



UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)

Wholly owned by UTAR Education Foundation (200201010564(578227-M))



UTAR Hospital

A newly built not-for-profit teaching and community hospital

Page 11 & 12: Special Feature >>



UTAR Sustainable Development Goals Report 2021



Traditional and Complementary Medicine Centre

Broadening Horizons, Transforming Lives

德智体兼修 群美新并重

SUSTAINABLE DEVELOPMENT GOALS





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Introduction

UTAR's Growth Strategies in Alignment with the SDGs

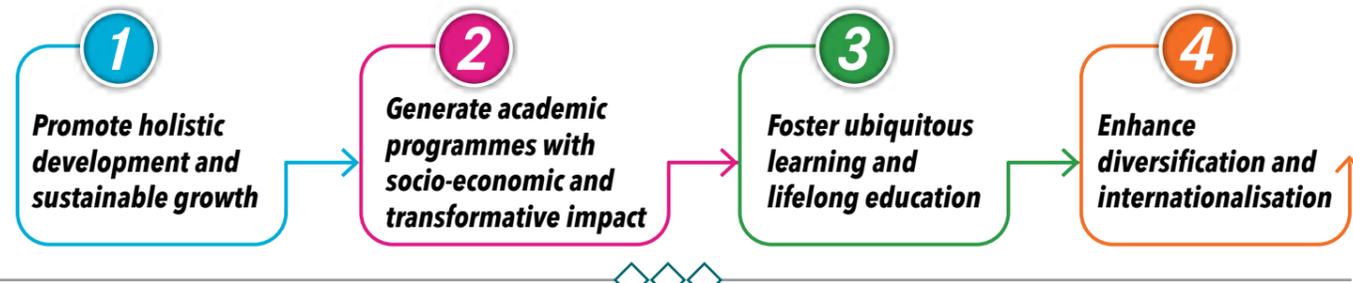
UTAR is highly reputed as one of the fastest growing private higher education institutions in the country with phenomenal growth in all aspects of its development since its inception. Since its inception on 13 August 2002 with 411 students for its first intake, the enrolment has now reached over 21,000 students with campuses located in Kampar, Perak and Bandar Sungai Long, Selangor. UTAR is a not-for-profit private university and is owned by the UTAR Education Foundation. It has graduated over 74,000 students.

(All figures are correct as at April 2022)



Over the years, the University has grown significantly and its strategies are reflected in its 10-Year Strategic Plan (2013-2022) which defines the strategic directions that are essential to propel the University to greater heights in support of quality education and to train youths to be future responsible leaders and citizens to meet the human resource needs of the nation.

The 10-Year Strategic Plan focuses on four directions which are:



These strategic directions are guided by UTAR's Six Educational Pillars of Education which are:



These core values encompass all the key areas of learning for a holistic education and a balanced life. While it is crucial to attain academic excellence, the development of soft skills, moral values and character building is equally important to be socially responsible members of the society. UTAR staff and students are constantly engaged in community and volunteer projects providing voluntary services and R&D services to instil among students the importance of engaging with the community in support of sustainability, an economically just society and respect for the less privileged.

The implementation of UTAR's strategies embraces the spectrum of university functions and focused areas that are essential for the attainment of the vision and mission of the University to be a global university of educational excellence with transformative societal impact. These focused areas are:



The University's strategic plans are also aligned with the universal objectives of the UN's Sustainable Development Goals (SDGs) which seek to end poverty, protect the planet and ensure economic growth and prosperity for all. As a University, UTAR plays a contributing role towards the cross-sectoral implementation of the SDGs, providing an invaluable source of expertise in R&D, sharing knowledge, and guiding students in advancing the SDG agenda while fulfilling its own goals.

UTAR believes that through quality and focused education, youths can be trained and empowered to be responsible citizens who can enable and promote peace, tolerance and respect for the diverse communities, support and implement green practices to ensure sustainability and contribute to the economic and social welfare of the community to eradicate poverty. Youths must recognise the vast and fast-changing dynamics of the global arena that will also affect the local and national communities and the way decisions are made and plans are implemented. The University's initiatives are also interrelated with the goals of the SDGs to advance the 2030 agenda of the SDGs.

