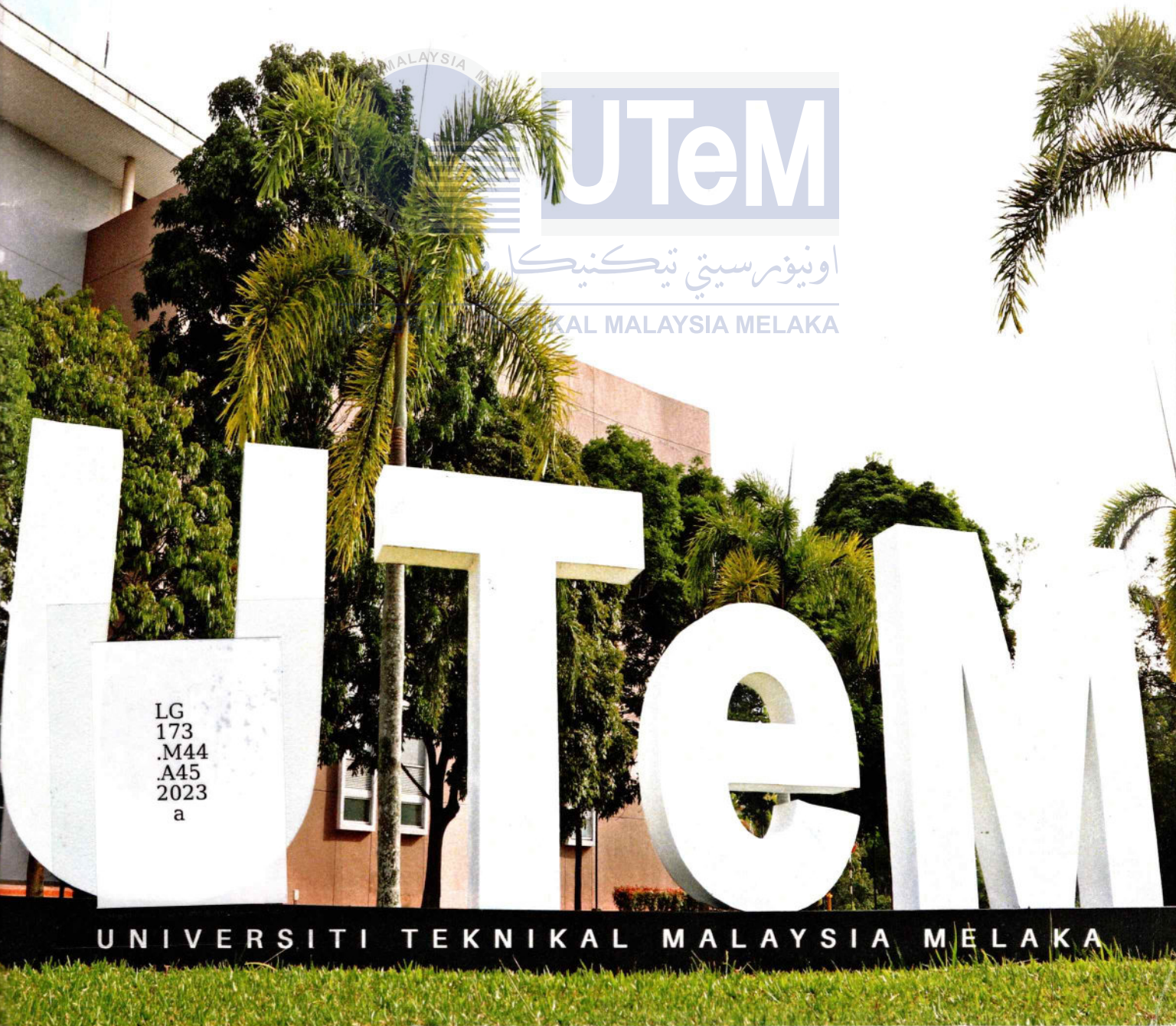
UTeM
اونيۏرسيتي تيکنيکل مليسيا ملاک
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

Aligning The University Surging Forward

www.utem.edu.my



Aim to be Unique

Welcome to Universiti Teknikal Malaysia Melaka – the place where your great technical career begins. As the first technical university in Malaysia, we strongly believe that there are enormous opportunities that you can explore with us.

UTeM main focus lies in the technical fields of engineering, engineering technology, ICT and technology management. We aim to be unique from other universities by adopting the "practice and application-oriented" teaching and learning method. Adopting this method means that interaction between our lecturers and students becomes more frequent, thus increasing the student's level of understanding of the subjects being taught.

Our students are also exposed to the actual working environments because our laboratories and workshops are equipped with the latest technologies. Most of their time will be spent doing assignments and projects based on the problem of the industry.

This brochure is created to bring together information that will be useful to all potential international students, academicians, industry and community. Many of the pages have been written especially for you, while some of the links will point you to external information which we hope will be useful to you.

Vision

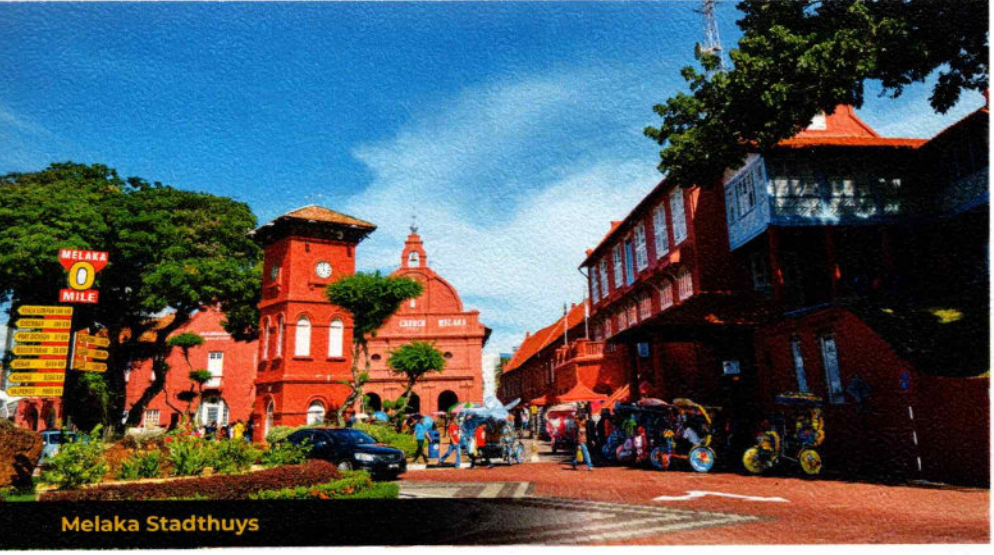
To Be One of the World's Leading Innovative and Creative Technical Universities

Mission

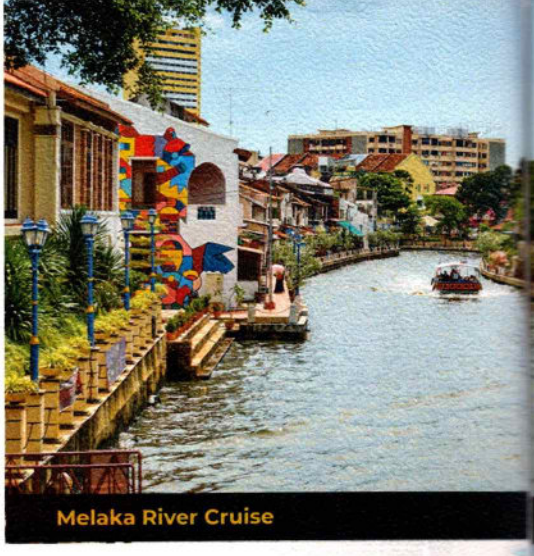
UTeM is determined to lead and contribute to the wellbeing of the country and the world by:

1. Promoting knowledge through innovative teaching & learning, research and technical scholarship;
2. Developing professional leaders with impeccable moral values;
3. Generating sustainable development through smart partnership with the community and industry.

Contents



Melaka Stadthuys


Melaka River Cruise

UTeM at a Glance

UTeM is the 1st Technical University and the 14th Public University in Malaysia. Located in the UNESCO World Heritage City of Melaka, set within 766 acres of lush verdant landscape boasting state-of-the art facilities in all its eight faculties.

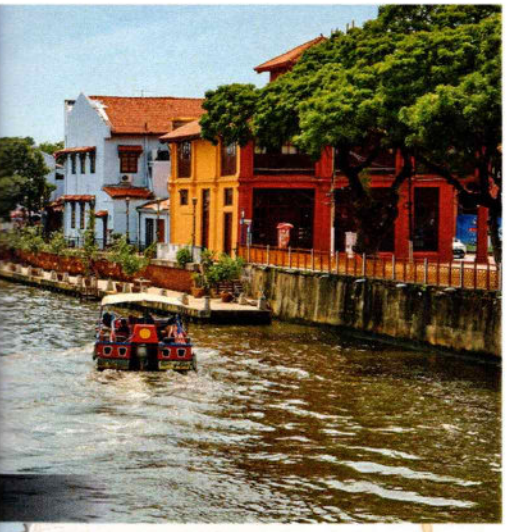
As a focus University, UTeM boasts its strengths in technical fields –namely engineering, Information Technology (IT) and Technology Management. UTeM currently operates from two campuses namely the Main Campus and the Industry Campus. UTeM has eight faculties which provide in-depth specialization in engineering, engineering technology, ICT and technology management disciplines. The faculties are:

- Faculty of Electrical Technology and Engineering
- Faculty of Electronics and Computer Technology and Engineering
- Faculty of Mechanical Technology and Engineering
- Faculty of Industrial and Manufacturing Technology and Engineering
- Faculty of Information and Communication Technology
- Faculty of Technology Management and Technopreneurship
- Institute of Technology Management and Entrepreneurship

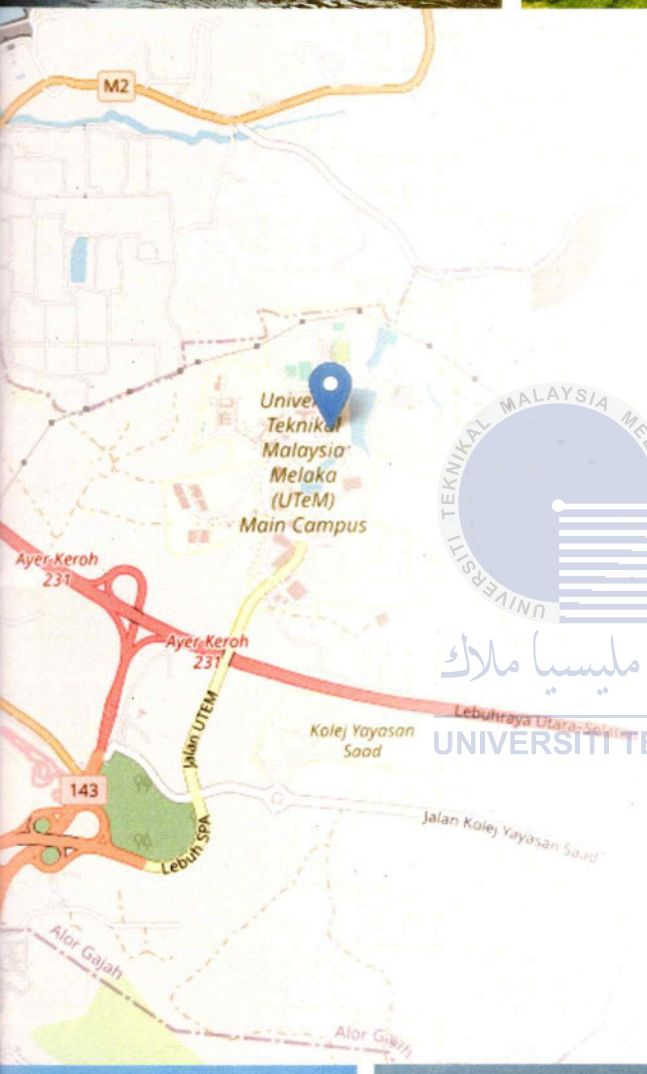
The university offers academic programs at Diploma, Bachelor, Masters and PhD levels. The programmes offered at UTeM are highly specialised. The curriculum is developed closely with industry experts so as to ensure its quality and relevance to meet the needs of the thriving industrial sectors, and further produces highly-skilled human resources for the development of Malaysia.

