



TARUMT
TUNKU ABDUL RAHMAN UNIVERSITY OF
MANAGEMENT AND TECHNOLOGY



2023

FACULTY OF ENGINEERING AND TECHNOLOGY

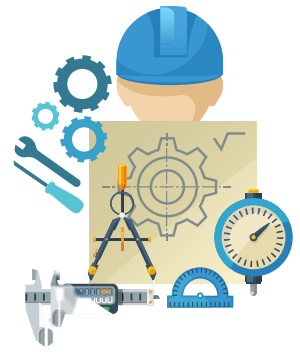
UNDERGRADUATE PROGRAMMES



TUNKU ABDUL RAHMAN UNIVERSITY OF MANAGEMENT AND TECHNOLOGY DU058(W)

Wholly owned by the TARC Education Foundation (Reg. No.: 201301003979 (1033820-M))

The **Faculty of Engineering and Technology (FOET)** began as the School of Technology of Tunku Abdul Rahman College in 1972 with programmes that simultaneously prepared students to sit for internationally recognised professional examinations. With the upgrading of Tunku Abdul Rahman College to Tunku Abdul Rahman University College, the Faculty of Engineering and Built Environment was set up in 2013 offering both Bachelor and Diploma programmes. Due to rapid growth and academic restructuring, it was decided to split the Faculty in 2017 and the Faculty of Engineering and Technology was set up to focus on the existing range of professionally and internationally recognised Bachelor of Engineering programmes accredited by the Engineering Accreditation Council, Board of Engineers Malaysia.



With over 50 years of experience in engineering education, the Faculty of Engineering and Technology is poised to grow from strength to strength, offering programmes that meet the quality standards of the engineering profession. We invite you to join us in the pursuit of academic excellence leading to great opportunities in your future. We are confident that you will find your time with us both enjoyable and rewarding. Our aim is to **ENGINEER YOUR PATHWAY TO SUCCESS**, equipping you with knowledge, skills and attributes to prepare you for a brighter future.

What Our Graduates Say



ANG KAI LIANG

I am currently employed as an IC design engineer and I am grateful to TAR UMT's well rounded education that has given me the opportunity to pursue my ambitions. TAR UMT is a tertiary education institution that offers quality education that is affordable. The lecturers are knowledgeable and helpful and the campus facilities are top - notch which help students to have a fulfilling campus life. The programme curriculum is designed to strengthen students' technical skills as well as soft skills in addition to helping students build important competencies for future employment. This helps us boost our employability especially in this challenging and fast - paced world.

Bachelor of Electrical and Electronics Engineering with Honours - Graduated in 2022
Diploma in Technology (Electronic Engineering) - Graduated in 2019

1. President's List, 2019,2021,2022
2. Dean's List, 2021
3. Second runner-up in Prodex 2021
4. Second runner-up in Prodex 2022



LEE JIA HAN

It has been a wholesome experience to further my studies at TAR UMT. My lecturers are always amiable and helpful, and their encouragement and the way they conduct lessons have helped me a lot in my learning process. I would like to express my appreciation to TAR UMT for providing me the TAR UMT merit scholarship and opportunities to participate in competitions. The achievements I have accomplished during my years in TAR UMT are excellent reminders that I have a lot of potentials to soar higher in my career and life. This ties in very well with my belief in "Self-confidence is the great determiner of success", because I am the only one who is going to lead myself on my path. Cheers!

Bachelor of Mechanical Engineering with Honours – Graduated in 2022
Foundation in Science – Graduated in 2018

1. Merit Scholarship Holder, 2018 & 2022
2. Champion of ProDEX 2022 under category Group A (Simulation & Modelling)
3. GREATECH Best FYP Award 2022
4. President Lists: 202201, 202105, 202005, 201905, 201809
5. Dean Lists: 202101, 201909, 201805



FONG HAO NAN

Studying engineering in TAR UMT is a great way to carve a good future in the field of engineering as there is no question of the quality of the programme as well as providing students with an ideal environment to learn and grow. Quality education at TAR UMT also includes helping students develop important practical skills through various means such as encouraging students' participation in various competitions. I also appreciate the faculty's emphasis in robotics which has helped me further deepen my passion for engineering.

Bachelor of Mechatronics Engineering with Honours - Graduated in 2022
Diploma in Technology (Mechatronics) - Graduated in 2019

1. Book Prize Winner, 2019
2. Merit Scholarship Holder, 2019 & 2022
3. GREATECH Best FYP Award 2022

Why study at the
**FACULTY OF
ENGINEERING
AND
TECHNOLOGY**

Professionally accredited engineering programmes by the **Board of Engineers Malaysia** and **globally recognised** through Malaysia's signatory membership with the Washington Accord.

Strong industrial links and **exposure** with engineering site visits, guest lectures, and curriculum design with input from industry advisors and successful alumni.

Work on real world **industry-funded projects** and receive **mentorship** from experienced academic staff and practising engineers.