The various initiatives of the University incorporate the following objectives:

- Building, strengthening and institutionalising university partnerships with local and foreign universities, industry partners, the government and the community
- Building sustainable relationships and strengthen engagement with less privileged communities to provide support and assistance training, environmental and health challenges
- Engaging in R & D to study, generate, translate and disseminate knowledge to increase societal impact of research through dynamic partnerships, resource and knowledge sharing to strengthen the understanding of managing interactions between the environment and human health
- Training and shaping future leaders on sustainable development by integrating some SDGs into curricula to provide students with the knowledge and the skills needed to be responsible citizens and to promote multidisciplinary and systems approaches to solving increasingly complex challenges of society today
- Engaging data analytics to map, track and document the various efforts that link research, knowledge, decision-making and practice to help establish meaningful frameworks to identify, measure and report on the relevant indicators in a valid way. Continuous evaluation of sustainable efforts enables demonstration of commitment and progress which are critical for learning and improvements, promoting transparency and sustaining partnerships
- Recognising the efforts of staff and students in support of the SDGs



University Social Responsibility



In line with its focus on holistic development, sustainable growth and the community, UTAR places great emphasis on social responsibility among its staff and students. Its projects and initiatives cover a diverse spectrum of activities, rooted in its core values and reflected in its voluntary services in support of the people and the community to enhance their quality of living. Activities range from research, R&D projects, consultation, training, conferences, talks and seminars, to voluntary community services in New Villages and rural areas, health campaigns, gotong-royong, free health services, awareness programmes, financial aid and scholarships, leadership and youth camps, and teaching and learning support. From top management to academics, support staff and students, service to the community and even the industry is part and parcel of the University education. From working with the underprivileged in villages and cleaning up homes to collaborations with industry companies to improve products and services and conduct research; these activities are conducted throughout the year, providing value creation for both the givers and receivers.

UTAR has always adopted good governance, responsible management and social responsibility since its inception and has always believed that this approach is essential for long term sustainability, lifelong learning and value creation for its staff, students and the community.

In fulfilling its University Social Responsibility, UTAR strives to

- Make positive contributions in the campus, in the local communities, to the society and to the nation
- Focus on continuous improvements and progress
- Minimise environmental impacts and take steps to ensure environmental conservation
- Support and respect diversity, multi-cultural and multi-racial harmony
- Collaborate with international and local university and industry partners for synergy and knowledge exchange
- Train our youths on volunteerism, teamwork, charity and responsible leadership
- Support the educational objectives of the state and nation to ensure peace, harmony and economic growth

Over the years, UTAR has always practised giving back to the community to help the less privileged and providing educational opportunities especially to those who lack the financial means to pursue tertiary education. As of February 2022, over RM169 millions of internal scholarship was imbursed to more than 58,000 students. Over RM22 millions of external scholarships imbursed to more than 660 students. Meanwhile, over RM10.9 millions of internal loans imbursed to more than 1500 students, and over RM1.1 billion of external loans, including PTPTN, imbursed to more than 79,000 students.

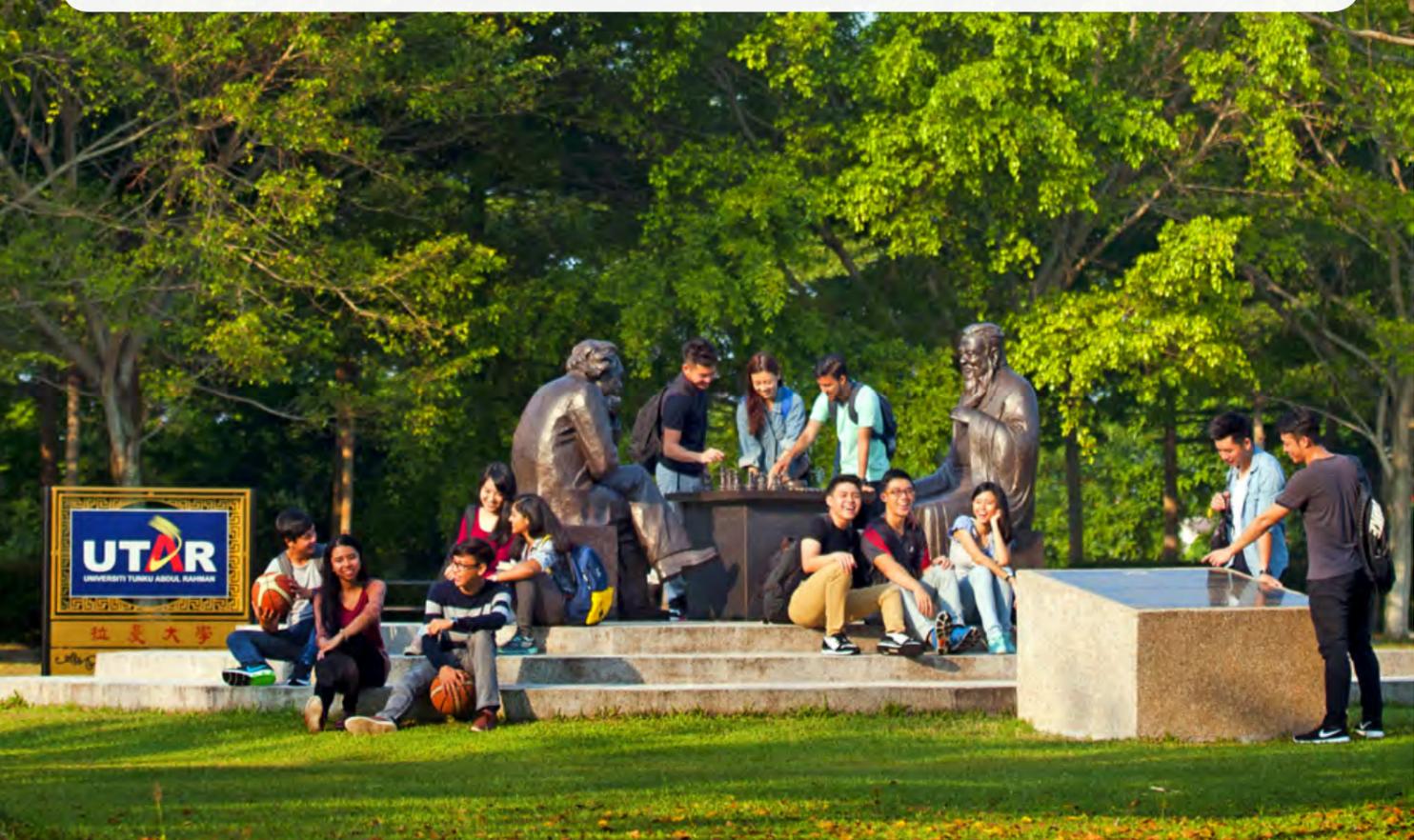
Some of UTAR's community projects and initiatives in support of SDGs include the annual Kuala Lumpur Engineering and Science Fair in collaboration with the ASEAN Academy of Engineering and Technology (AAET), Malaysian Industry-Government Group for High Technology (MIGHT), the Institution of Engineers Malaysia (IEM), Malaysian Ministry of Education and Malaysian Ministry of Science, Technology and Innovation to promote STEM education among school children, especially those from rural schools and the community.

