, encouragement, and a go-to person. Our students are supported by dedicated Learning Support Officers (LSOs) for the duration of their studies, giving them a greater chance of success. Students studying our higher education programs will have a committed LSO for each unit of study.

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

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



# 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 specialized equipment in a safe and near-limitless testing environment.
6. Diverse student cohorts.
7. Bandwidth requirements can be demanding.
8. Support

# Hear From A Past Student

Daniel White | EIT Student

Bachelor of Science (Mechanical Engineering)





# Hear From A Past Student



**You've achieved so much in your career while studying, what motivated you to pursue the Bachelor of Science (Mechanical Engineering) online, and how did it complement your professional growth?**

My journey into mechanical engineering began while exploring different career paths. I started with a trade in Tool, Jig, and Die making, where I discovered a passion for mechanical engineering and STEM.

After completing my trade, I was accepted into several South African universities, including University of the Witwatersrand and University of Johannesburg, while also considering correspondence study to continue working full-time.

During COVID-19, I realized the value of established online learning and chose Engineering Institute of Technology (EIT) for its international accreditation and flexible study model, where I completed my Bachelor of Science in Mechanical Engineering.

A first-year Industrial Research project connected me with a company specializing in automated tooling and OEM production lines. That relationship eventually led to my current role as a design engineer, designing OEM automated tooling and production lines.

My studies not only strengthened my technical knowledge but also opened direct pathways into the industry I was passionate about.

# Hear From A Past Student

Many people wonder how practical components work in an online engineering degree, can you share your experience with the remote laboratories and how they compared to traditional, in-person labs?

EIT's B.Sc program includes two types of labs and practicals integrated across all modules.

## Set 1: Remote & Simulation Labs

These labs replicate real-world engineering tasks using professional industry software for design, analysis, and testing.

For example, pneumatic control labs involved creating and testing functional systems — the same tools and processes now used in professional engineering environments and automated tooling design.



# Hear From A Past Student

## Set 2: Hands-On Workshops

- BXX001 Hands-on Workshop 1
- BXX002 Hands-on Workshop 2
- BXX003 Hands-on Workshop 3
- BXX004 Hands-on Workshop 4

These are in-person practical workshops offered at EIT campuses or completed through industry-based assessment for working professionals.

Students with relevant industry experience may also apply for Recognition of Prior Learning (RPL) through an assessment process aligned with Engineers Australia standards.

While the B.Sc focuses strongly on theoretical engineering concepts, students seeking a more practical, technician-focused pathway may prefer applied engineering programs such as B-Tech or Advanced Diplomas.



# Hear From A Past Student

How did the flexibility of online study help you balance your academic responsibilities with your career and personal commitments?

Studying online through Engineering Institute of Technology (EIT) made it possible to gain a high-quality engineering education while continuing to work full-time. The flexible, student-centred structure allowed me to balance academic, professional, and personal commitments without compromising progress in any area.

EIT supports students through multiple lecture times across different time zones, flexible deadlines for working professionals, and dedicated Learning Support Officers (LSOs) who assist with academic challenges. This well-designed support system ensures students can stay engaged and succeed in their studies, even with demanding schedules.