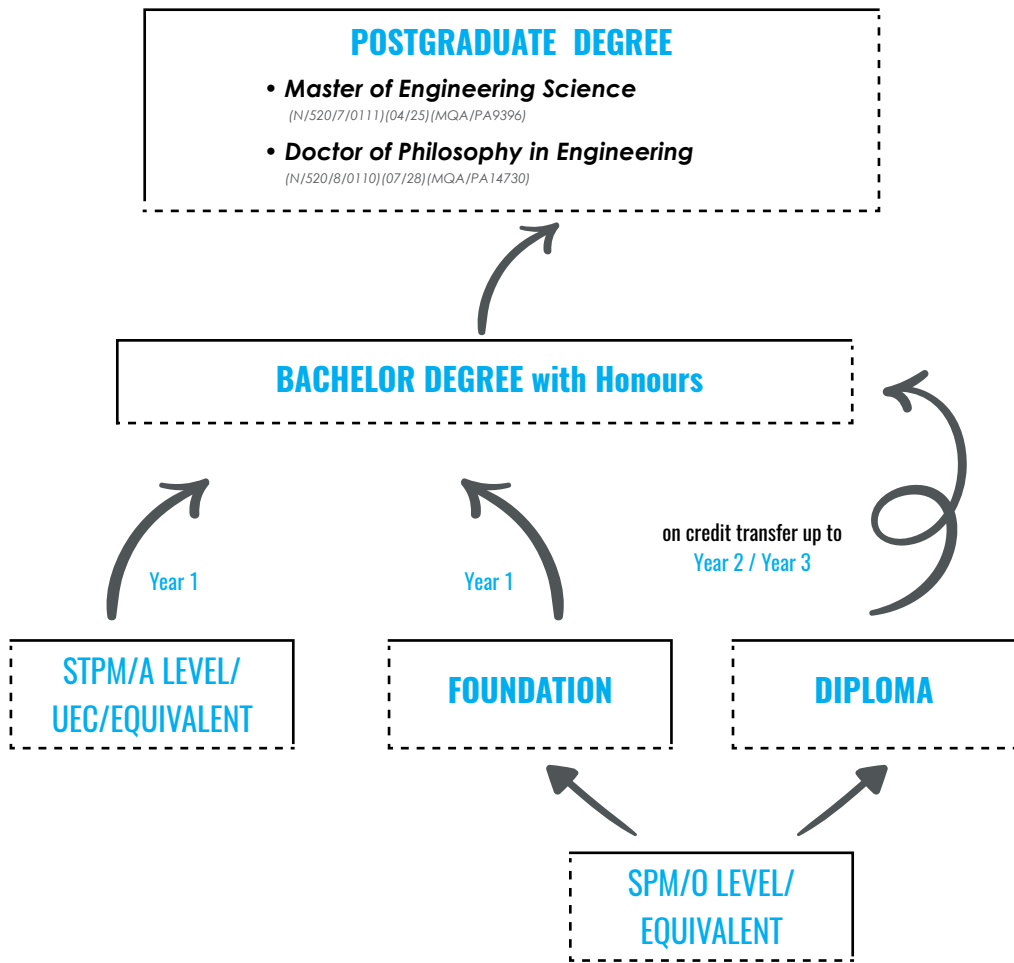
Graduates are **highly sought after** by engineering firms and students may take advantage of career fairs and onsite interviews to **secure employment upon graduation**.

Engineering education excellence with a strong emphasis on **innovative teaching** and **student centric learning experience**.

Passionate and highly qualified academic staff dedicated to inculcate the significance and key values of research in line with industry driven technological growth.

Opportunities to participate in **national and international competitions** that **challenges** the application of in depth engineering knowledge, practical skills, teamwork and leadership skills.

GENERAL PROGRESSION ROUTE



2023 INTAKES

FEBRUARY

COMMENCEMENT DATE:

- Foundation
- Selected Bachelor Degree/
Diploma programmes

10/02/2023

JUNE

COMMENCEMENT DATE:

- Foundation
- Bachelor Degree & Diploma

23/06/2023

26/06/2023

OCTOBER/NOVEMBER

COMMENCEMENT DATE:

- Foundation
- Selected Bachelor Degree/
Diploma programmes

20/10/2023

17/11/2023

PROGRAMMES OFFERED

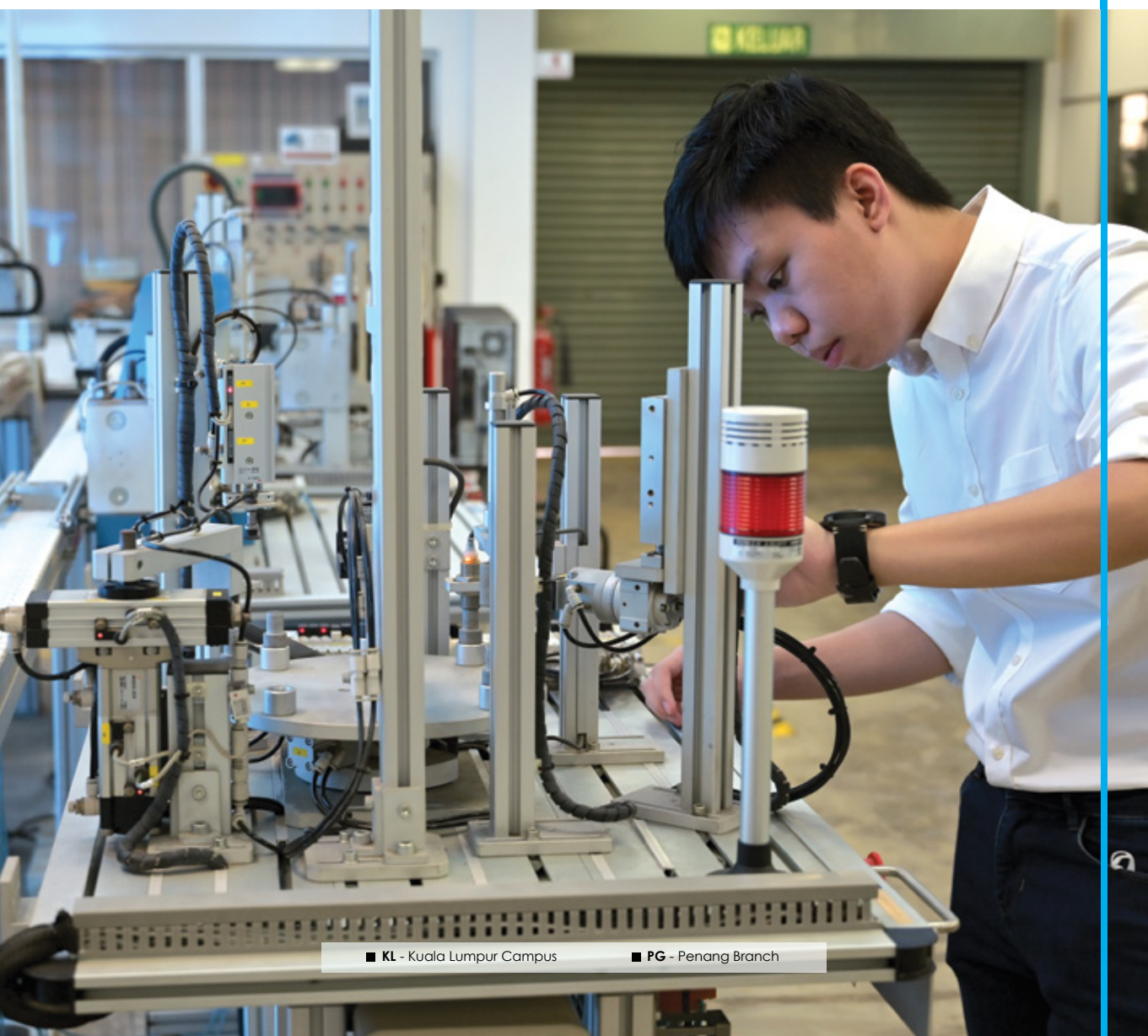
Foundation (1 Year)



Bachelor Degree (4 Years)

➤ Foundation in
Engineering **KL/PG**

- Bachelor of Electrical and Electronics
Engineering with Honours **KL**
- Bachelor of Mechanical Engineering
with Honours **KL**
- Bachelor of Mechatronics Engineering
with Honours **KL**
- Bachelor of Electronics Engineering
Technology with Honours **PG**



PROGRAMMES OFFERED

on credit transfer up to

Year 2

Diploma (2 Years 6 Months)



Bachelor Degree (4 Years)

Engineering Track

➤ Diploma of Electronic Engineering **KL/PG**

➡ Bachelor of Electrical and Electronics Engineering with Honours **KL**

➤ Diploma of Mechanical Engineering **KL**

➡ Bachelor of Mechanical Engineering with Honours **KL**

➤ Diploma of Mechatronic Engineering **KL**

➡ Bachelor of Mechatronics Engineering with Honours **KL**

on credit transfer up to

Year 3

Diploma (2 Years 6 Months)



Bachelor Degree (4 Years)

Engineering Technology Track

➤ Diploma of Electronic Engineering **KL/PG**

➡ Bachelor of Electronics Engineering Technology with Honours **PG**

Diploma (2 Years 4 Months)

Technology Track

➤ Diploma in Product Development Technology **KL**

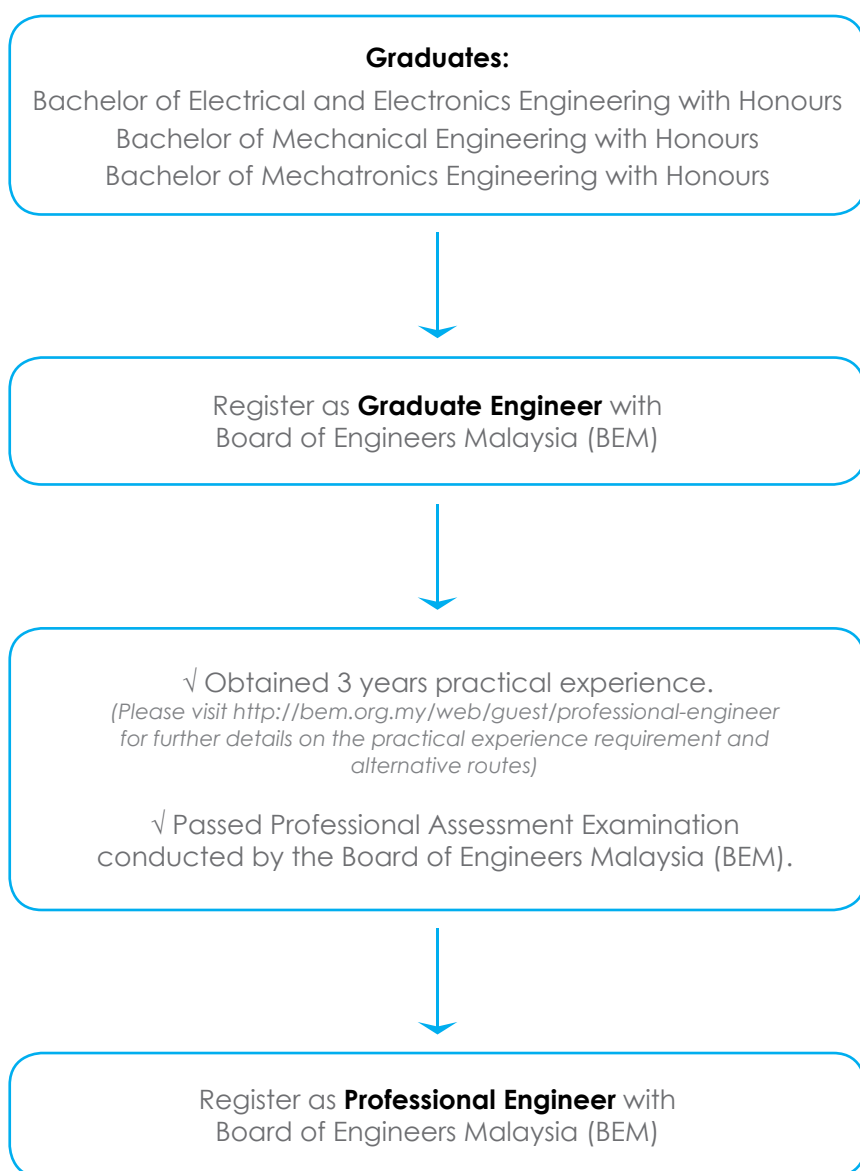
➤ Diploma in Manufacturing Technology **KL**