It is also UTAR's practice to share knowledge and expertise with the educational community and the public. UTAR's Centre for Corporate and Community Development (CCCD) has been conducting short courses, training programmes, free seminars and talks to the public which has benefitted more than 247,000 participants since 2003. UTAR's Soft Skills Development Programme and the various community projects with international communities focus on the core competencies that prepare its students to understand and face the global challenges of diverse communities around the world.

Since its early years, UTAR has designed quality programmes incorporating the objectives of the SDGs, practised good governance, diversified its partnerships and student bodies, employed effective teaching-learning pedagogy, initiated research and publications and expanded its support for the community. All these have come to fruition when the University was awarded self-accreditation status by the Malaysian Qualifications Agency (MQA) of the Ministry of Higher Education.

UTAR has always been committed towards making the world a better place in alignment with the SDG agenda. Its contribution covers various areas such as community engagement, environment conservation and green technology, quality education, medical and health support, economics and commerce, social and multicultural harmony and bursary, and these are reflected on the numerous awards and recognitions received. Among the significant awards received are the Sin Chew Business Excellence Award 2017 - CSR Excellence Award category, and the Sin Chew Education Awards (SCEA) 2018/2019 for Outstanding Educational Institutions in the Private Universities/Colleges Category. UTAR is also ranked 84th World's Most Sustainable University in UI GreenMetric World University Rankings 2021.

(All figures are correct as at April 2022)





SDG@UTAR

Our Commitment

We acknowledge the significance of sustainability in all aspects of our operations, and we aim to follow ethical practices to minimise the impact on our society and the environment, ensure the safety and well-being of the community, and practise responsible consumption and production to ensure sustainability for future generations.

Our Advocacy

UTAR supports and promulgates sustainability through the following actions:

SDG Committees



SDG sub-committees, represented by faculty and administrative staff, researchers, and students, were set up to encourage ownership and participation in the University's sustainability initiatives within the campus and with external communities.

Teaching



Sustainability education is incorporated as part of the University's educational experience to provide students with the relevant knowledge and awareness on community and collaborative efforts to improve the planet for tomorrow.

Research and Publications



Research centres were set up to conduct studies and recommend best practices that support community health and well-being, safety, environmental protection, sustainable practices, renewable energy and resources, and responsible consumption and production. These centres also conduct impact surveys and research, compile data and report through publications in local and international journals, social media and website.

Strategic Plan and Roadmap



University social responsibility and sustainability are incorporated into UTAR's 10-Year Strategic Plan as an integrated roadmap that marks the strategic journey and direction undertaken by the University for sustainable progress and development now and in the future.