UTeM has cemented a reputation of being a source of high-quality engineering graduates with the capability of meeting the requirements of high-tech industries.


Main Campus



Melaka Sultanate Palace Museum



Our Name

Universiti Teknikal Malaysia Melaka (UTeM) was established on 1st December 2000. It was established under Section 20 of the University and University College Act 1971 (Act 30) under the orders of Kolej Universiti Teknikal Kebangsaan Malaysia (Incorporated) 2001, then known as Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM).

On 1st February 2007, UTeM went through a rebranding exercise when Kolej Universiti Teknikal Kebangsaan Malaysia (KUTKM) was given a new name as Universiti Teknikal Malaysia Melaka (UTeM).

Our Logo

The Logo depicts UTeM as a creative and innovative technical university committed to maintaining a coordinated relationship with our stakeholders.

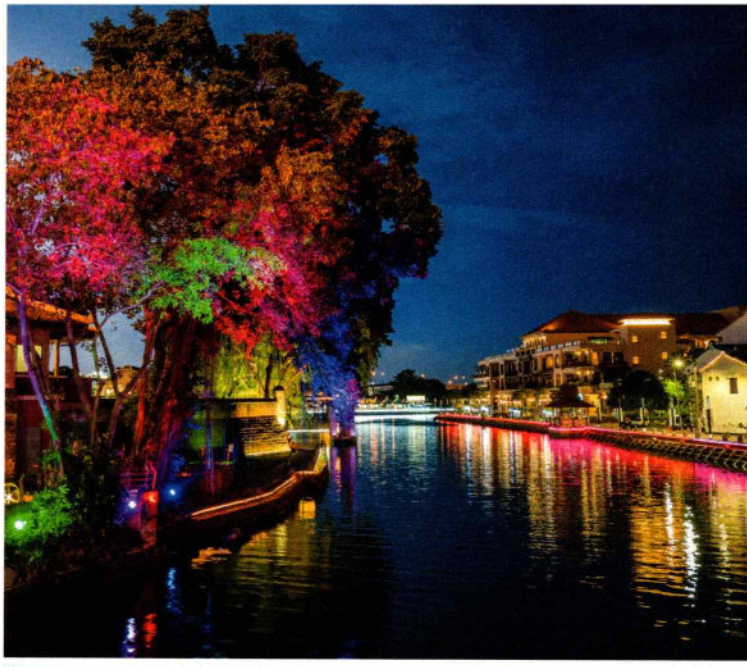
UTeM
اونيۏرسيتي تيکنيکل مليسيا ملاک
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

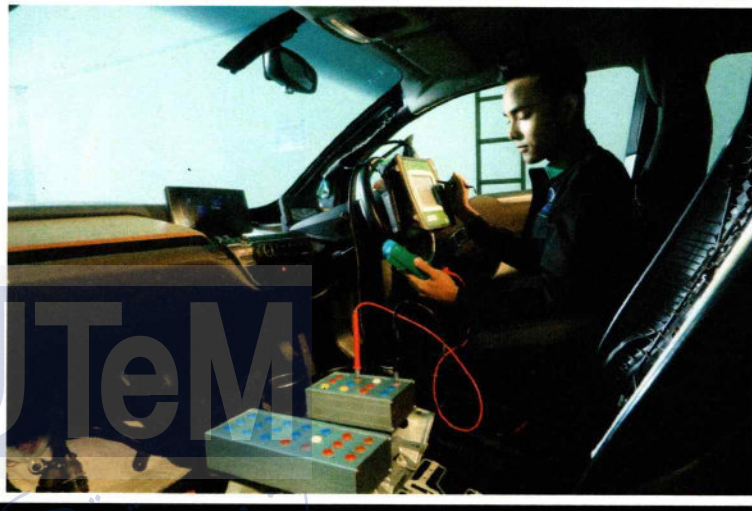
Technology Campus

Learning & Growing for the Real World

About Melaka:

Melaka, a quiet city has impressed visitors as the place where the history of Malaysia began. Founded around 15th century, Melaka is rich in history and many relics of the past. Dubbed as the Historical State, Melaka is the third smallest Malaysian state, after Perlis and Penang. It is in the southern region of Peninsula Malaysia, on the Straits of Melaka. It borders Negeri Sembilan to the north and the state of Johor to the south. The state's capital is Melaka Town. Located about 150 kilometres





to the south of Kuala Lumpur and 245 kilometres north to Singapore, Melaka seems to be strategically linked between two national capitals (Malaysia and Singapore respectively). It was listed as a UNESCO World Heritage site together with George Town of Penang on 7 July 2008.

Vice Chancellor Message

Greetings and a warm welcome to Universiti Teknikal Malaysia Melaka (UTeM). UTeM is a higher education institution that focuses on technical and vocational training (TVET). We strive to become a global leader in TVET, producing skilled workers who are highly sought after in various industries. UTeM's reputation, which extends far beyond our local community, is well recognized globally among similar institutions. As a female leader, I strongly support gender equality and advocate for women's rights in TVET. I'm deeply engaged in fostering opportunities for women, encouraging their pursuit of TVET education and careers.

Supported by a significant grant from the Malaysian government, UTeM is spearheading projects to boost women's knowledge proficiency in TVET, which is a crucial step towards economic growth. This initiative aligns with the United Nations Sustainable Development Goal 5, advocating gender equality and empowerment. Our focus on nurturing female participation in TVET highlights our commitment to fostering an inclusive society, where gender equality fuels economic progress.

At UTeM, our educational ethos emphasizes practical and application-oriented learning approach. We uphold the value of hands-on experience and real-world application as the key to student's success. Our curriculum is a blend of practical elements—ranging from laboratory work and workshops to projects and industry-based assignments. Through various delivery modes, such as Work Based Learning (WBL), Open and Distance Learning (ODL), and micro-credentials, we give students the platform to apply theoretical knowledge in real-life practical settings. This equips them with the confidence and ability to navigate real-world challenges with confidence and excel in their respective fields.

At UTeM, we operate with a business-oriented mindset, viewing our stakeholders as valued customers. We strive to excel in service delivery, diligently catering to our stakeholders' needs. Consequently, we've been cultivating multinational partnerships and facilitating transnational education. These partnerships enable us to create a knowledge exchange, resource sharing, and the application of best practices, thereby enriching the learning experience for both our students and faculty. Our dedication to international collaborations not only widens our horizons, but also keep us abreast with global advancement in technical and vocational education. Like any successful business, our ultimate goal is to cultivate strong and long-lasting relationships with our stakeholders, consistently delivering value and exceeding expectations.

Finally, our primary goal is to empower our graduates for successful careers. We're committed to achieving a target of 100% graduate employability by 2025. Our core mission is to equip our alumni with job-ready skills, enabling them to secure not just jobs, but fulfilling careers with competitive salaries and desirable positions.

Prof. Ts. Dr. Massila Kamalrudin

Vice Chancellor
Universiti Teknikal Malaysia Melaka (UTeM)

UTeM- Aiming Ever Higher for an Even

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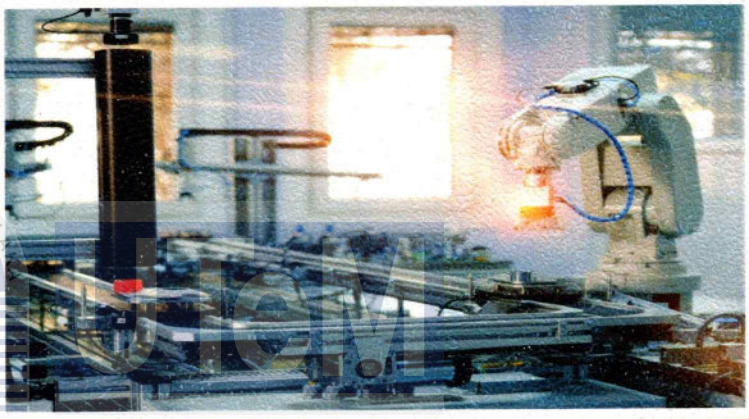
Registered Student Association



34,609

Number of alumni
(number 2 in MTUN)

267

Number of research grants from industries and government 2018 - 2023

1,137

Administrative staff members

Better Future

121,917

Library books

12,201

Number of undergraduate students

1,160

Number of postgraduate students

873

Full time academic members

Professor Ts. Dr.
Massila Kamalrudin
Vice Chancellor

Field of Interest:
Requirements Engineering (Software Requirement and Design, Advance Software Engineering)

Professor Dr.
Zulkiflie Ibrahim
Deputy Vice Chancellor Academic and International

Field of Interest:
Fuzzy Logic Control and Electrical Motor Drives

Professor Ir. Ts. Dr.
Ghazali Omar
Deputy Vice Chancellor Research and Innovation

Field of Interest:
Techniques of Advanced Materials

Datuk Dr.
Sabri Mohamad Sharif
Deputy Vice Chancellor Student Affairs

Field of Interest:
Intellectual Property Commercialisation, Innovation Management, Technopreneurship, Policy, Leadership

Mr.
Masdzarif Mahat
Chief Operating Officer

Field of Interest:
Organizational Administration and Management, Governance Management Human Resource Management