ACCREDITATION FROM ENGINEERING ACCREDITATION COUNCIL, BOARD OF ENGINEERS MALAYSIA (BEM)

Bachelor's Degree programmes (Bachelor of Electrical and Electronics Engineering with Honours, Bachelor of Mechanical Engineering with Honours and Bachelor of Mechatronics Engineering with Honours) have received accreditation from Engineering Accreditation Council, Board of Engineers Malaysia (BEM) since 2016.

An accredited Bachelor's Degree enable graduates to be eligible for the registration as Graduate Engineer (Grad.Eng.) and followed by Professional Engineer (Ir/ P.Eng) with Board of Engineers Malaysia (BEM).

The Bachelor Degree programmes has been accorded a 6 - year accreditation for graduates of Year 2022 - 2027.



MECHANICAL ENGINEERING

Mechanical engineering is the broadest among all engineering disciplines. Thus, most of the modern day inventions are due to knowledge and application of mechanical engineering. Ranging from simple machineries to supersonic jets and self-driving vehicles, mechanical engineers were always involved from the inception of an idea to the creation of market-ready product. Graduates trained under mechanical engineering will be equipped with the know-hows and skills to work in a wide spectrum of industries such as manufacturing, automotive, modern agriculture, bio-medical, building services and product design. They are well prepared to contribute to the modern world, fulfilling the needs of the Fourth Industrial Revolution (IR 4.0).



Career Prospects

Graduates with bachelor degree would find career opportunities as an engineer in various sectors, but not limited to mechanical, manufacturing, process and production, design and development, consultancy and also research and development (R&D). Employment opportunities as equipment or facilities engineer are on the rise nowadays, alongside quality assurance sector.

Graduates with diploma qualification are competent in working as assistant engineers or technicians in the above-mentioned fields and also in relevant sales or marketing sectors.



Level & Campus

Bachelor of Mechanical Engineering with Honours

- 4 years

• **KL** (R/521/6/0063)(10/25)(MQA/FA3884)

Diploma of Mechanical Engineering

- 2 years 6 months

• **KL** (R/521/4/0061)(08/28)(AA0045)



MECHATRONICS ENGINEERING

Mechatronics is a multidisciplinary engineering branch incorporating Mechanical, Electronics, Control, Networking and Software systems. The synergy of these systems are widely used in multiple industries which typically include automation and system integration. Graduates are therefore involved in almost all levels of various sectors, namely: design, development, applications, automation, manufacturing and advanced research.

Career Prospects

Encompassing mechanical, electronics and control aspects, graduates who were trained under mechatronics engineering would find job opportunities in automation, robotics, instrumentation & control and systems engineering sectors. Having a solid fundamental knowledge, graduates are also able to venture into design, research and development, engineering services, autonomous system engineering and/or jobs that are in-line with the Fourth Industrial Revolution (IR 4.0).

Esteemed diploma level graduates are eligible to contribute as assistant engineers or technicians in the above-mentioned fields and also in relevant sales or marketing sectors.

Level & Campus

Bachelor of Mechatronics Engineering with Honours

- 4 years

• **KL** (R/523/6/0159)(10/25)(MQA/FA3885)

Diploma of Mechatronics Engineering

- 2 years 6 months

• **KL** (R/523/4/0139)(08/23)(AA0047)



ELECTRICAL AND ELECTRONICS ENGINEERING

Electrical and Electronics (E&E) Engineering is probably the most useful degree for you to gain insight on how all the bizarre technologies improves our life - from smart wearable, smart appliances to smart power grid, smart transportation and many more. The advanced technologies that we are enjoying right now as well as that to be enjoyed in the future are driven the brightest E&E engineers and scientists with strong fundamental knowledge in electricity, electronics and electromagnetism. E&E Engineering programme enables you to explore technical knowledge in variety broad areas - power and high voltage engineering, signal processing, integrated circuits, communications, control & instrumentations, renewable energy, computer architecture and data engineering - and become a competent engineer well equipped to meet the challenges of Fourth Industrial Revolution (IR 4.0). Emphasis of the programme is on sustainable design, development and commercialization of a wide range of electrical & electronic products and services.



Career Prospects

Graduates will find career opportunities in a wide range of sectors, including aerospace, communications, instrumentation & control, IT & computing, consumer & industrial electronics/microelectronics, electrical & power generation machinery & equipment, manufacturing, transport networks, power generation, transmission & distribution, public utilities, building services, scientific, medical and educational institutions, amongst others.