Community Engagements



Regular and annual voluntary service community projects are conducted to encourage engagements from the community, and local and international universities. Community projects by students and staff focus on enhancing the quality of living in the community, education and welfare, safety and well-being, socio-economic issues, as well as environmental conservation and sustainable practices.

International Collaborations



More than 500 MoU/MoA local and international university and industry partners is a source of international exchanges, sharing of knowledge and resources, training and forum on issues related to the SDGs.

STEM Education



UTAR advocates the nation's STEM Education initiatives in ensuring the sustainability of STEM education in schools for the continual training of human resources in the fields of science, technology, engineering and mathematics to meet the needs of the future and for sustainability.

UTAR's Policy Commitments to the UN Sustainable Development Goals



Founded with the bedrock principle of by the people, for the people, UTAR, as a not-for-profit university, has always embraced the society through various commitments which are also in line with the United Nations (UN) Sustainable Development Goals. Not limited to empowering students through quality yet affordable education, UTAR plays a contributing role towards the cross-sectoral implementation of the SDGs, providing an invaluable source of expertise in R&D and education, while sharing knowledge, and guiding students in advancing the SDG agenda and fulfilling its own goals. UTAR has throughout the years spearheaded sustainable initiatives which not only broaden the horizons of one generation, but also transform their lives as well as that of the generations to come.

Non-Discrimination and Anti-Harassment Policy

Objective

UTAR, as a not-for-profit private educational institution, is committed to a work and study environment that promotes professionalism and seeks to attract staff and students in support of diversity. This policy shall govern the University in dealing with programme admissions, employment and University operations, and in accordance with the relevant Laws and Regulations of the country.

Policy

This policy is put in place to prevent prejudice, unlawful discrimination or harassment against individuals on the basis of race, religion, and gender. Any person violating this policy will be subject to corrective action as per University rules and regulations.

Any feedback or report on harassment or unlawful discrimination (regardless of verbal, physical or via electronic means), will be attended to and investigations will be conducted. Appropriate actions will be taken accordingly, following the University policies, rules and regulations, and where necessary, in accordance with the relevant Laws and Regulations of the country. The University will take corrective actions to prevent recurrences and will provide counselling support to those affected, if required.

Staff and Students of the University shall undertake to comply with the University policies, rules and regulations, and also in accordance with the relevant Laws and Regulations of the country at all times.

For enquiries or feedback related to this policy, please refer to the Director of the Division of Human Resource or the Head of the Department of Student Affairs.

Environmental Policy

In line with its focus on excellence in teaching and research, UTAR is committed to promoting environmental sustainability and creating environmental awareness among its students, staff, stakeholders and the public to conserve the environment and to prevent environmental pollution.

This policy sets out the six fundamental principles that UTAR accepts to be responsible for the environment and its sustainability.

Principle 1

We are committed to implementing a holistic framework to ensure the systematic management of environmental sustainability through compliance with applicable environmental legislation and standards.

Principle 2

We will undertake to create awareness and the appreciation of environmental sustainability among students, staff, alumni, stakeholders and the public through education, research, consultancy and community engagement.



Principle 3

We will aspire to continuously improve our environmental performance to achieve the objectives of this policy through education, research, consultancy and community engagement, as well as integration of best practices into our campus activities.

Principle 4

We will strive to minimise the adverse impacts on the environment by reducing the use of energy and water, and implement educational programmes to use energy and water more efficiently, while adopting good energy and water management practices.

Principle 5

We will endeavour to eliminate and minimise waste and preserve natural resources, and ensure that the management of materials and disposal of waste is implemented in an environmentally responsible manner.

Principle 6

We will expect our suppliers, vendors and contractors to comply with local environmental laws and regulations to ensure the protection of the environment.

The University is committed to ensuring the protection of the environment to protect its resources and to prevent any adverse environmental impacts.

Sustainable Food Policy

As a teaching, learning and research institution, with responsibilities to the local community and society, Universiti Tunku Abdul Rahman aims to implement its procurement activities in an environmentally and socially responsible manner. This Policy shall apply to all food operators and other related service providers in the University. All food operators and related service providers are required to comply with this Policy in their daily operations.

The University aims to:

- Educate staff and students on healthy and sustainable food consumption and habits through good health practices, advice and educational events.
- Ensure food safety and nutrition within a sustainable food system.
- Ensure that food operators and service-related providers adopt measures that support food sustainability in an environmentally and socially responsible manner.
- Commit to supporting the local community and contribute to the economy in a manner that is economically viable, ecologically sound, and socially supportive.

All food operators and related service providers in the University are required to:

- Develop objectives and make efforts in support of good environmental and social effects associated with the food products and services we purchase.
- Identify and adopt measures to take into consideration environmental and socially responsible factors during the food selection and cooking process.
- Identify and provide a choice of healthy and balanced food options, in support of sustainability, to our students, staff and visitors.
- Promote good health and its educational social benefits through supporting good eating habits and providing a healthy selection of quality and safe food.
- Encourage related suppliers and contractors to minimise negative environmental and social effects associated with the products and services they provide.