Mdm.
Sabarina Abdullah
Bursar

Field of Interest:
Information and Financial Management

Mdm.
Siti Saluwa Jamal
Chief Librarian

Field of Interest:
Information and Library Management

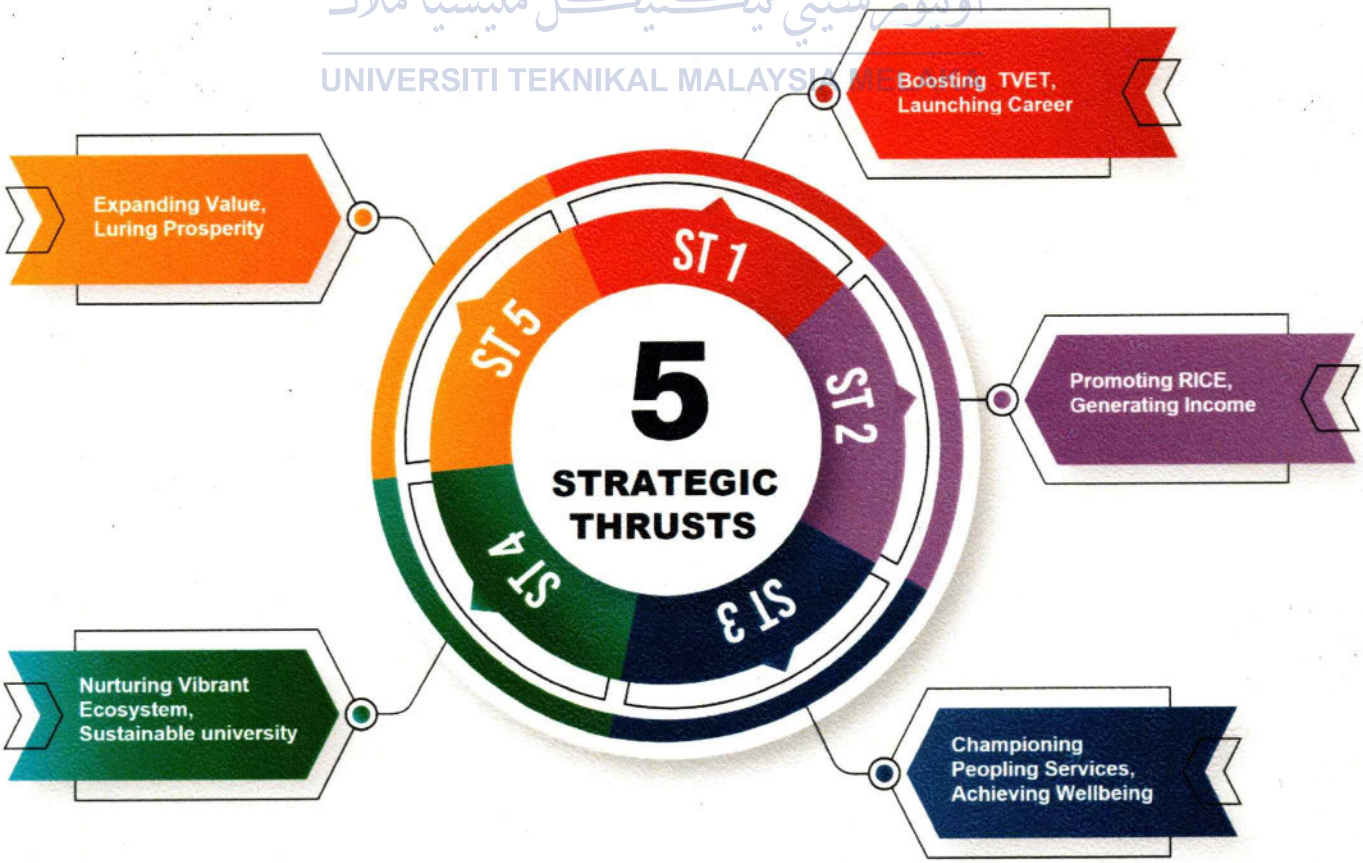
Datuk
Azhar Mohamed
Legal Advisor

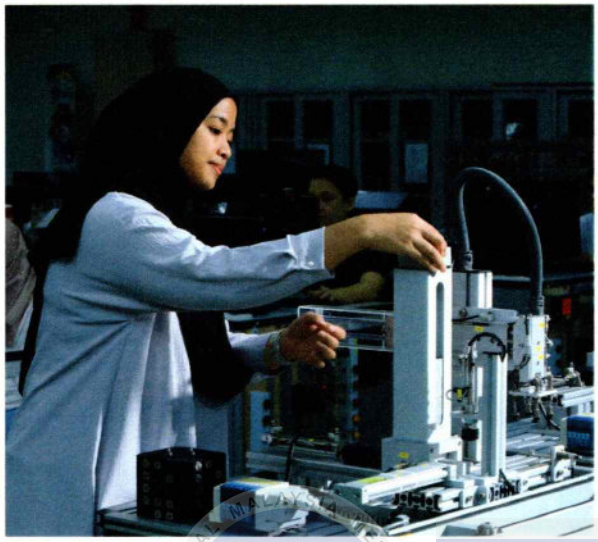
Field of Interest:
Legislation and Law

Professor Dr.
Mohd Khanapi Abd Ghani
Chief Information Officer

Field of Interest:
Health Informatics and Software Engineering

An Introduction to the 5 Strategic Thrusts (5ST)





5 Strategic Thrusts (5ST) is a strategic plan that is very important to the university. This strategic plan contains Strategic Thrust, Strategic Initiatives (IS), Strategic Initiative Indicators (IIS), Action Plans (PT) and Key Performance Indicators (KPI) that are responsible by Responsibility Centre (PTj), University Authority Centre (PBU) and UTeM Holdings Sdn. Bhd.

5 ST contains 5 Thrusts which are Boosting TVET; Launching Career, Promoting RICE; Generating Income, Championing Peopling Services; Achieving Wellbeing, Nurturing Vibrant Ecosystem and Sustainable University; and Expending value; Luring Prosperity. 33 Strategic Initiatives (SI), 74 Strategic Initiative Indicators (SII), 175 Action Plans (AP) and 358 Key Performance Indicators (KPI) have been identified in an effort to drive PTj, PBU and UTeM Holdings Sdn. Bhd. to provide the best services to the targeted groups in the future.

The development of 5ST will be a guide and serves as a reference for UTeM community at all levels in planning, monitoring and evaluating programs or activities that will be implemented and mapped in accordance to the 5ST, QS World University Rankings (QS WUR) rating and Sustainable Development Goals (SDG).

Linked for Learning

Universiti Teknikal Malaysia Melaka (UTeM) has established partnerships with outstanding networks of 74 universities worldwide, fostering educational collaborations and enabling UTeM students exchange programmes. These partnerships extend beyond student and faculty exchanges, encompassing joint research endeavors and the publication of scholarly work in diverse fields. Through these cooperative efforts, UTeM and its partnering institutions actively contribute to the advancement of knowledge and innovation.

Past and Current International Partners

Europe

Germany:
- Hochschule Hannover University of Applied Sciences and Art
- Aachen University of Applied Sciences

Hungary:
- Obuda University

Netherlands:
- Eindhoven University of Technology

Turkiye:
- Universiti Teknikal Gebze, Turkey
- Uskudar University, Turki
- Istanbul Aydin University, Turki
- Yildiz Technical University, Istanbul, Turkey
- Marmara University, Turki

United Kingdom:
- Liverpool John Moores University
- Coventry University, United Kingdom
- University of Leeds
- University of Plymouth
- International Foundation Group

Middle East and Africa

UAE:
- Uni Student Universities Entrance Services
- Al Tanweer Institute of Technology

North America

USA:
- Indiana University Purdue University Indianapolis

South America

Colombia:
- Corporacion Universitaria Americana

Where Opportunities for Learning Abound

Academic Program

Faculty	Field of Study
Faculty of Electrical Technology and Engineering	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Engineering. · Electrical Engineering · Mechatronics Engineering · Electrical Engineering Technology (Industrial Power, Industrial Automation & Robotics and Electrical Systems) · Technology (Electrical System Maintenance and Industry Automation)
Faculty of Electronics and Computer Technology and Engineering	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Engineering. · Electronics Engineering · Computer Engineering · Electronics Engineering Technology (Telecommunication, Computer Systems) · Technology (Internet-of-Things and Telecommunication Technology)
Faculty of Mechanical Technology and Engineering	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Engineering. · Mechanical Engineering · Automotive Engineering · Mechanical Engineering Technology (Automotive, Refrigeration and Air Conditioning Systems, Maintenance Technology) · Technology (Automotive Technology, Air Conditioning and Refrigeration Technology)
Faculty of Industrial and Manufacturing Technology and Engineering	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Engineering. · Manufacturing Engineering · Industrial Engineering · Manufacturing Engineering Technology (Process and Technology, Product Design) · Technology (Welding Technology, Machining Technology)

Asia

China:
- Shenzhen Polytechnic People's of China (SZPT)
- University of Electronic, Science and Technology China
- Northwestern Polytechnical University, Shaanxi, China
- Zhejiang University of Technology
- Liuzhou Jiaotong School (LZJT), Liuzhou, Guangxi
- Hunan Institute of Technology

Indonesia:
- Universitas Sriwijaya (UNSRI), Indonesia
- Universitas Sebelas Maret
- Universitas Muhammadiyah Magelang
- Yayasan Perguruan Tinggi Islam Batik Surakarta
- Universitas Islam Indonesia (UII)
- Universitas Merdeka Malang (UNMER, Malang), Indonesia
- Universitas Negeri Malang
- Universitas Brawijaya (UB), Indonesia
- Institut Teknologi Sepuluh Nopember, Indonesia
- Universitas Amikom Yogyakarta
- Universitas Atma Jaya Yogyakarta
- Universitas Semarang
- Universitas Mulia
- Universitas 'Aisyiyah Yogyakarta, Indonesia
- Universitas Internasional Batam (UIB), Indonesia
- Universitas Andalas
- Universitas Muhammadiyah Yogyakarta
- Sekolah Tinggi Manajemen Informatika dan Komputer Dumai, Indonesia
- Universitas Hasanuddin Makassar, Indonesia
- Politeknik Indonusa Surakarta
- Institut Sains & Teknologi Akprind
- Institut Teknologi Sumatera
- Universitas Ahmad Dahlan
- Universitas Balikpapan (UNIBA)
- Universitas Bangka Belitung
- Universitas Islam Negeri Sunan Kalijaga Yogyakarta
- Universitas Muhammadiyah Surakarta
- Universitas Sumatera Utara (USU)
- Universitas Negeri Padang
- Universitas Syiah Kuala
- Universitas Lampung
- Universitas Islam Batik Surakarta

Bangladesh:
- Islamic University of Technology, Gazipur Bangladesh

Japan:
- Gunma University, Jepun
- Yokohama National University
- Nagoya University, Japan
- Japan Advanced Institute of Science & Technology (JAIST)
- Tokushima University, Japan
- Nagaoka University of Technology, Japan
- Tokyo University of Agriculture and Technology (TUAT)
- Shibaura Institute of Technology (SIT)
- Okayama Prefectural University (OPU)

India:
- Vellore Institute of Technology, Vellore
- Amity University Rajastan

Korea:
- Kumoh National Institute of Technology
- Jeonbuk National University

Thailand:
- Prince of Songkla University
- Kasem Bundit University
- King Mongkut's Institute of Technology Ladkrabang
- Faculty of Engineering Chulalongkorn University

Taiwan:
- National Formosa University (NFU)

Faculty of Information and Communication Technology	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Information Technology. • Computer Science (Software Development, Computer Network, Media Interactive, Artificial Intelligent, Computer Security, Database Management) • Data Science and Analytics • Software Engineering (Mobile Development) • Information Technology (Game Technology • Information System
Faculty of Technology Management and Technopreneurship	Diploma, Bachelor's degree with Honours and Postgraduate Programs as well as Doctor of Technology Management • Technopreneurship • Technology Management (Technology Management (High Technology Marketing, Technology Innovation, Supply Chain Management and Logistics) • Technovasion • MBA (Technology Innovation Management, Advanced Operations Management)
Institute of Technology Management and Entrepreneurship	Postgraduate Programs in the area of • Business (Information Management, Engineering Management) • Human Resource Development, • Technical Communication, • Industrial Counseling

For Further details, please contact:

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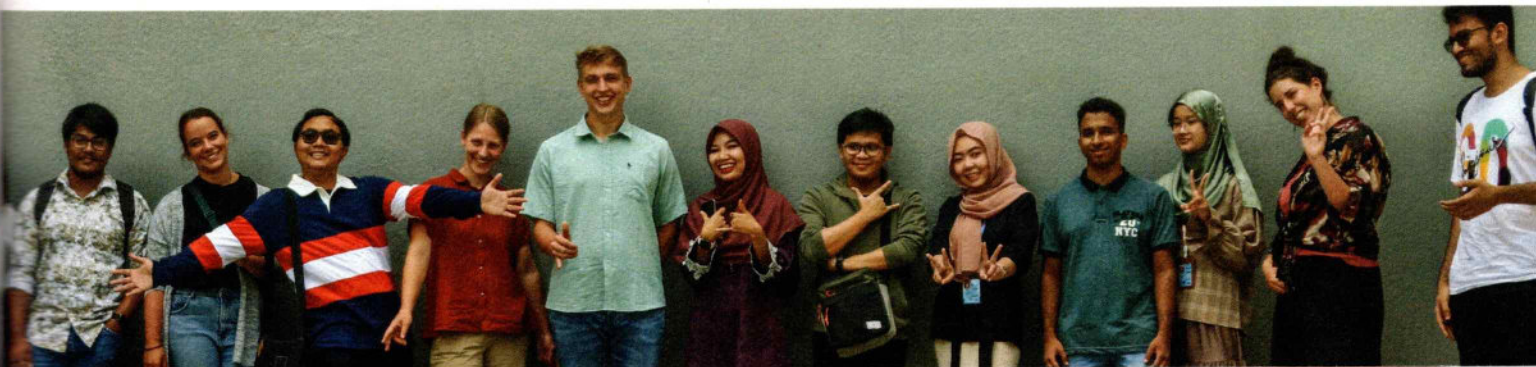


Student Professional Certification Program

(i) This initiative was established in 2016, and its aspire to equip each undergraduate student with one professional certificate.

(ii) In order to obtain professional certification, students undertake a professional certification course conducted by certified UTeM staff members.

(iii) These courses are courses that are relevant to the needs of the job market and industry requirements as well. They are also seen as a mark of quality assurance which in turn provide added value to graduates of UTeM.