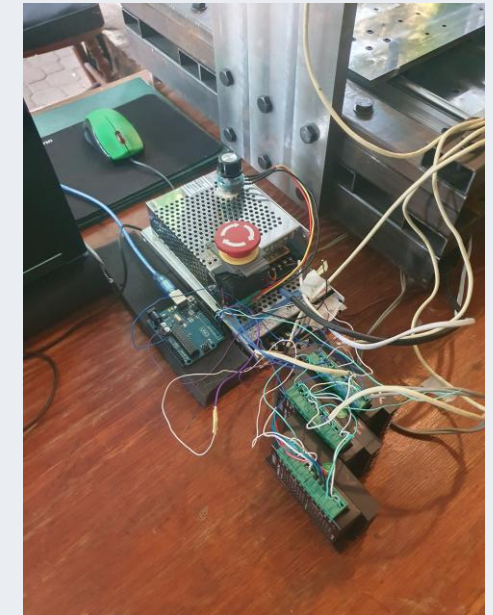
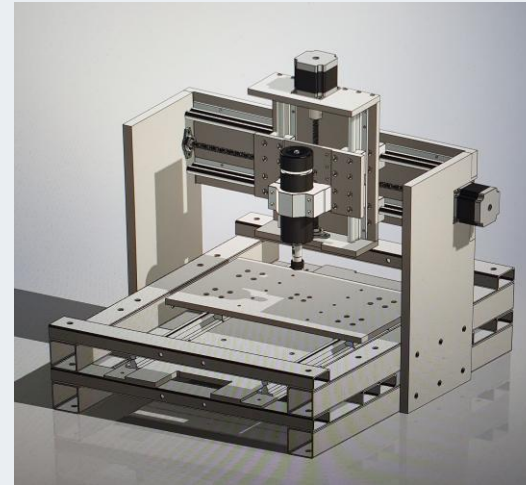


# Hear From A Past Student

Looking back, was there a particular project, lab, or subject that had a direct impact on your career progression or technical confidence?

The EIT program is well structured, with each module contributing meaningful, relevant knowledge that has built a strong foundation I still rely on in my work as a design engineer. The curriculum plays a key role in developing the skills needed to meet the demands of the field.

A standout experience was the final-year project, where I designed and built a fully functional 3-axis CNC milling machine. It required integrating knowledge from multiple subjects and applying both theory and practice. This project strengthened my technical confidence and proved my ability to successfully deliver complex engineering solutions.



# Hear From A Past Student

What stood out to you most about your experience studying at EIT, and how did it differ from other institutions you may have considered?

The level of support I received throughout the entire degree. The lecturers were of a very high calibre and were always willing to answer questions and provide guidance. In addition, the Learning Support Officers (LSOs) were consistently available to assist whenever issues arose or accommodations needed to be made for various reasons.

EIT's curriculum was another highlight. It is well-structured, carefully regulated by the academic board, and instilled confidence in the quality of the education I was receiving. The fact that EIT holds international accreditation for its degree programs is a significant advantage, as it supports professional progression and ensures the degree is widely recognized.

What truly differentiates EIT from other institutions I considered is its commitment to staying current and relevant. The curriculum is set to meet industry needs, and the institution embraces contemporary technology to deliver education to a global student body. This sets it apart from more traditional institutions



# Hear From A Past Student

Is there anything else you would like to share?

## Career after graduation: Automotive Tooling Design Engineer

An Automotive Tooling Design Engineer is a specialized engineer who designs the manufacturing equipment, molds, dies, and fixtures required to mass-produce vehicle components.

- While Automotive Product Engineers design the actual car parts (like a car door or dashboard), Automotive Tooling Design Engineers design the machinery and physical tools that fabricate those parts at high speed, high accuracy, and low cost.
- My specialization: Turnkey Body-In-White OEM tooling design.

In a Turnkey OEM Body in White (BIW) design project, a tooling design engineer creates the entire physical framework. This is the complete automated assembly line required to weld and assemble the car's raw sheet-metal frame.  
(the skeleton of the vehicle)