Regulations on the Usage of Expanded Polystyrene

1. Purpose

- 1.1 The following rules and regulations are applicable to all food Cafeteria Operators, Push Cart Operators and any food vendors who supply and sell foods and drinks within the premises of the University. It also applies to any type of events and/or activities held within the premises of the University.
- 1.2 These regulations are made to reduce the use of polystyrene in everyday purchasing and encourage consumers to stop using expanded polystyrene packaging. These regulations shall help the University to prevent pollution due to the usage of expanded polystyrene. This initiative is in line with the University's Green Campus Initiative.

2. Authority and Definitions

- 2.1 The University reserves the right to maintain full jurisdiction over the vendors/users and to take action against all violators of these regulations, and amend these regulations from time to time as deemed by the University.
- 2.2 The following terms shall have the meanings specified:
 - 2.2.1 "University Premises" means any land or buildings under the ownership of the University or under the control of the University including land or buildings occupied by private individuals or companies whether as tenants or licensees.
 - 2.2.2 "Cafeteria Operators" means all Cafeteria Operators or Stall Operators operating at the cafeteria within the University Premises.
 - 2.2.3 "Push Carts Operators" means all Push Cart Operators operating within the University Premises.
 - 2.2.4 "Event Organiser" means any organiser or committee or host of any event or activities approved to be held within the University Premises by the University.
 - 2.2.5 "Customers" means anyone buying foods and drinks from the Cafeteria Operators, Push Cart Operators or Food Vendors within the University Premises.
 - 2.2.6 "Outsiders" means anyone other than UTAR students and staff with a bona fide reason for entering the University.
 - 2.2.7 "University" means Universiti Tunku Abdul Rahman.
 - 2.2.8 "Staff" means any or all employees of the University no matter full-time or part-time.
 - 2.2.9 "Student" means any or all students registered under a programme of study at the University regardless of full-time or part-time.
 - 2.2.10 "Expanded polystyrene" means a rigid cellular form of polystyrene with low weight/density and good thermal insulation characteristics in general.
 - 2.2.11 "Polyethylene terephthalate" is a type of thermoplastic polymer resin from the polyester family which is widely used for food and liquid containers as well as clothing fibres.
 - 2.2.12 "Polypropylene" is a type of thermoplastic polymer from the group of polyolefin. It is widely used for food and liquid containers, milk bottles as well as stationery. Polypropylene has high melting points thus it is suitable to be sterilized under steam or boiled water.

3. Cafeteria and Push Cart Operators

- 3.1 The Cafeteria and Push Cart Operators shall not use expanded polystyrene-based drinking cups and eating plates for in-house usage. The Cafeteria and Push Cart Operators are encouraged to use recyclable single-use plates and cups for dine-in usage.
- 3.2 The Cafeteria and Push Cart Operators shall not use expanded polystyrene-based food and drink packaging/takeaway boxes and cups. The Cafeteria and Push Cart Operators shall use other options such as biodegradable paper, polyethylene terephthalate or polypropylene boxes and cups for food and drink packaging.
- 3.3 The Cafeteria and Push Cart Operators are not allowed to charge any additional cost for the use of recyclable plates, cups and dishware for dine-in usage.
- 3.4 The Cafeteria and Push Cart Operators are not allowed to charge any additional cost for the use of paper, polyethylene terephthalate or polypropylene-based cups and plates for dine-in usage.

4. Event Organiser

- 4.1 The Event Organiser shall not use expanded polystyrene-based drinking cups and eating plates for dine-in usage. The Event Organiser is encouraged to use recyclable plates and cups for dine-in usage.
- 4.2 The Event Organiser shall not use expanded polystyrene-based food and drink packaging/takeaway boxes and cups. The Event Organiser shall use other options such as biodegradable paper, polyethylene terephthalate or polypropylene boxes and cups for food and drink packaging.
- 4.3 The Event Organiser is not allowed to charge any additional cost for the use of recyclable plates, cups and dishware for dine-in usage.
- 4.4 The Event Organiser is not allowed to charge any additional cost for the use of paper, polyethylene terephthalate or polypropylene based cups and plates dine-in usage.

5. Enforcement and Investigation Powers

- 5.1 The Department of Student Affairs of each campus shall enforce the expanded polystyrene usage regulations and have the authority to ensure the compliance of Expanded Polystyrene Usage Regulations.

6. Assistance and Referrals

- 6.1 Any concerns or queries regarding the expanded polystyrene usage policies, enforcement and operational aspects should be directed to the Head of Department of Student Affairs of each campus.