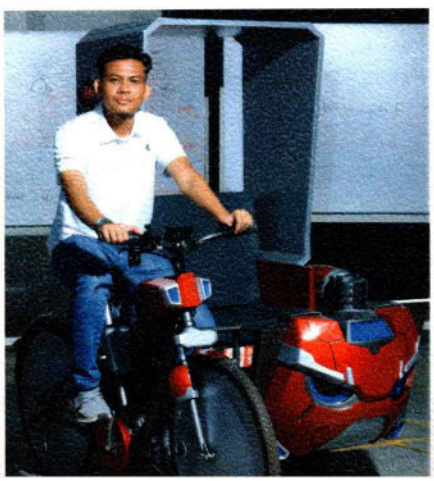
(iv) A total of 33 Professional Certification courses are available to UTeM undergraduates.

Technical and Vocational Education and Training (TVET)

(i) UTeM offers Industrial Mode Program. It is a work-based learning method where students spend 1 year in the industry with companies with which UTeM maintains an industrial relationship. 8 academic programs participate in work-based learning method which consists of Welding, Machining, Automotive Technology, Air Conditioning and Refrigeration Technology, Electrical Maintenance, Industrial Electronics Automation, Internet of Things and Telecommunications)

(ii) High Competency Laboratory based on TVET

Laboratory	Function
Cybersecurity Competence Centre (UTeM CysCC)	· To develop a world-class Center of Excellence for Cyber Security Skills and Expertise. · To increase the number of national and global cyber security experts. · To increase awareness and strengthen the level of cyber security in the industry
Makers@University	· To produce engineers and technologists who utilize technology to realize ideas. · To give the freedom to the students to try out their conceptualized ideas with digital sketches, prototype production, testing and analysing of created products. · To communicate their ideas in group and encourage critical discussion with members from different backgrounds. · To decide by consensus whether to remodel, redesign, improve or upgrade the invention. · To encourage the formation of teamwork among students. · To increase students' interest in conceptually produce their own products. · To produce creative techno-entrepreneurs who are confident in producing products that meet the needs of the local Industry and Community.
Teaching Factory - UTeM Smart Precision Manufacturing	· To provide comprehensive and integrated training facilities for UTeM's undergraduate and postgraduate students. · To provide training platform in Advanced Manufacturing and Computing Technology. · Provide the latest, advanced and modern engineering and technology for various products of manufacturing processes.
Pneumatic and Hydraulic Laboratory	One of the Teaching and Learning Laboratories at UTeM's Faculty of Electrical Engineering that is recognized by Bosch Rexroth Company to deliver professional certificates in Hydraulic Technology not only to UTeM's students, but also to outsiders.
STMicroelectronic Internet of Things Laboratory	UTeM's Faculty of Electronic Engineering and Computer Engineering (FKEKK) is honored as the first faculty of a Malaysian university to have its own IoT laboratory. This laboratory started its operation in 2018 as a result of a memorandum of understanding with the company STMicroelectronics Sdn Bhd. It is equipped with IoT technology with the full contribution of STMicroelectronics. The Guard Technology course offered by the faculty has made full use of the laboratory's sophisticated equipment. In addition, this ST IoT laboratory is also used for integrated projects, the undergraduates' Final Year Projects and the faculty staff and students' research activities.

Teaching Factory of UTeM and Kesidang CNC 3D Router.

The Teaching Factory of Universiti Teknikal Malaysia Melaka (TF/UTeM) is part of the strategic planning of the Ministry of Education of Malaysia known as the development of IPTA Model 2. It is a strategic initiative under the MTUN excellence framework, and was finally established in UTeM in 2020. The main aim of TF is to provide a platform for the students to be exposed to experiential learning, and collaborative problem solving by undertaking a product development project. Of course, with the integration of the relevance IR4.0 elements. TF UTeM has identified three important action plans that support the core strategies of UTeM, namely: the teaching and learning, product development, and research and consultation. There are specific initiatives for each of the action plan. For example, under the product development action plan there is a talent development initiative in which students are exposed to experiential learning, and collaborative problem solving by developing a highly potential product for commercialization. One of the products that was successfully developed is the KESIDANG CNC 3D Router.

The industrial type of CNC 3D machines can provide best experience to students in teaching and learning, however; the price is normally too expensive. As such, in some vocational schools and universities, the computer aided manufacturing (CAM) courses are rather theoretical, causing ineffective and temporary learning to the students. The Kesidang CNC 3D Router was developed to overcome this challenge. It was positioned so that it is excellent for teaching and learning, and applicable for some major industrial applications. The product development team (mainly students) were exposed to the main aspects of product development process, including the formulation and execution of the development activities.

The machine capable to cut soft materials of various plastics, woods and metals that is medium in size or smaller. It is enclosed with transparent PC material for the ease of observation, allowing students to observe the machining process from different angles or sides. It is also compatible with various CAM software. Furthermore, the IoT element allows the machine to be controlled using mobile phone and/or laptop. The Aluminum structures prevent the machine from corrosion, therefore reduce the need for a room with 24 hours-controlled temperature. It has received recognitions from the academic as well as industry. The machine is highly potential for commercialization and expected to provide a better solution for teaching and learning of CNC and CAD/CAM courses.

Kesidang functional prototype (source TF UTeM)

TVET Unity

UTeM always thrives to stimulus TVET platform through series of program. On 26th January 2023, UTeM launched a dedicated program on TVET namely Duta TVET UTeM (UTeM TVET Ambassador). In general, this program encourages the interaction between UTeM and community through TVET-based activities.

In principle, Duta TVET UTeM are academic and technical staff who act as a change agent to utilize knowledge and technology to the community through a program involving UTeM staff and also the local community. There are three (3) main programs namely:

1) Knowledge Transfer Program (KTP).
2) One-off Community Program.
3) Programs that can be developed for well-being.

The ultimate goal of the program is to aid the community in applying knowledge that can be used for well-being, and income generation.

Research Laboratories/Facilities

Power Distribution Laboratory

Power Distribution (PD) Laboratory is purposely setup for enhancing skill in switchgear testing and calibration. Equipped to the current latest technologies with high and advance testing devices. Power Distribution Laboratory able to test low and medium voltage up to 11kV devices.

The lab are able to test and commissioning of LV/MV/HV switchgear by describing the most important precoutions and recommendation in various procedures and steps. Special attention is given to test and commissioning checks (visual, mechanical, electrical, operational and insulation resistance). Several testing is important yo periodically executed in prder to make sure all switchgear and devices related is in good condition and well maintained.

Industrial Control Laboratory

Specifically designed for enhancing skills in Industrial Control and Industrial Automation field. This laboratory is equipped with a Programmable Logic Controller widely known as PLC trainIng kit, a mechatronics handling system training module known as MAP 200 and also a flexible manufacturing system known as FMS 200.

PLC is widely used in industry as most of the machines use PLC as their controller. In this laboratory, we will be able to learn about PLC and components related to it such as input devices, input modules, output devices and output modules. We can also learn how to wire the PLC and how to program it. Together with the knowledge of PLC and pneumatics we will be able to program a mechatronic handling system so that we can understand how a product is assembled by a PLC controlled machine in industry.

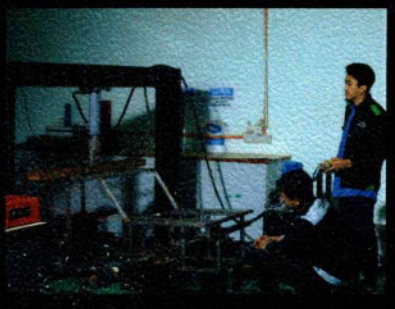
Data Communication and Networking Laboratory

Data Communication and Networking Laboratory is Cisco Certified Networking Academy (3095802) since 2012. This laboratory provides an extensive and comprehensive training and hands-on experience to the students to equip them with the technical know-how in operating Cisco network devices, configuration, troubleshooting as well as the security aspects of deploying them to their existing network at the workplace.

Data Communication and Networking Laboratory offers in-depth theory, challenging labs, and a detailed overview of networking from fundamental to advance applications and services. It is designed for students with advanced problem-solving and analytical skills who would like to advance their careers or prepare for Cisco Certified Network Associate (CCNA) certification. This professional certification validates skills including installation, troubleshooting, and monitoring of network devices to maintain integrity, confidentiality and availability of data and devices and develops competency in the technologies that uses in its security structure.

Applied Mechanical Design (AMD) Laboratory

Reliable solution provider to the industry for the structural analysis and product testing that has served various industry such as oil and gas, construction and automotive industry such as Petronas, HRSB, Road Transport Department and CTRM. This laboratory is equipped with load test facility such as 6m x 6 m strong floor, 30 tonne hydraulic system, static data logger and dynamic data logger. In order to expend the potential of this laboratory, AMD Lab have applied for ISO 17025 certification and expected to be certified laboratory in 2023.



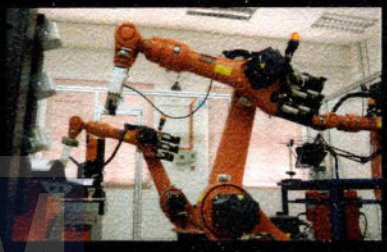
Final Year Project & Innovation Laboratory

Unlock your creativity and join our international community of innovators in exploring the fascinating world of 3D printing, you will have the opportunity to learn valuable skills and techniques that will set you apart in today's technology-driven industries. Through hands-on experiences, you'll experience the thrill of turning your digital designs into tangible objects. Whether you're a beginner or an experienced designer, our cutting-edge machines, such as the Ender 3 Pro, Flashforge, and Ultimaker S3, will be at your fingertips, enabling you to bring your creative visions to life.

By becoming a part of our international community of innovators, you will dive into the rapidly evolving realm of additive manufacturing. With 3D printing, you can develop your design ideas into physical components, pushing the boundaries of what's possible. Embrace the role of a pioneer in this exciting field and shape the future with your innovative ideas. Step into the world of 3D printing with us and unlock endless possibilities for innovation, creation, and personal growth.

Robotics and Industrial Automation Research Laboratory

Home to undergraduates and postgraduate research in Industrial Robots (Robotics Vision and Welding) with 6 Degree of Freedom, Mobile Robotics Simulation and Experiments using CoppeliaSim, Electrohydraulic Mini Excavators research, Amphibian Robotics such as Spherical Robots and many more. The lab is also up-to-date with Industrial Revolution 4.0 with applications using Node Red and IoT integration. The latest research work on Unmanned Aerial Vehicles is also parked in these laboratory.



Studio Multimedia

The Studio Multimedia at Faculty of Information and Communication Technology is an innovative hub for multimedia production. It features a theatre room for immersive multimedia presentations. Two high-quality audio recording mini studios ensure exceptional sound quality. The Green Screen setup enables creative visual effects, and the Motion Capture system captures realistic human movements. The Rail-track camera system allows smooth camera movements. This collaborative environment empowers students and researchers to excel in multimedia. With advanced and cutting-edge facilities including the theatre room, mini studios, Green Screen setup, Motion Capture system, and Rail-track camera system, Studio Multimedia FTMK fosters creativity and innovation.

Advanced Materials Characterization (AMCHAL) Laboratory

AMCHAL is a demand-driven laboratory. This laboratory is initiated for research and development activities for advanced material characterization. The main project conducted by the expertise in this lab is on Stretchable Conductive Ink through an industrial grant funded by CREST (in total about RM1.2 million). New formulation and high reliability of Stretchable Conductive Ink has been developed successfully and could give a new insight to the electronics industries. The establishment of this lab offers a conducive environment to the postgraduate students to perform all research activities with advanced equipments including Auto Desiccator Cabinet, Metallurgical Cross Section Grinder-Polisher, Four-Point Probe with Test Unit, Image Analyzer, Potentiostat, micro hardness Tester, Dynamic Nano Indenter, Cross Section Polisher, Curve Tracer, Digital Oscilloscope, Digital Multimeter, Micro Hardness Tester, High Powered Microscope, Universal Testing Machine and Scanning Electron Microscopy.