Job scopes may include developing solutions to problems using new or existing technologies, product design, research & development, test & verification, inspection and maintenance, marketing, sales & service, management/supervision of engineering projects & operations, systems installation & testing, ensuring projects meet electrical safety regulations and consultancy, amongst others.



Level & Campus

Bachelor of Electrical and Electronics Engineering with Honours - 4 years

- **KL** (R/523/6/0158)(10/25)(MQA/FA3882)



ELECTRONICS ENGINEERING TECHNOLOGY

Electronics Engineering is one of the largest and fastest growing industries, especially in Penang – Malaysia's electronics manufacturing hub. This programme deals with the design, application, installation, manufacturing, operation or maintenance of electronics systems. Unlike conventional electronics engineering programme which emphasises on general theories and conceptual designs, the Bachelor of Electronics Engineering Technology with Honours programme covers a specialised discipline in application of electronic engineering, design and implementation, with a broad knowledge of curriculum in the area of industrial robotic, very-large-scale integration (VLSI) design system, microwave communication system, digital signal processing, microelectronics and etc.

Students are also given work placement opportunities with the industry partners includes Plexus Manufacturing Sdn Bhd, Jabil Circuit Sdn Bhd, ViTrox Corporation Berhad, UWC Berhad, VeecoTech Web & Ecommerce Sdn Bhd and Community Marketplace Technology Sdn Bhd throughout their studies, particularly during their semester breaks and internship. This programme produces highly sought-after talents for the industry as students will go through an enriching learning experience that is industrial-relevant.

Career Prospects

Graduates will find career opportunities that covers a broad spectrum in engineering field, including product development & manufacturing, aerospace, communications, instrumentation & control, IT & computing, consumer & industrial electronics, microelectronics etc.

Level & Campus

Bachelor of Electronics Engineering Technology with Honours - 4 years

• **PG** [N/0713/6/0002](05/29)[MQA/PA15254]



ELECTRONIC ENGINEERING

Electronic technologies form the foundation of modern society, making possible the devices and systems that we rely upon in our daily life such as mobile communications, computer networks, medical equipment, video and audio systems and industrial control and automation. Electronics is a broad engineering field, giving students enormous flexibility and wide ranging career options. The Diploma of Electronic Engineering emphasises on design of digital and analogue systems with a focus on applying basic concepts and skills to real world situations and developing broad-based knowledge with a curriculum that includes electronic devices, communications, automation and control, software engineering and embedded systems. The Diploma programme is designed to bridge the gap for school leavers for a successful university study in Electrical and Electronics Engineering.



Career Prospects

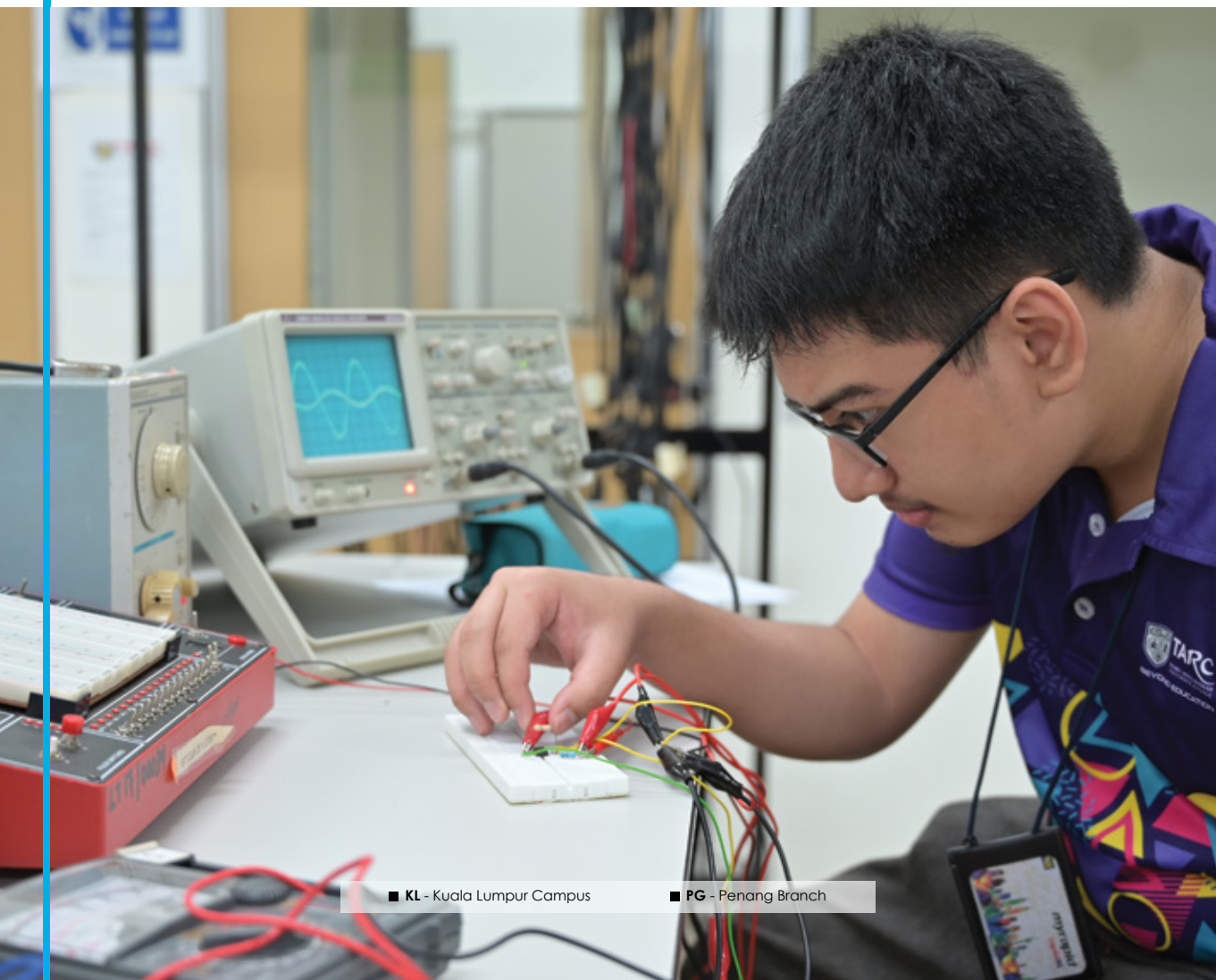
Graduates will find flexible and wide ranging of career options in the industries of aerospace, telecommunications, instrumentation & control, computing, consumer and industrial electronics with job scopes that may include product design, development & testing, maintenance, marketing, and sales & services.