Special Feature



Enriching and Caring for the Community

UTAR Hospital

Enriching and Caring for the Community



Good health and well-being, and access to healthcare services remain as among the top global agendas to move forward and drive sustainable development. Apart from UTAR's affordable quality education that has provided the community equal access to pursue quality education, the UTAR Hospital is an extension of its effort in giving back to the society and contributing to the overall health of the society. These efforts also further contribute to the targets outlined in SDGs 1, 3, and 4. The hospital will not only offer affordable and quality basic and specialist medical services to the students and the public, but also provide clinical training for the MBBS, TCM and Health Science students in the Faculty of Medicine and Health Sciences.

The project comprises an initial phase of a hospital-complex with 250 beds for Western Medicine, 100 beds for TCM, and a future phase of additional 250 beds. The Traditional and Complementary Medicine (T&CM) centre began its operation on 7 April 2022, which currently offers services in TCM Internal Medicine; Acupuncture & Moxibustion; Tuina; Gua Sha; and Cupping. Counselling services are also available, and joining that list of services will be the coming Western Medicine, additional Chinese Medicine, Ayurvedic Medicine, and Traditional Malay Medicine services. These services comprise of facilities for out-patient and in-patient treatment, diagnostics and treatment, medical and non-medical support, research and education, and staff, student and administrative centres.



Functions of UTAR Hospital

- Not-for-profit hospital
- Advanced sub-specialised services
- Secondary and tertiary referral services, including TCM services
- Rehabilitation and long stay care services
- Comprehensive services to adults, women and children, newborns
- Clinical research and development
- Clinical training – undergraduates, postgraduates, continued medical education

Niche Areas of Specialist Services

- Key-hole and robotic surgeries
- Radiotherapy services for cancers
- Cardiovascular & cardiothoracic services
- Stem cells for regenerative medicine
- Advanced cell-based therapy e.g. immunotherapy using immune cells
- Advanced stroke care

Normal Specialist Services

- General surgery
- General medicine
- Obstetric & Gynaecology
- Paediatric
- Orthopaedic
- Radiologist
- Anaesthesiology
- Ear Nose Throat
- Pathology

Governance & Operation

- Wholly-owned by the UTAR Education Foundation – A not-for-profit institution
- Managed by a Hospital Management Board with its own CEO / Medical Director
- Affordable charges and fees for services
- Welfare support for qualified needy patients
- Specialist hospital offering a comprehensive range of services as an alternative to Hospital Ipoh, the major state hospital



Development Progress of UTAR Hospital

Photos taken on 25 April 2022



Overview of the actual Hospital site



Medical Centre



Air-Conditioning and Mechanical Ventilation Plant Room



Multi-storey Car Park Block



Thermal Energy Storage Tank



Staff Residence



Linked Bridge



Galleria Area at Medical Centre



Atrium Area at Medical Centre

Completion of T&CM Centre

Photos taken on 25 April 2022



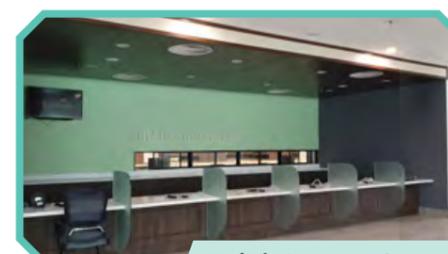
T&CM Centre



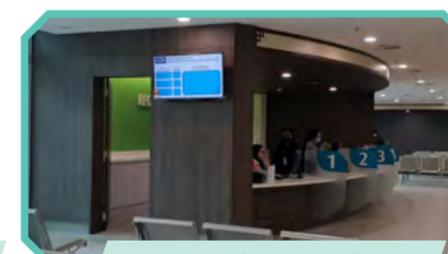
Softscape Planting



Ground Floor Lobby



Herbal Dispensary Counter



Registration & Payment Counter



First Floor Consultation Lobby



Highlights

UTAR T&CM Centre offers training to hospital volunteers

UTAR Traditional and Complementary Medicine (T&CM) Centre organised Hospital Volunteer Training on 21 May 2022 at UTAR T&CM Centre. Present at the opening ceremony were UTAR President Ir Prof Dr Ewe Hong Tat, Buddhist Tzu-Chi Merits Society Malaysia Medical Mission Commissioner Member Choo Yoong Chang, Buddhist Tzu-Chi Merits Society Malaysia Perak Person In Charge Wong Chong Yin, UTAR Vice President for Student Development and Alumni Relations Prof Dr Choong Chee Keong, T&CM Centre Director-cum-Principal Practitioner Assoc Prof Dr Te Kian Keong, esteemed guests from Tzu-Chi, UTAR Hospital staff and UTAR staff. With the aim to provide training to the volunteers, as well as equip them with a deeper understanding of the hospital volunteers' duties and responsibilities, the training programme successfully attracted UTAR students, staff and members of the public. The training was conducted by UTAR T&CM Centre staff and Tzu-Chi volunteers. The topics included introduction to UTAR T&CM Centre; volunteer work content, volunteer ethics code; knowledge of traditional Chinese medicine, basic nursing knowledge; communication skills, and emotional and psychological support, to name a few.