Cybersecurity Competence Centre

Dedicated laboratory advancing cybersecurity expertise. It features a cyberwar room for hands-on training, a special server environment for advanced techniques, and a seminar room for knowledge sharing. With state-of-the-art facilities, the centre fosters research, education, and collaboration. Experts tackle evolving cybersecurity challenges and develop robust measures to safeguard digital systems. The centre plays a crucial role in promoting cyber resilience through cutting-edge research, industry partnerships, and specialised training programs. As a leading Lab, Cybersecurity Competence Centre strengthens cybersecurity knowledge, ensuring the protection of critical information in an ever-changing digital landscape."

Advanced Machining Laboratory

Equipped with high-end technology machines such as 9 axis turning/milling, 3 axis milling, 5 axis milling, 5 axis high speed milling and 2+1 lathe, this laboratory offers high-technology in machining, improves the flexibility in producing various industrial components namely Aerospace, Automotive, Semiconductor, Mold & Die and many more. In addition, these technologies boost up the in-house capabilities in producing high-precision parts to the certain industrial's requirements.

Autotronic Technology Laboratory

Immerse yourself in an engaging and comprehensive educational training program on the BMW i3 electric vehicle. Gain hands-on experience and in-depth knowledge of key components such as the high voltage battery, inverter, electric motor, high voltage AC compressor, service disconnect, charging interface, and high voltage heating unit. Students will participate in practical exercises that cover the construction, operation, and significance of these components. From understanding the conversion of electrical energy into mechanical motion to learning about charging methods and safety protocols, this program equips students with the skills and confidence to excel in the rapidly evolving field of electric mobility.

Renewable Energy Laboratory

The hybrid chiller is an advanced HVAC equipment that combines air and water cooling modes. It offers several advantages for students interested in HVAC studies. Moreover, the hybrid chiller provides flexibility, allowing students to study the effects of different cooling methods in various operating conditions. It offers a realistic simulation of HVAC systems used in industries, providing hands-on experience to understand system operation, control, and optimization. Additionally, the MARCRAFT GT-1500 Renewable Energy System Trainer is an advanced laboratory equipment designed to educate and train students in renewable energy systems. This system trainer offers several advantages for students interested in HVAC studies and renewable energy.

Advanced and Nano Materials Laboratory

Support advance material research, material design engineering and characterization. Located at Faculty of Manufacturing Engineering and is a leading center for material characterization and functional material testing. The engineering material laboratory capable of conducting design material engineering simulation (ANSYS Granta), high resolution imaging with magnification up to nanoscale and elemental analysis (FESEM), phase & crystallite size identification of the compound sample (powder, thin film, solid) (XRD), analysis of infrared spectrum of absorption or emission of a solid, liquid, or gas (FTIR). The lab currently supported advance materials research, supercapacitor, nanotechnology, innovative material design and semiconductor research towards advance manufacturing centre in the nation.

Centre of Smart System & Innovative Design (CoSSID)

This research center mainly focusing on smart manufacturing system and innovation design. Main function is to conduct research by implementing IR4.0 for smart manufacturing including area of Design, Material, processes, system integration and operation sustainability. It provides innovation manufacturing solution through Computer Aided Engineering (CAE), Reverse Engineering, Material Characterization, Digital Manufacturing, Additive Manufacturing / 3D Printing, Precision Machining, Smart System Automation and Operational Research towards innovation, smart industries and infrastructure (SDG).

Centre of Technology for Disaster Risk Reduction (CD2R)

CD2R conducts research and innovation on providing comprehensive technological solutions to natural, man-made, and bioresources disasters. The research areas cover the utilization of advanced technologies such as sensors integrated with smart monitoring and forecasting systems with advanced ICT infrastructures to minimize the risks of disaster. The related biotechnology is used to provide the preventive measures and early detection of any disasters such as disease and biological attack to secure the food chain networks and improving quality of life and well-being of social and economy of the country.

Center for Telecommunication Research & Innovation (CeTRI)

CeTRI conducts research and innovation in the Electronic Engineering for Telecommunication system solution. CeTRI focuses on wireless communication, optical and RF & microwave technologies integrated with advanced embedded system, micro-nano technology, sensors and Internet of Things (IoT) with artificial intelligent (AI) to provide a platform for smart system applications. These smart systems are targeted used in medicals, agricultures, transportations, manufacturing and others for better human life.

Centre for Advanced Research On Energy (CARe)

CARe is a hub for technological advancements in the realm of thermal design, energy management, simulation and experimentation that focuses on renewable energy and energy storage research specifically in the area of solar energy, battery, diesel, bio-fuel and hydrogen. Research in solar energy provides optimum method for electrical power generation and smart grid implementation. Whereas, fundamental and applied research in battery, diesel, bio-fuel and provide is a playground for product development and innovation in automotive and energy storage for various applications which are towards Clean and Affordable Energy of SDG initiatives.

Centre for Robotics & Industrial Automation (CeRIA)

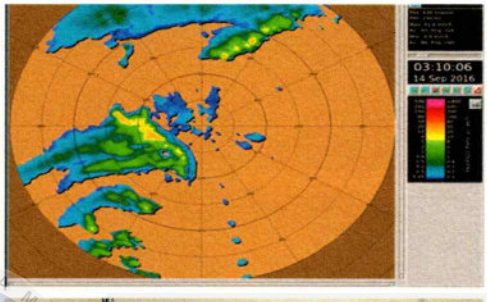
CeRIA conducts researches in new technologies, consultations, testing and also new product developments related robotics research. CeRIA aims to excel in the following fields: Robotics and Industrial Automation, Rehabilitation Engineering and Assistive Technology, Electric Vehicle (EV), Drone Technology, Electric Power Conversion and Distribution.

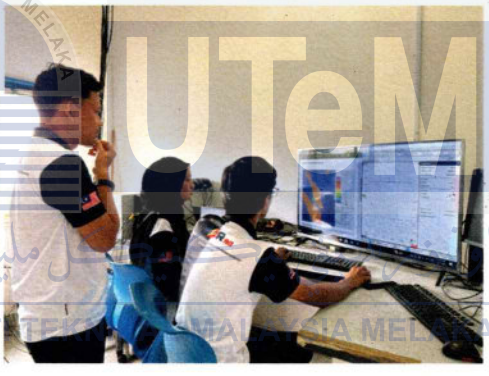
Center for Advanced Computing Technology (C-ACT)

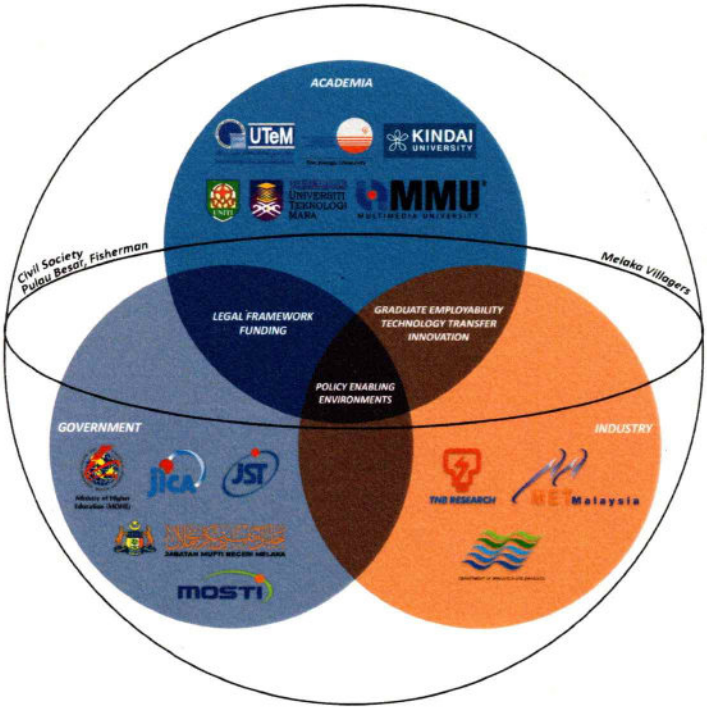
The primary mission of C-ACT is to foster excellence in advanced computing technology through research, innovation, and collaboration. C-ACT focuses on various research areas within advanced computing technology, including Artificial Intelligence (AI), Data Science and Big Data Analytics, Cybersecurity and Privacy, Smart Informatics System, Metaverse Technology, Pervasive and Assistive Technology, and Extended Reality Technology. These research areas enable C-ACT to explore a wide range of applications that positively impact on society including Smart City Applications, Environmental Monitoring and Conservation, Human-Computer Interaction, Smart Education Technology, and Internet of Things (IoT).

Centre of Technopreneurship Development (C-TeD)

C-TeD is dedicated to advancing knowledge and fostering innovation in these domains, supporting the growth of technopreneurs, and enabling them to thrive in the rapidly evolving technological landscape. The niche areas of C-TeD are technology Innovation and commercialization; digital transformation; technology entrepreneurship and startup ecosystems; and leading human development in emerging industries. The goal of C-TeD 's research in the fields of technology management and technopreneurship is to offer useful insights and workable solutions to encourage innovation, entrepreneurship, and sustainable growth in the technology-driven economy.







The First Flash Flood Forecasting Technology Based on Real-Time Lightning Mapping in Malaysia

The Science and Technology Research Partnership for Sustainable Development (SATREPS) program is a joint initiative of the Japanese government Malaysian government, and the Japan International Cooperation Agency (JICA). The program supports international joint research projects that address global issues in the areas of bioresources, disaster prevention and mitigation, environment and energy, and infectious diseases control. UTeM has been awarded SATREPS grant starting from June 2023 until May 2028 for a period of 5 years. This SATREPS program is a collaboration project between UTeM and Kindai University in Japan, and Universiti Tenaga Nasional (UNITEN) in Malaysia.

In this project, three main outcomes have been formulated in order to achieve the main goal to forecast lightning occurrence and flash flood in Malaysia.

Outcome 1

LF sensors & Weather Sensor

Development of lightning sensors network and weather sensors network at 8 stations located in Kuala Lumpur, Selangor, Negeri Sembilan, and Melaka for real-time monitoring of lightning occurrences.

Outcome 2: Algorithm 1

Development of smart algorithms to map lightning and charge distribution in 3D with accuracy less than 10 meters.

Outcome 3

Development of dashboard and apps for real-time monitoring and forecasting for social implementation to fisherman in Malacca and TNBR engineers in Kuala Lumpur.

Outcome 2: Algorithm 2

Development of smart algorithms to forecast flash flood based on lightning parameters with accuracy more than 90%.

Impact -

The developed system utilizing advanced technologies such as sensors integrated with smart monitoring and forecasting system with advanced ICT infrastructures can be used to minimize the risks of flash flood and lightning strikes disasters and improving quality of life and well-being of social and economy in Malaysia.

THOR RG
ATMOSPHERIC SCIENCE AND DISASTER MANAGEMENT

Partners

More than 100 University-Industry Collaboration

Development of HHO Cell prototype in Melaka River Cruise Petrol Marine Vessel for Improved Fuel Economy and Environment

We are thrilled to share exciting updates on our ground-breaking hydrogen project and highlight our recent achievements. The main aim of this project is to revolutionize the way we power the future by harnessing the immense potential of hydrogen as a clean and efficient energy source.

Our relentless dedication and cutting-edge research drove us to reach remarkable milestones. We secured both the prestigious FRGS 2012 H2 grant and the MTUN 2019 Commercialization Grant. Additionally, we were granted the patent for our ground-breaking technology, and received four gold medals subsequently. These accolades, along with the graduation of one PhD and three MSc students, have solidified our position as pioneers in the field of hydrogen energy. We remain dedicated to intensify and boost our operations, refining our technology, and fostering collaborative partnerships to propel our project even further.

Moving forward, our key priorities include refining hydrogen technology for enhanced efficiency and reliability, forging strategic partnerships to accelerate commercialization, and organizing public demonstrations to showcase its potential. We are committed to scaling up operations, driving innovation, and shaping a sustainable future powered by hydrogen.

Join us in our mission as we work towards a cleaner and brighter tomorrow, making a lasting impact on the energy landscape. Together, let's embrace the power of hydrogen and create a greener world for generations to come.