Level & Campus

Diploma of Electronic Engineering - 2 years 6 months

- **KL** (R2/523/4/0138) (08/28) (AA0044)
- **PG** (R2/523/4/0126) (05/28) (AA0150)



PRODUCT DEVELOPMENT TECHNOLOGY

Product Development is the process of conceptualising and designing products, either physical or digital, to provide end users with solutions that meet their needs. For the purpose of developing new products or improving an existing products, it is imperative that product development technologists identify company goals in conjunction with market opportunities, prior to applying well-defined principles and technologies in a creative way. Product development technologists also formulate manufacturing specifications and perform design analyses to ensure all products meet industry standards and guidelines for functionality. Graduates trained under product development technology programme are expected to be innovative, creative, and analytical with excellent working knowledge using 3D modelling software and other modern technology tools.



Career Prospects

Graduates of *Diploma in Product Development Technology* are *Manufacturing and Industrial Technologists* with broad technical, managerial and operational background within their profession. Graduates can build their career as an assistant engineer, technical associate, or technician in the field of *product research and development, product design and marketing, product testing and quality assurance, product manufacturing and production, mechanical and machineries design*, as well as *automation and control*. They are well prepared as a *technoprenuer* to fulfil the country's needs of the Fourth Industrial Revolution (IR 4.0). Graduates are also encouraged to further their study in the relevant Bachelor Degree Programme.



Level & Campus

Diploma in Product Development Technology - 2 years 4 months

• KL (N/521/4/0185)(04/26)(PA13347)

MANUFACTURING TECHNOLOGY

Manufacturing technology encompasses software-based systems, material forming equipment and processes, material removal tools and processes, tooling systems, automated systems and additive processes etc. It refers to any technology that shapes or influences the manufacturing processes. Manufacturing processes are defined as all the activities involved in translating raw materials into finished products through the use of labour, machinery, chemicals, formulation methods, or biological processes. This diploma aims to produce graduates with a sound foundation in manufacturing technology field. Graduates are equipped with the knowledge which are essential for their future employment.



Career Prospects

Diploma graduates may be employed in a wide variety of manufacturing industries such as iron & steels, petrochemicals, electronics, ceramics, polymers, composites, automotive and aerospace industries as assistant engineers, metallurgical technician, quality control technician, service technician, testing technician, production technician, sales & marketing executive. Diploma graduates also can pursue further study in the relevant Bachelor of Technology programme.



Level & Campus

Diploma in Manufacturing Technology - 2 years 4 months

• KL (N/0720/4/0001)(05/27)(MQA/PA14872)

BACHELOR DEGREE ENTRY REQUIREMENTS

	STPM	A Level	UEC	Other IHL	TAR UMT/TAR UC
Bachelor of Electrical and Electronics Engineering with Honours	Grade C in Physics and Mathematics T/Further Mathematics	Grade D in Physics and Mathematics	5 Grade B in the relevant subjects which must include Physics and Advanced Mathematics (I or II)	Relevant Foundation/ Diploma accredited by MQA	<ul style="list-style-type: none"> Foundation in Engineering OR Relevant Diploma
Bachelor of Mechanical Engineering with Honours					
Bachelor of Mechatronics Engineering with Honours					
	AND SPM Pass/ O Level Grade E (Pass)/ UEC Grade C in English Language				
	STPM	A Level	UEC	Other IHL	TAR UMT/TAR UC
Bachelor of Electronics Engineering Technology with Honours	Grade C in Physics and one Mathematics subject	Grade D in Physics and Mathematics	5 Grade B in the relevant subjects which must include Physics and one Mathematics subject	Relevant Foundation/ Diploma accredited by MQA	<ul style="list-style-type: none"> Foundation in Engineering OR Relevant Diploma
	AND SPM Pass/ O Level Grade E (Pass)/ UEC Grade C in English Language				

- Note:
- a) Students without a credit in SPM Bahasa Melayu are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
 - b) TAR UMT/TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
 - c) Equivalent qualifications/qualifications from other Institution of Higher Learning (IHL) will be considered on a case-by-case basis.
 - d) Subject to the Ministry of Higher Education latest requirements.