Handover of UTAR Hospital Ambulance by Thiam Lai Yean Foundation

The UTAR Hospital Ambulance donated by Thiam Lai Yean Foundation was officially handed over to UTAR Hospital on 21 May 2022 at T&CM Centre, UTAR Hospital, Kampar. The handover ceremony was graced by Advisory Committee Members of Thiam Lai Yean Foundation Madam Lim Yoke Cheng and Madam Lim Yoke Ping; Chairman of UTAR Hospital Board and Member of UTAR Council Ir Academician Emeritus Prof Tan Sri Dato' Dr Chuah Hean Teik; UTAR President, Interim CEO of UTAR Hospital and Member of UTAR Council Ir Prof Dr Ewe Hong Tat; UTAR Council Member Datuk Lim Si Cheng, UTAR Vice President for Student Development and Alumni Relations Prof Dr Choong Chee Keong; Member of UTAR Hospital Board Assoc Prof Dr Te Kian Keong, Member of Thiam Lai Yean Foundation Teh Shen Li, UTAR Hospital staff and UTAR staff.



UTAR Hospital T&CM Centre opens its door to the public

The supports were overwhelming and the responses were positive when UTAR Hospital's T&CM Centre officially opened its door to the public on 7 April 2022. On the first day of its opening, it already received over 60 appointments with patients coming from various areas of Perak. On 8 April 2022, the T&CM Centre continued to receive about 60 appointments.



Support and contributions from the public

Since the start of the construction in December 2019, UTAR Hospital has received tremendous support from the public's various donations and contributions in kind, as well as fundraising activities.



Federation of Anxi Associations Malaysia



Perak Chinese Mining Association



Ng Teck Fong Foundation



Techkem Group



Chairman of Sayling Wen Cultural and Educational Foundation, Taiwan Datuk Wira Wen Tai Chun and Vice Chairperson Datin Wira Audrey Yang



Port Klang Free Zone



Mr Lim Chin Hua, Executive Chairman of Konwa Industrial Sewing Machine



MC-Ocean Holding Sdn Bhd



Ajiya Berhad



Econsave and Sin Chew Daily Charity Show



Federation of Textiles General Goods & Garments Associations Malaysia

UTAR Hospital Donation

UTAR was established as a not-for-profit University with donation from philanthropists, benefactors and the public. Hence, this hospital will also be run as a not-for-profit hospital and will be self-sustaining. Your valued support and generous contribution for this hospital project will greatly benefit the medical and health science students, the community and the nation. Such a meaningful project needs strong support and contribution from all parties.

Online transfer or banked in cheque can be made directly to the following:
 Account Name : UTAR EDUCATION FOUNDATION
 Account No. : 3171115615
 Bank Name : Public Bank Berhad

For tax-exemption receipt to be issued, donors are required to email us your full name, NRIC No./Company No., address and scanned copy of the transfer/bank-in slip within 10 days of your donation made.

www.utar.edu.my/uef



End poverty in all its forms everywhere



RESEARCH

Non-Muslim Malaysians' purchase intention towards halal products

Halal products were a norm in the Muslim countries; however, halal food products were not only being consumed by Muslims nowadays. People are concerned about their daily needs, especially their food and expenditure in this modern society. Customers nowadays are more educated, and all the information can be easily accessed by just a click. Previous literature found that customers are looking for quality products and products that are safer to be consumed. The results show that product quality, product price, product availability and product safety significantly influence the purchase intention of urban non-Muslim on halal food products. The result implies that product quality is the most significant factor compared with other variables.

Productive engagement of older adults in China: A multilevel analysis

This study investigates how the personal characteristics, behaviours, and health statuses of older adults in China influenced their productive engagements in paid and unpaid jobs. There was a strong association between older adults' productive engagements and their functional limitations to daily living activities, health, and healthy behaviours. Older adults with inadequate finances were more likely to be working to support themselves. Those who exercised less and living in the provinces with higher GDP were less likely to work post-retirement. Chronic diseases, advances in age, no education and rural residence did not deter older adults from doing unpaid work.