Contact Email:
Noreffendy@utem.edu.my,
Phone :+606-270 4369

Professor, Mechanical Engineering Dept,
Green Tribology & Engine Performance Research Group GTriboE
Universiti Teknikal Malaysia Melaka UTeM

Exciting Updates on Our Hydrogen Project and Recent Achievements!

By [Noreffendy Tamaldin]

We are thrilled to share exciting updates on our ground-breaking hydrogen project and highlight our recent achievements. Our aim is to revolutionize the way we power the future by harnessing the immense potential of hydrogen as a clean and efficient energy source. Through our relentless dedication and cutting-edge research, we have achieved remarkable milestones, including being awarded the prestigious FRGS 2012 H2 grant and the MTUN 2019 Commercialization Grant. Additionally, we are proud to announce the granting of a patent for our ground-breaking technology, as well as receiving four gold medals for our exceptional innovation. These accolades, along with the graduation of one PhD and three MSc students, have solidified our position as pioneers in the field of hydrogen energy. We remain committed to scaling up our operations, refining our technology, and fostering collaborative partnerships to propel our project even further. Join us in shaping a cleaner and brighter future.

Current Achievement

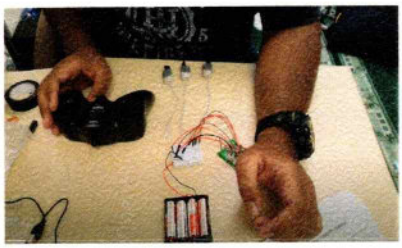
- Patented Technology – HHO cell Mylpo Reg# PI 2018 000 707
- 2 other potential IP have been identifies & under development
- CO Emission reduction up to 50% *(*refn ARPN Journal)*

Future Potential

- Yearly fuel consumption (2017) – RM 500k
- Yearly fuel saving up to 30% = RM 150k
- Fully working HHO prototype cell for marine applications
- Future improvement to increase % fuel saving, cut off fuel

*Refn-
Rosley, M. N. B., Tamaldin, N., Abdollah, M. F. B., Zulfattah, Z. M.,& Mat Yamin, A. K. (2006). EMISSION CHARACTERISTICS OF HYDROGEN ENRICHMENT IN LIGHT DUTY SINGLE CYLINDER DIESEL ENGINE. ARPN Journal of Engineering and Applied Sciences 12 (14), 4255-4258

River Cleaning Robot Challenge



Latarbelakang:

- The black event of Sungai Kim Kim disaster: impact, lessons learned and action plan.
- The importance of conservation awareness activities and the preservation of rivers and water resources.
- The importance of solid waste and scheduled waste disposal more regularly and effectively.
- The role of grassroots in river conservation and preservation activities.
- The role of grassroots in solid waste disposal activities and scheduled waste

The lesson from this disaster to the community in particular, it is necessary to intensify the river conservation awareness efforts more deeply with complete guides to the community. Community grassroots awareness programs need to be carried out in stages, in an orderly and effective manner starting from the pre-school level up to the level of higher education institutions. Each group at the grassroots level needs to play their respective roles and be responsible for preserving and conserving water resources and ensuring that the environment is safe and secure.

Partners

Inoculant Technology for Paddy

MR220 rice planted

A briefing explaining the use of inoculants directly to the participants

Paddy is a crop cultivated to obtain rice. The process of planting rice begins with the process of preparing the paddy field. Rice stalks and straw from the previous season need to be cleaned first through open burning. The hay will be left to dry before it can be burned. This process takes between 1 to 3 weeks depending on whether the weather is dry or rainy. After the hay is burned, rough plowing will be done using machinery to turn the soil over. The second plowing will be done after 1 week to destroy the remaining straw and stubble before the last plowing is done where the surface of the paddy field will be plowed while leveling the surface to ensure an even height of water when the water entry process is done later. The entire process of preparing the rice fields takes between 4 to 6 weeks (42 days).

Using the inoculant developed by researchers at UTeM, the process of preparing the paddy field can be shortened to only 6 days (a saving of 36 days). This inoculum is sprayed directly onto the hay and the plowing process can continue without having to burn the hay. This method has been tested on a 40-acre paddy field in Kampung Gelam, Tanjong Kling, Melaka for 3 consecutive seasons. Participants reported that the cultivated paddy land became more fertile and easy to plow. In addition, the germination of seedlings is also reported to be almost 100 percent and the problem of soil acidity no longer occurs. The surrounding residents expressed their happiness and joy because there is no more straw burning that pollutes the air.

By shortening the preparation time of the paddy field, rice paddy operators are able to plant more rounds of rice within a year (Table 1 and Table 2).

Table 1: The time taken to plant rice MR220CL and MR220 through conventional methods

Rice Varieties	Maturity Period/ Days After Planting (days)	Site Preparation (days)	Total days	Number of planting cycles per year
MR220CL2	100	42	142	2.57
MR220	115	42	157	2.32

Table 2: The time taken to plant rice MR220CL and MR220 using inoculants by UTeM

Rice Varieties	Maturity Period/ Days After Planting (days)	Site Preparation (days)	Total days	Number of planting cycles per year	Increase in Planting Rounds
MR220CL2	100	6	106	3.44	0.87 (34%)
MR220	115	6	121	3.02	0.70 (30%)

Kesidang Scholarship

Kesidang flower (*Vallabris Glabra*), also known as Tikar Seladang (*White Oxen Mat*) or *Kerak Nasi* (*rice crust*), is the official flower of Melaka, which is one of the World Heritage Sites by UNESCO. The Kesidang flower symbolises traditional Malay culture's grace, charm, and beauty. It has a small and attractive shape, coupled with an attractive fragrance.

The Kesidang flower represents a close relationship stemming from the grassroots at the university level, signifying a profound connection by a shared sense of purpose, common interests, and a collective commitment to personal growth, intellectual exploration and academic excellence that embodies into the fabric of campus life.

Therefore, Universiti Teknikal Malaysia Melaka (UTeM) regards Bunga Kesidang as the official flower of the university. The floral engraving is applied to the head and sheath of the UTeM Long Keris, which symbolises the university's power, worn and carried by the Commander when accompanying the Chancellor at the official UTeM Convocation ceremony.

Criteria	Scholarship Requirements / Student's Responsibilities	Fees
Research Mode Programme (PhD / Master) 1. The application is open to all local and international candidates. 2. The applicant has accepted the study offer from UTeM as a full-time postgraduate student. 3. The applicants should obtain a minimum CGPA of 3.5 or equivalent at Bachelor Degree. 4. Family household income not exceeding RM5,000.00. 5. The applicant is not presently holding other scholarships or financial assistance from any other organisations. 6. Has passed the scheduled interview. 7. For international candidates, priority is given to applicants from unstable political countries. **Taught Course Mode Programme** 1. The application is open to all local and international candidates, 2. The applicant has accepted the study offer from UTeM as a full-time postgraduate student. 3. The applicants should obtain a minimum CGPA of 3.5 or equivalent at Bachelor Degree. 4. Family household income not exceeding RM5,000.00. 5. The applicant is not presently holding other scholarships or financial assistance from any other organisations. 6. Has passed the scheduled interview. 7. For international candidates, priority is given to applicants from unstable political countries.	i. A student is required to Graduate on Time (GOT). If a student fails in his studies, he is responsible to pay the tuition fees / examination fees. ii. A student who fails to GOT. is required to repay the overall scholarship amount sponsored by the Kesidang Scholarship. iii. A student must ensure the semester registration is made for each semester. iv. A student must obtain a good academic standing status (KB) and pass all courses in each semester. Any repeated courses (UM) must be paid by the student. v. A student is not allowed to defer his study. The Kesidang Scholarship will be automatically terminated if the student applies for deferment. vi. A student is not allowed to hold other scholarships or financial assistance from any other organisations. vii. A student shall sign a contract as stipulated by UTeM.	The Kesidang Scholarship covers tuition fees and examination fees. **PhD** Local – RM16,500.00 International – RM30,000.00 **MSc** Local – RM8,000.00 International – RM14,000.00 **Masters (Taught Couse)** Local – RM9,500.00 International – RM16,500.00

Post Graduate Fellowship Scheme Zamalah

This scheme is designed to enhance the number and quality of postgraduate students as well as UTeM research activities. Students pursuing Master and Doctor of Philosophy through research are invited to apply:

Eligibility:

a) Having an excellent academic qualification with a CGPA of not less than 3.50 or equivalent at the undergraduate level.
b) For applicants who have a Master's degree, they must also have outstanding academic achievement at the undergraduate level.
c) Registered as a full-time student for Master of Science or Doctor of Philosophy at UTeM.
d) Applicants do not receive scholarships or financial assistance from any other bodies or organisations.
e) Students in the final stages of Bachelor/MSc with excellent academic performance and intend to pursue a Master / Ph.D. by research can also apply by submitting an application through their respective faculties and obtaining a recommendation from the Dean of the faculty.
f) The application is open to local and international candidates.

Duration:

The maximum funding period is TWO (2) years for a Master's degree and THREE (3) years for Doctor of Philosophy.

Stipend:
Monthly Allowance

Degree	Amount (RM)
PhD	1,800.00
MSc	1,500.00

Recipients of this scheme will be exempted from paying Tuition and Examination Fees. As for other fees, it is the responsibility of the candidate to settle.

Closing Date:
Application is open throughout the year. However, the selection process will be held in March, July, October, and December.

Application:
The application must be made using the official application form that can be downloaded from the PPS website and must be accompanied by a copy of the identity card/passport, degree, transcripts, and detailed research proposal. The application must be submitted to:

Dean,
Centre for Graduate Studies, Universiti Teknikal Malaysia Melaka, Hang Tuah Jaya, 76100, Durian Tunggal, Melaka

JELITA Akademi TVET Wanita@UTeM

Akademi TVET Wanita JELITA @ UTeM is a training and education hub for women empowerment through Technical and Vocational Education and Training (TVET). The acronym of JELITA stands for "Job Empowerment by Learning and Inclusive Technical Advancement". Meanwhile, in Malay, JELITA means beautiful. The first programme organized by Akademi TVET Wanita JELITA @ UTeM is JELITA Programme moulded specifically for 15,000 Malaysian women granted by the government through strategic partners and industry partnerships. There are six main target groups for the JELITA Programme; school leavers, married women/single mothers, women in rural areas/disabilities/natives, businesswomen, working women who plan to change their job and professional women. Besides that there are ten clusters for JELITA Programme certification which consist of 1) Information Technology; 2) Engineering Technology; 3) Marketing, Entrepreneurship & Business; 4) Leadership & Management; 5) Transportation & Logistic; 6) Beauty & Fashion; 7) Halal Services; 8) Creative Arts & Crafts; 9) Tourism, Hospitality & Culinary; and 10) Agro Technology. The main focus of this academy is to enhance the capacity and skills of women through various programmes including multiskilling, upskilling, reskilling and future skilling. The certification offered by this academy is designed to be qualified for lifelong learning and industry-relevant education through Micro-Credentials recognized by Malaysia Qualifications Agency (MQA). In future, this academy is planned to be a part of the UNEVOC Network under UNESCO to be viable for international participation and commitment.

Scholarship by UTeM and UTeM Chancellor's Foundation

Anak Emas Programme

Anak Emas Programme was introduced at the entrance of the 1st semester of the year 2022/2023. This program is fully sponsored studies and is given pocket money every month. The UTeM Chancellor's Foundation is the entity that fully sponsors the studies of these students. Currently there are 3 students being sponsored by Yayasan Canselor where the background of the selected students is a child who grew up without parents and a child whose parents have died and who grew up in an orphanage.

The students in question are Rohana Abdullah whose story that went viral in the media when he was a 2-month-old baby was abandoned by his mother and raised by a Chinese woman of a different religion but still raised him by giving him a perfect Islamic upbringing. The second student is Siti Fatimah Abdullah who was raised in an orphanage because her parents died when she was still a baby. The third student is Nurul Syafiqah Nor Hasyimi whose father died while she was studying in high school and her mother died of cancer when she was at the beginning of her studies at UTeM. Nurul Syafiqah is the eldest child of 4 siblings and has to bear as a mother and father to her 3 siblings and is determined to spend her studies to defend the fate of her siblings in the future.