DIPLOMA ENTRY REQUIREMENTS

Diploma of Electronic Engineering Diploma of Mechanical Engineering Diploma of Mechatronic Engineering	SPM	O Level	UEC	Certificate
	3 Credits in the relevant subjects	3 Grade C in the relevant subjects	3 Grade B in the relevant subjects	<ul style="list-style-type: none"> Relevant Certificate accredited by MQA <p>OR</p> <ul style="list-style-type: none"> Relevant Skilled/ Technical/ Vocational Certificate accredited by MQA or recognised by the Malaysian Government
Diploma in Product Development Technology Diploma in Manufacturing Technology	SPM	O Level	UEC	Certificate
	3 Credits in the relevant subjects	3 Grade C in the relevant subjects	3 Grade B in the relevant subjects	<ul style="list-style-type: none"> Relevant Certificate accredited by MQA <p>OR</p> <ul style="list-style-type: none"> Relevant Skilled/ Technical/ Vocational Certificate accredited by MQA or recognised by the Malaysian Government

Note:

- SPM holders must have at least a pass in Bahasa Melayu and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.
- Students without a credit in SPM Bahasa Melayu are required to pass Bahasa Kebangsaan A before the award of Diploma.
- Equivalent qualifications/qualifications from other Institution of Higher Learning (IHL) will be considered on a case-by-case basis.
- Subject to the Ministry of Higher Education latest requirements.



FOUNDATION ENTRY REQUIREMENTS

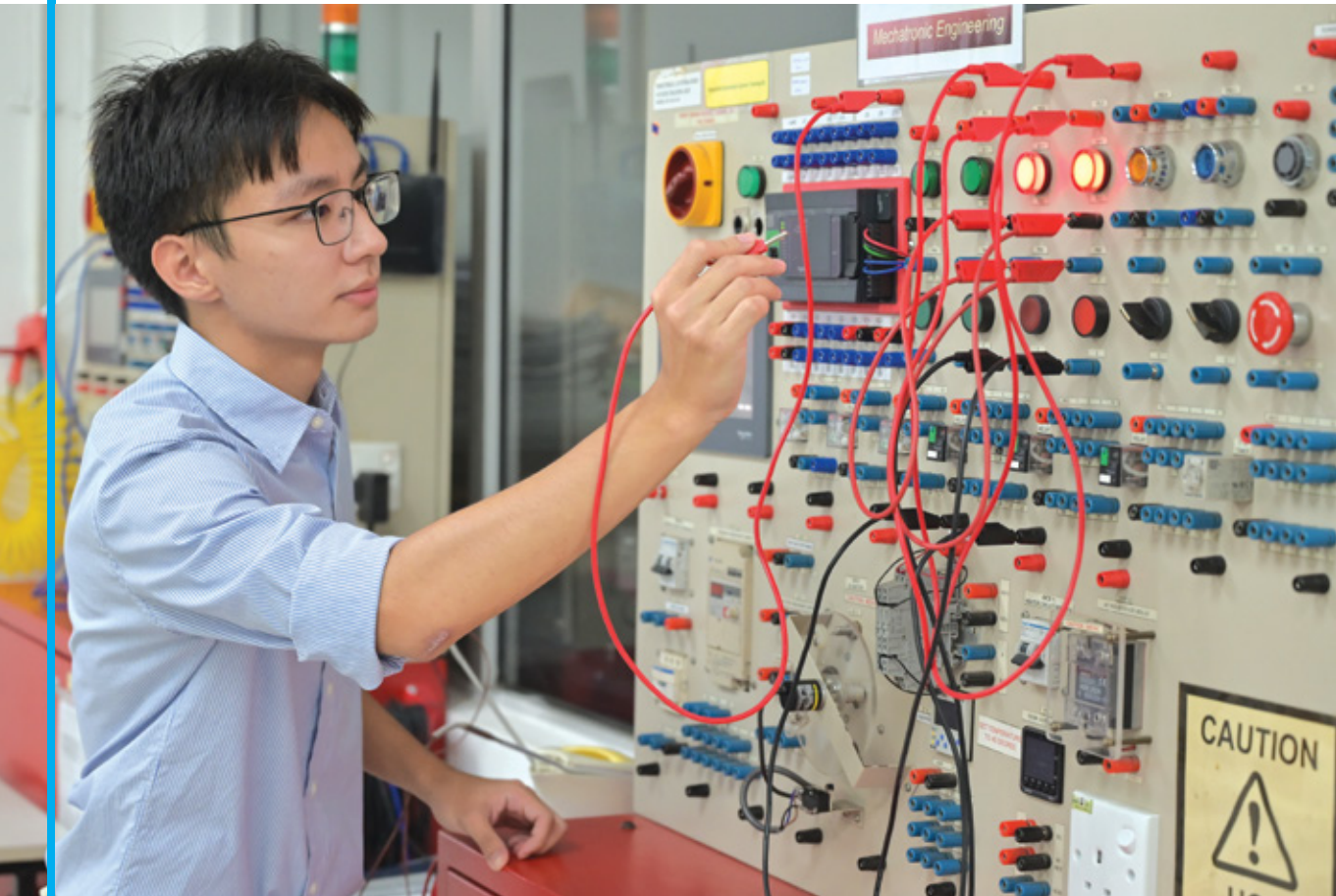
BACHELOR DEGREE	FOUNDATION	ENTRY REQUIREMENTS		
		SPM	O LEVEL	UEC
Bachelor of Electrical and Electronics Engineering with Honours	Foundation in Science (Track A)	5 Credits in the relevant subjects which must include,	5 Grade C in the relevant subjects which must include,	3 Grade B in the relevant subjects which must include,
Bachelor of Mechanical Engineering with Honours		SPM Credit/O Level Grade C/ UEC Grade B in one mathematics subject and two science subjects		
Bachelor of Mechatronics Engineering with Honours		AND		
Bachelor of Electronics Engineering Technology with Honours		SPM Pass/O Level Grade E (Pass)/UEC Grade C in English Language		

Note:

a) SPM holders must have at least a pass in Bahasa Melayu and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.

b) Equivalent qualifications other than the above will be considered on a case-by-case basis.

c) Subject to the Ministry of Higher Education latest requirements.