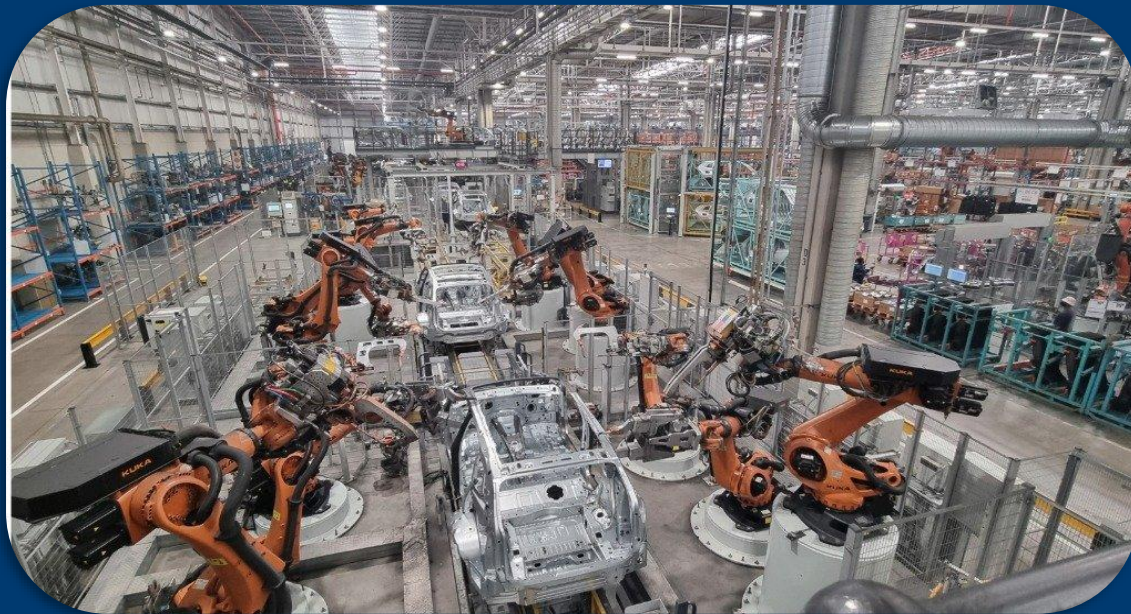


BMW Project  
Turnkey Production  
Line

**BMW X3 SUV**



**BMW X3: Plant Rosslyn in South Africa**



**BMW X3**

## Current BMW Project Turnkey Finish Line Tooling

### BMW Neue Klasse: i3 NA0 and iX3 NA5



BMW Neue Klasse: i3 NA0 and iX3 NA5 : Plant San Luis Potosí, Mexico

BMW NCAR NA0 and NA5 are internal BMW factory project codenames representing the first waves of vehicles built on BMW's revolutionary, electric-first Neue Klasse (NCAR) modular architecture.

In the automotive world, NCAR stands for New Cluster Architecture. Unlike BMW's older CLAR platform—which had to support petrol, diesel, hybrid, and electric setups all on the same assembly line—NCAR is a complete architectural reset designed strictly for high-voltage, 800V next-generation electric vehicles.



**Concept: Releases in 2027**



# Hear From A Past Student



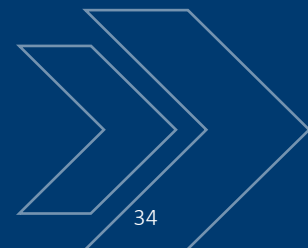
Is there anything else you would like to share?

I would like to sincerely thank EIT for providing me with such a solid academic foundation. The program has truly launched my career, opening doors in ways I could only have dreamed of before beginning my studies.

I plan to continue my education with EIT by pursuing a master's degree in the coming years, followed by a doctorate. I am excited to continue growing both academically and professionally.

In addition, I would love to contribute to EIT's vision by working on the development of industry-specific trade programs. My goal is to help bring rigorous trade theory back into industry, bridging the gap between academic excellence and practical application.

Thank you, EIT, for the opportunities, support, and inspiration you have provided throughout my journey.



# Thank You!

# Upcoming Courses



Please refer to the EIT website for further information.

Engineering Institute of Technology (EIT)	Start Date
Bachelor of Science (Mechanical Engineering)	20/07/2026
On-Campus – Bachelor of Science (Mechanical Engineering) <i>CRICOS Course Code: 095815G</i>	27/07/2026

# Q&A

# Contact Us:

---



**Website**  
[www.eit.edu.au](http://www.eit.edu.au)



**Email**  
[webinars@eit.edu.au](mailto:webinars@eit.edu.au)



**Head Office**  
6 & 8 Thelma Street, West Perth  
Perth, WA 6005



**Courses**  
<https://www.eit.edu.au/schedule/>



**Phone**  
Inside Australia: 1300 138 522  
Outside Australia: +61 8 9321 1702