The Chancellor's Foundation used an allocation of RM90,334.00 to sponsor studies and pocket money for these students. Insha Allah in 2024, the Chancellor's Foundation will sponsor 2 more qualified students for their studies at UTeM.

DERMASISWA

Sponsored throughout studies by corporate agencies as a form of corporate social responsibility to these agencies. Here are the corporate agencies that distribute bursaries to Public Universities.

1. TVET B40 Scholarship Program. The government is targeting at least 55% of Sijil Pelajaran Malaysia (SPM) graduates to continue their studies in TVET programs by 2025, as stipulated in the 12th Malaysia Plan (RMK-12). The offer process is made to eligible students who are offered study places through the Student Admission Application System (UPUOnline) or through the Student Admission Application System at their respective HEIs. The sponsorship period offered is for 3 years for Diploma level students and 4 years for Bachelor Degree students.
2. Public Service Department Scholarship (JPA DSB40) is a government initiative to help the qualified B40 group. The program is only given to SPM graduates who are taking Diploma studies only. This bursary is given throughout the course of study according to the stipulated conditions.
3. Corporate companies such as Tenaga Nasional Berhad also provide bursaries to students who continue their studies at UTeM. They channel this aid through the National Energy Foundation. YTN-sponsored scholarship opportunities at public and private universities are open to all qualified Malaysians. Students who wish to continue their studies in the fields of Electrical Power Engineering, Electrical Engineering, Mechanical Engineering, Civil Engineering, Accounts/Digital Innovation/IT Management and Analytical Data Science. For students who continue their studies in the Bachelor's Degree mode will be given RM5,000.00 per semester and the Diploma mode of study will receive RM4,500.00 per semester and ensure that the CGPA exam results are above 2.00.

There are also corporate agencies that provide one-off financial assistance as follows:

1. Tunku Abdul Rahman Foundation
2. Mara Learning Foundation
3. MITRA (Malaysian Indian Community Transformation Unit)

SULUNG Programme

The SULUNG programme is an initiative of the Ministry of Higher Education (KPT) to help children from B40 families who are the first individuals in the family to continue their studies at higher education institutions. The selected students are students who are continuing their studies in the Bachelor's Degree mode of study.

Fees are fully funded by the University including living costs. The selection of students for this SULUNG Programme follows the University mechanism that has been agreed by the Malaysian Ministry of Higher Education. For the admission of students for the 2023/2024 session, UTeM will select a total of 236 qualified students involving a sponsorship cost of RM2,171,200.00 using the UTeM Student Financial Sustainability Fund.

Welfare Initiatives

UTeM telah menyediakan beberapa initiatives untuk membantu pelajar B40 seperti berikut:

1. Zakat Contribution
For 2023, UTeM has received a zakat contribution of RM940,000.00 and has been distributed to a total of 2,031 qualified UTeM students.

2. Short-term Loans
Students can apply for financial assistance of RM 500.00 (maximum) to cover their daily needs. Students only need to pay RM100.00 per month within 5 months.

3. Food Bank
Food supply assistance from external or individual agencies is distributed to internal and off-campus students. A total of 300 students received food assistance from 6 residential colleges on and off campus.

4. TUAH CARE Food@Campus
The initiative to provide free food aid to 1,725 UTeM students is targeted.

Our Athletes Aim for the Highest

UTeM University Medalist

Athletics Athletes: Javelin Event

Syed Abrar
Syed Ahmad Zawawi

- ALL COMERS SILVER – Gold Medal
- MAF NATIONAL ATHLETICS CHAMPIONSHIPS 2021 - Silver medal
- MAF NATIONAL ATHLETICS CHAMPIONSHIPS 2022 - Gold medal
- IPT Athletics Championship Circuit 1 – Gold Medal
- IPT Athletics Championship Circuit 2 – Gold Medal
- IPT Athletics Championship Circuit 3 – Gold Medal
- IPT Athletics Championship Circuit 4 – Gold Medal
- IPT Athletics Championship Grand Final – Gold Medal
- Asean University Games, Thailand (AUG) 2022 – Silver Medal
- Higher Education Institution Sports (SUKIPT) – Gold Medal

Athletics Athletes : 400M Hurdles Event

Syed Fazeel Shah
Syed Anwar Shah

- Bronze Medal – Masum Sports Carnival 2018
- Silver Medal – Higher Education Sport Fest 2018
- Bronze – Kuala Lumpur Open 2018
- Bronze – Melaka Open Championship 2018
- Bronze - Malaysia Closed 2018
- Bronze – Johor Open Championship 2019
- Bronze - 4x400m Johor Open Championship 2019
- Silver – Circuit 1 Athletics Championship 2022
- Bronze – Circuit 2 Athletics Championships 2022

Rowing Athlete

Muhammad Haziq
Zainal Abidin

- Gold Medal – National Water Sports Carnival (DBKL) 2019
- Gold Medal – Putrajaya Dragon Boat Water Festival 2019 (DBKL) 2019
- Bronze Medal – International Dragon Boat Dongguan, Guanzhao China 2019
- Bronze Medal – Kayak Sprint National 2019

Athletes: Rowing

Hafiy Hibatullah
Mohd Zahid

On water events:
- Silver - Men 4- ASEAN University Game 2022 Ubon Ratchatani, Thailand
- Silver - Lightweight Men 1X National Regatta 2022
- Silver - Men 2X National Regatta 2022
- Silver - Men 8+ National Regatta 2022
- Silver - Men 8+ MASUM 2019
- Silver - Men 4- MASUM 2019
- 4th M8+ Varsity Boat Race 2019

TUAH and TEJA UTeM

The HEPA office introduced two (2) icons namely TUAH and TEJA as one of UTeM's uniqueness and 'brand' for UTeM students. These two iconic icons represent the characteristics and attributes of UTeM students where TUAH attributes are Agile, Superior, Adaptive and Holistic whereas TEJA attributes are Agile, Elegant, Universal and Adaptive.

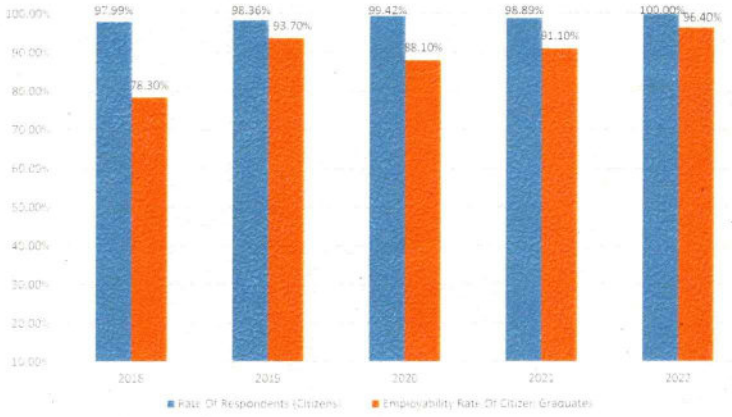
The spirit and values of TUAH and TEJA apply to all gender, race, religion and different backgrounds. TUAH and TEJA do not mean that male and female students should go to the battlefield and fight with weapons, instead, they need to improve their abilities to be able to achieve mastery in their respective fields, be it engineering and technology, leadership, sports, innovation, music and cultural arts, volunteerism, entrepreneurship, spirituality and so on.

An evaluation index was developed to measure these attributes. The TUAH Index (TUAH INDEX) and the TEJA Index (TEJA INDEX) are merits for students based on their achievement and involvement through co-curricular activities and programmes throughout their studies.

By constantly exploring knowledge for the sake of globalization, TUAH and TEJA will try to develop and humanise technology so that it can be adapted for good. In addition to that, TUAH and TEJA can help produce knowledgeable individuals with good mannerisms.

Graduates Employability

The achievement rate of graduate employability in 2022 for all Public Universities including UTeM was announced by the Ministry of Higher Education (KPT) in May 2023. All UTeM graduates are requested to answer the Graduate Tracking Survey System (SKPG) starting from November 2022 to February 2023. During this period, the Center for Alumni Management & Graduate Marketability (PPAKG), HEPA and all faculties have given high focus and the best teamwork to ensure that all graduates answer this study correctly. As a result of this persistent effort, UTeM has succeeded in tracking 100% of citizen graduates, a total of 3034 people, and has recorded the highest increase in the marketability rate of graduates since the SKPG was introduced, which is 96.4%. Definitely not forgetting all UTeM citizens who are directly or indirectly involved in ensuring that UTeM graduates are the choice of employers out there. Surely this achievement will be a fuel to continue giving the best in relation to the marketability of UTeM graduates hereafter.



Graduate Entrepreneurship

The journey of Universiti Teknikal Malaysia Melaka (UTeM) which now can be traced back to 23 years ago until 2023, has seen UTeM graduates gained successes in various fields. Some of them are working in the government and private sector, where some have even made a name for themselves as successful business graduates. Moreover, there are UTeM graduate entrepreneurs who have successfully expanded their business ventures to the international level.

For instance, the Raw Denim House (RDH) brand by UTeM entrepreneur graduate Muhammad Aidil Akhyar, who is a former student of Electrical Engineering at UTeM. His brand is a proud achievement because its products have been greatly received worldwide. Another example is Ts. Halimaton Saadiah Hakimi who is the Chief Executive Officer (CEO) of Eureka Innovation Solutions & Consultancy which offers services and research in the field of information technology. She graduates from UTeM in the field of technology management and technopreneurship. The success in her career can be seen from her ability to procure strategic business partners and outside investors including from the United Arab Emirates (UAE). Not forgetting Oh Yih Peng, a UTeM graduate in the field of high-technology marketing who is now an agricultural entrepreneur and the founder of AO Agro-Tech Enterprise. He focuses on the cultivation of Rock Melon using fertigation system and the cultivation of chillies using the Internet of Things (IoT).

Nowadays, entrepreneurship are increasingly becoming a favourite choice among UTeM students and graduates. It is no longer just an option for those who are unable to obtain work after graduating, in fact many UTeM graduates choose entrepreneurship as their preferred career. For that reason, the Center for Enterprise Development and Technopreneurship (CREATE) and the Office of Student & Alumni Affairs (HEPA) are always committed to implementing various entrepreneurship programs to produce more entrepreneurial graduates. Among the programs that have been implemented and will be implemented such as 90 Minutes with Entrepreneur Graduates, Technology Entrepreneur Incubator, TVET Altruistic Entrepreneur Workshop (B.U.A.T) which will involve successful entrepreneur graduates, CREATEpreneur@UTeM and many more.

Along with the university's aspirations in increasing the number of technology-based entrepreneur graduates among women, CREATE also collaborates with the Women's Leadership Foundation (WLF) in organizing the Young Aspiring Leaders & Entrepreneurs (YALE) and Proactive Outdoor Women Entrepreneur (POWER) programs. Futhermore, the Women's Technical Entrepreneurship Convention (WTC) is one of the annual agendas in empowering female entrepreneur graduates as following the UTeM Strategic Plan (2023 - 2025) under Strategic Core 3: Championing Human Services, Inviting Prosperity.

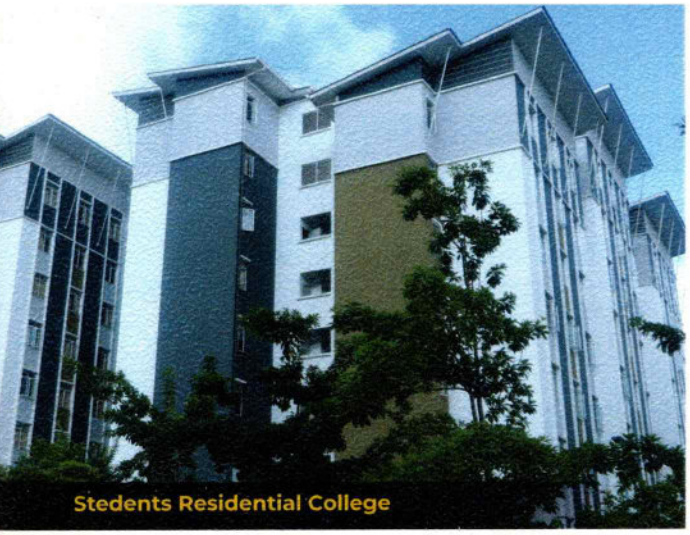
Faculty Buildings

Facilities and Development

Office of Development Management (PPP) and the Office of Facilities Management (PPF) have been actively involved in developing infrastructure, and physical development as well as maintaining infrastructure and physical facilities since the establishment of UTeM in 2000. Several development projects have recently started at the Main Campus to facilitate the development of teaching and learning needs, research and development as well as university administration and management. PPP and PPF will continue to go hand in hand with the University management in planning and developing the campus as well as managing the campus's facilities to align with the mission and vision of UTeM. To give the best services, these offices will implement a good quality of work at the construction site which covers architectural, civil and structural engineering, electrical and mechanical aspects to ensure the comfort and well-being of building users.