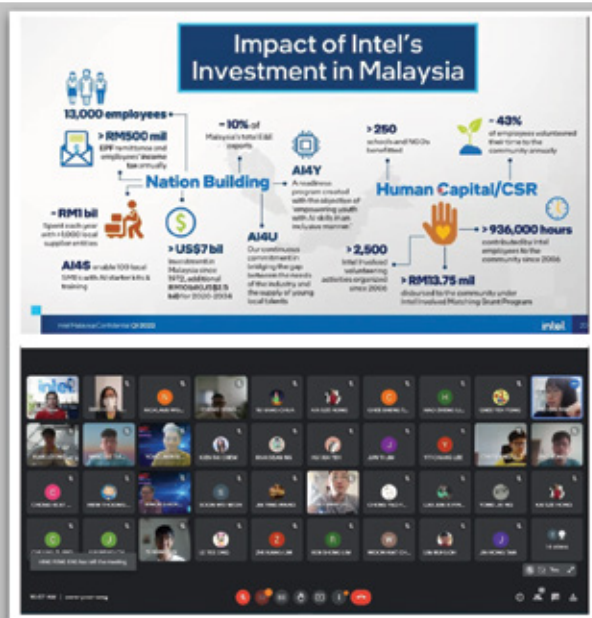


STUDENT ACTIVITIES



Virtual Industry Visit to Powerwell Sdn Bhd (24 March 2022)

Through the virtual visit, students were able to view live the production technologies of metal fabrication, including, cutting, bending, laser cutting and assembly of switchgear. This has helped students gain a better understanding about automation and smart factory related to IR 4.0.



Industrial Talk from Intel Malaysia (25 April 2022)

This is another valuable industry talk which benefited students to understand what are the important skills and knowledge in terms of seeking employment. Students were also able to gain useful tips and solutions to be industry ready and on how to increase their employability.

MERIT SCHOLARSHIP

Automatically offered upon admission



SIBLING DISCOUNT
RM1000

T & C Apply

Diploma/Foundation Programmes

Entry Qualification	Criteria	Waiver of Tuition Fee
SPM O Level	Minimum 8A+/A Minimum 8As	100%
SPM O Level	8As* 7As	50%
SPM O Level	7As* 6As	25%
SPM	6As*	20% Foundation programmes only
SPM	5As*	15% Foundation programmes only

*SPM As : A+/A/A-

Bachelor Degree Programmes

Entry Qualification	Criteria	Waiver of Tuition Fee
STPM / A Level	3As	100%
Unified Examination Certificate (UEC)	8As	
*TAR UMT/TAR UC Diploma/ *TAR UMT/TAR UC Foundation/ Matriculation	CGPA ≥ 3.8500	
South Australian Matriculation (SAM)/ Western Australian Certificate of Education (WACE)/ Higher School Certificate (HSC)	≥ ATAR 95	
Canadian Pre-University (CPU)	≥ 95%**	
STPM / A Level	2As	50%
Unified Examination Certificate (UEC)	7As	
*TAR UMT/TAR UC Diploma/ *TAR UMT/TAR UC Foundation/ Matriculation	CGPA ≥ 3.7500	
South Australian Matriculation (SAM)/ Western Australian Certificate of Education (WACE)/ Higher School Certificate (HSC)	≥ ATAR 90	
Canadian Pre-University (CPU)	≥ 90%**	
Unified Examination Certificate (UEC)	6As	25%
Unified Examination Certificate (UEC)	5As	20%

Including A-

*Must have obtained straight passes in all courses (including co-curriculum courses for diploma)

**For all subjects with a minimum of 6 subjects

Only applicable for full-time programmes.
Terms & Conditions apply.

For further information, please contact:

Assistant Registrar

Faculty of Engineering and Technology

Telephone: (6) 03 4145 0100/23 ext. 3235 , 3424

Email: foet@tarc.edu.my

 011-1082 5613 & 011-1059 7120

Kuala Lumpur Campus

Jalan Genting Kelang, Setapak, 53300 Kuala Lumpur, Malaysia.

Telephone: (6) 03 4145 0100/23


E-mail: info@tarc.edu.my

Penang Branch

77, Lorong Lembah Permai Tiga, 11200 Tanjung Bungah, Penang, Malaysia.

Telephone: (6) 04 899 5230

E-mail: penang@tarc.edu.my

 011-1082 5618

Perak Branch

Jalan Kolej, Taman Bandar Baru, 31900 Kampar, Perak, Malaysia.

Telephone: (6) 05 466 0388, 466 8012/3

E-mail: perak@tarc.edu.my


 011-1075 8513

Johor Branch

Jalan Segamat/Labis, 85000 Segamat, Johor, Malaysia.

Telephone: (6) 07 927 0801/3

E-mail: johor@tarc.edu.my

 011-1082 5624

Pahang Branch

Jalan IM 9/2, Indera Mahkota 9, 25200 Kuantan, Pahang, Malaysia.

Telephone: (6) 09 573 8171/2/3

E-mail: pahang@tarc.edu.my

 011-1082 5631

Sabah Branch

No 1, Jalan Alamesra, Alamesra, 88450 Kota Kinabalu, Sabah, Malaysia.

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E-mail: sabah@tarc.edu.my

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www.tarc.edu.my

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