PPP and PPF are given the responsibility to plan, develop the campus, manage the physical maintenance of buildings, infrastructure and assets of the University as a whole. We are also responsible for providing vehicle services to UTeM staff and students, handling and providing technical and logistical requirements for UTeM official programs. Other than this, PPP and PPF also manage the University assets, rental management of university buildings and shuttle services provided for the UTeM staff and students.

UTeM Lake

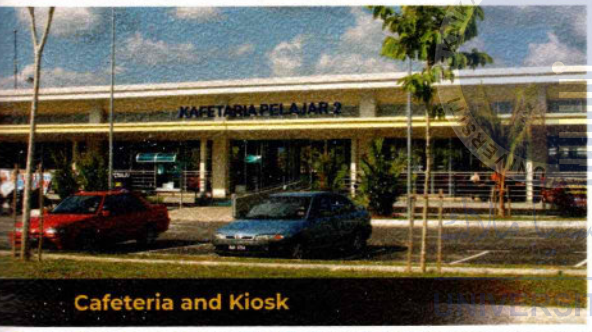


Stedents Residential College

University Health Center

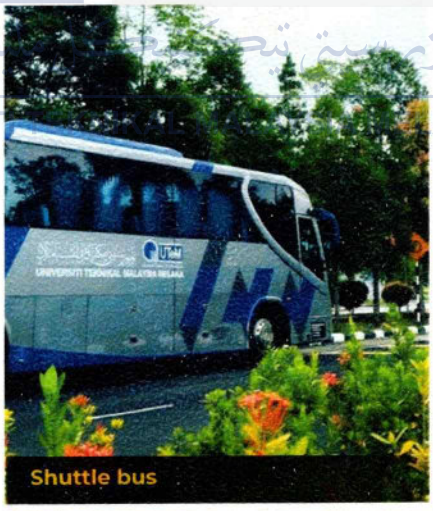
Student Activity Centre

UTeM Chancellor Hall

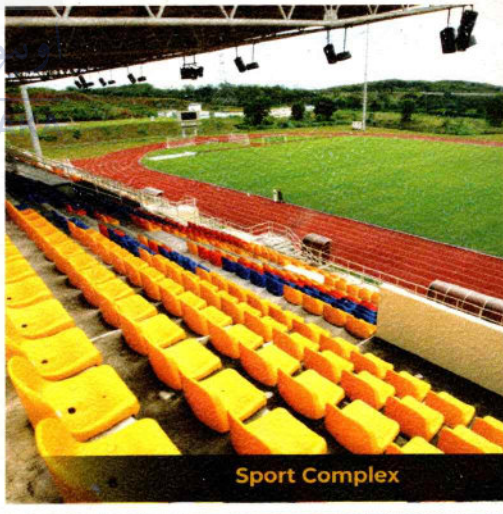


Cafeteria and Kiosk

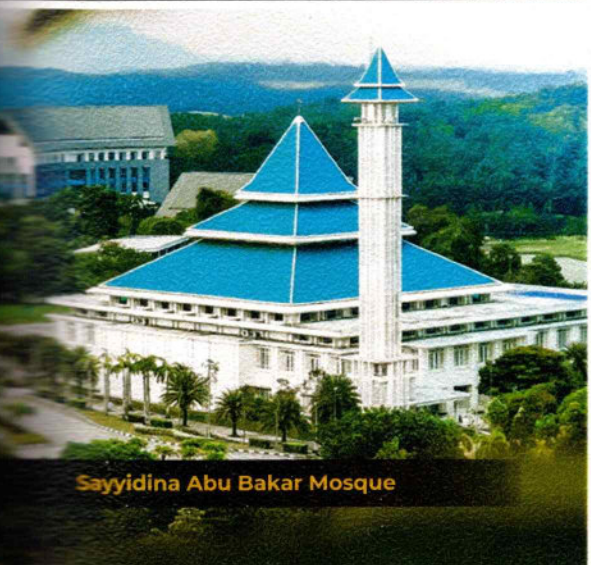
Person with Disabilities (PWD) Facilities



Shuttle bus



Sport Complex



Sayyidina Abu Bakar Mosque

Laman Hikmah Library

Expanding Value, Luring Prosperity

This thrust plays a role in developing the core values of UTeM so that university can be engineered to go more excellent level and able to implement a more challenging agenda by competing in the international arena and bringing more well-being to the university.

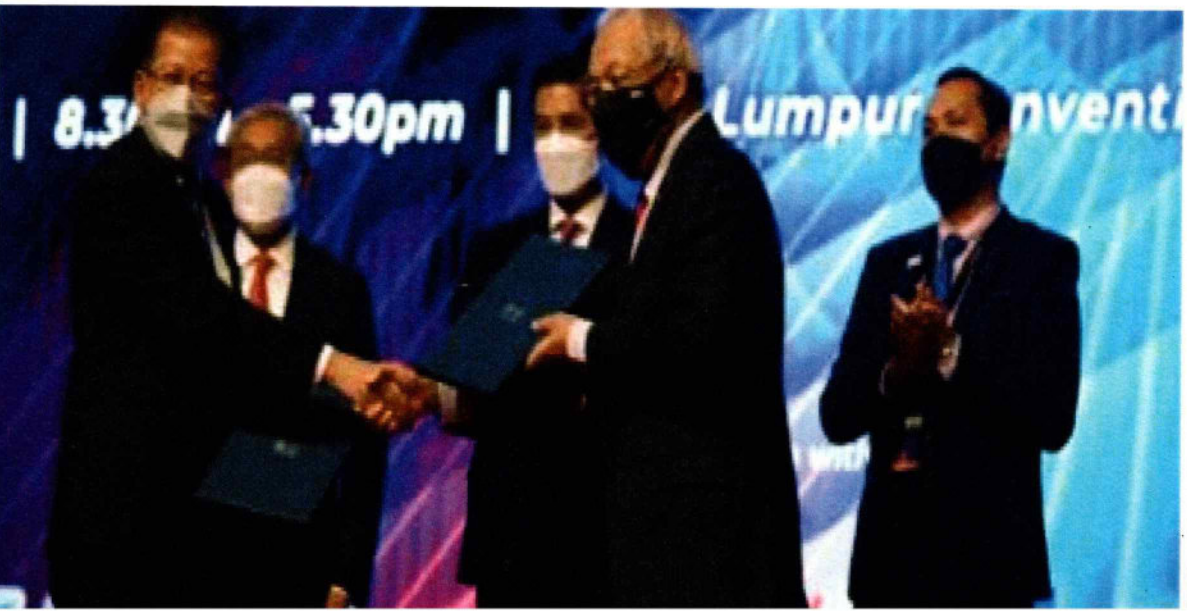
World's Top 2% Scientists

4 UTeM academic staff who have been listed in the World's Top 2% Scientists based on sources by Elsevier BV, Stanford University. The World's Top 2% Scientists represents top 2% of the most-cited scientists in various disciplines.

i. Dr. Iskandar bin Waini - FTKMP
ii. Dr. Najiyah Safwa binti Khashi'ie - FTKMP
iii. Dr. Ridhwan bin Jumaidin - FTKMP
iv. Prof. Madya Ts Dr. Muhd Ridzuan bin Mansor-FKM

QS Rankings

QS World University Rankings is an annual publication of university rankings by Quacquarelli Symonds (QS). The QS rankings comprises three parts which are the global overall ranking, the subject rankings and the five independent regional tables. UTeM has been successfully listed in the highest ranking in the QS World University Rankings 2024 after 5 years of being listed in the QS Asia University Rankings.



The Rankings

THE World University Rankings provides the list of the world's best universities, with an emphasis on the research mission. In 2023, UTeM is ranked in THE World University Rankings, THE Asia University Rankings, THE World University Ranking and THE Impact Rankings.

UI Greenmetric World University Ranking

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Sustainable Development Goals (SDG)

Sustainable Development Goals (SDG) are a collection of 17 global goals aimed at improving the planet and the quality of human life around the world by the year 2030.

From 17 SDGs, Universiti Teknikal Malaysia Melaka (UTeM) focused on 7 SDGs which are SDG 1 (No Poverty), SDG 4 (Quality Education), SDG 6 (Clean Water and Sanitation), SDG 7 (Affordable and Clean Energy), SDG 9 (Industry, Innovation and Infrastructure), SDG 12 (Responsible Consumption and Production) and SDG 17 (Partnerships for the Goals).

Programmes and activities that related with the UTeM's focused SDGs are:

SDG 1: No Poverty

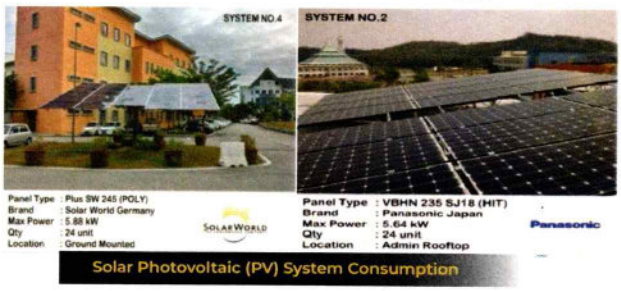
SDG 4: Quality Education

SULUNG

SDG 4: Quality Education

Process of placing a Portable Water Treatment Plant (PWTP) as a source of water consumption other than treated water by Syarikat Air Melaka Berhad (SAMB)

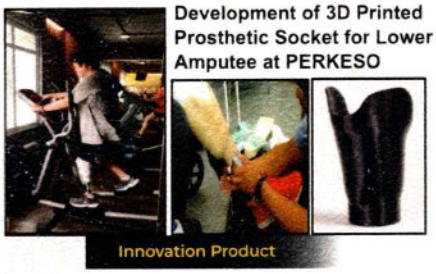
SDG 7: Affordable and Clean Energy



Solar Photovoltaic (PV) System Consumption

3 stars in ASEAN Energy Management Scheme (AEMAS)

SDG 9: Industry, Innovation and Infrastructure



SDG 12: Responsible Consumption and Production

SDG 17: Partnerships for the Goals

UTeM Holdings

UTeM Holdings is a commercial and investment arm of Universiti Teknikal Malaysia Melaka. It was incorporated on May 2006 as a private limited company. As a company wholly owned by the University, UTeM Holdings involved in various business activity related to the university mainly on education and training, commercialization and consultancies.

Academic based activities are now being one of our main focused. A few initiatives have been executed such as expanding our offshore program internationally, offering foundation program, establishing the international school and a few others. Besides the new initiatives, we are continuously offering certification and professional training as well as short courses.

In commercialization activities, our roles are to commercialize and license the innovative products and solutions developed by UTeM's researchers. To achieve the objectives, we are now aggressively establishing the collaboration between university and industries. We are also working hand in hand with Malaysian government agencies especially on obtaining the research grant, funds and else.

And for consultancy activities, we are working hand in hand with university on bringing out the University's academic expertise and research capabilities to be tailored to the specific needs and goals of the client and society as a whole.

Our business is not limited to the 3 business segments above. We are also actively looking for new business venture opportunities especially in the energy, technology and property.

www.utem.edu.my

UTeM

Aligning

The University Surging Forward

UNIVERSITI TEKNIKAL MALAYSIA MELAKA