Research in numbers: SDG1

5 publications

Course units on SDG1

8 course units

SDG1 related activities

17 activities

1,155 participants



PUBLIC ENGAGEMENT

FAM organises campaigns to support frontliners and flood victims

The [Faculty of Accountancy and Management \(FAM\)](#) and the [Committee for Community Outreach \(CCO\)](#) collaborated to launch the "Care 4U - Frontliner" campaign recently. The campaign was an initiative by FAM and CCO to support the healthcare frontliners and uniform officers, particularly the Police Force, Armies, and RELA members, by contributing food and drinks as a token of appreciation towards their services. The foods and drinks were prepared and sponsored by 50 participants from the Kajang Community neighbourhood and FAM staff, and on 4 June 2021, 150 pax of food and 150 bottles of drinks were donated to the Ibu Pejabat Polis Daerah (IPD) Kajang, while 50 pax were donated to the Forensic Unit of Hospital Kajang. Prior to this campaign, FAM also raised RM1,948 for the Flood Donation Drive campaign. The donation assisted student flood victims at the East Coast. 36 students from SMK Chukai and SMK Ayer Puteh in Kemaman, Terengganu received student aid packages, purchased with the donated funds. The package consisted of school essential items such as bag and stationery. The packages were sent to SMK Chukai and SMK Ayer Puteh on 25 April 2021 and 27 April 2021 respectively with the support of Mydin Kuantan Emporium.

Goal 2

End hunger, achieve food security and improved nutrition and promote sustainable agriculture



RESEARCH

Is food production vulnerable to environmental degradation? A global analysis

The issue on whether food production has a severe impact on the environment has been receiving increased attention in recent years. By utilising three different estimators, this paper investigates the effect of environmental degradation on food production underlying the Cobb–Douglas production function. We also test the role of R&D, capital and labour on food production. All three estimators provide consistent results using a panel of 53 countries for the period 1996–2017. First, CO₂ emissions are harmful to food production. Second, both capital and R&D are found to have a positive relationship with food production. Meanwhile, an increase in labour tends to reduce food production. Furthermore, the Dumitrescu–Hurlin (DH) panel Granger causality test reveals that there is bidirectional causality between (i) food production and CO₂ emissions, (ii) R&D and food production. The findings of our study not only contribute significantly to the existing literature but also bring about a better understanding on the pollution–food production nexus. Based on our findings, policies aimed at reducing CO₂ emissions and stimulating R&D efforts are recommended.

Drying characteristics and quality of lemon slices dried under Coulomb force-assisted heat pump drying

In this research, a Coulomb force-assisted heat pump (CF-HP) dryer was invented for the purpose of improving the drying characteristics and product quality of biomaterials. As compared to HP drying alone, the assistance of Coulomb force in HP dryer enhanced the drying rate and effective moisture diffusivity of lemon slices up to 26%, which eventually shortened the total drying time by 40%. This saved the total energy consumption of HP drying by 31.5%. CF-HP drying method preserved most of the vitamin C and total phenolics content, at the same time minimized shrinkage and browning of dried lemon slices.

Research in numbers: SDG2

11 publications

Course units on SDG2

53 course units

SDG2 related activities

27 activities

2,258 participants



PUBLIC ENGAGEMENT

CFS provides food aid and necessities to the local community

As residents of Kampar themselves, six [Centre for Foundation Studies \(CFS\) Kampar](#) academics initiated “The Hope Project” to raise funds and donate food and daily necessities to the underprivileged Kampar people, according to the list jointly compiled by CFS and Persatuan Kebajikan Insan Prihatin Perak (PKIPP), one of the active NGOs in Kampar. The team successfully raised RM1,890, contributed by other CFS academics, and the items donated on 15 September 2021 included rice, wheat flour, instant noodles, rice vermicelli, cooking oil, canned sardines, sugar, salt, cream crackers, chilli sauce, soy sauce, sweetened condensed milk, spices, milk powder, instant beverages and diapers. The project also raised awareness on the needs of underprivileged people, and provided a collaborative opportunity with NGOs to actively help the local community.

Goal 3

Ensure healthy lives and promote well-being for all at all ages



RESEARCH

Role of circular RNAs in determining the fate of mesenchymal stem cells

Ribonucleic acid (RNA) has been well-understood for its linear form for many years. With advances in high-throughput sequencing, there is an increasing focus on circular RNAs (circRNAs) recently. Although they were previously regarded as splicing error by-products, research has shown that they play a pivotal role in many cellular processes, one of which is the control of stem cell differentiation and fate. On the other hand, decades of research have demonstrated the promising therapeutic potential of mesenchymal stem cells (MSCs). To this end, there is a growing body of research on the role of circRNAs in the determination of the fate of MSCs. This review critically examines the current evidence and consolidates key findings from studies that explore the involvement of circRNAs in the regulation of MSC differentiation

The mediating role of reciprocal filial piety in the relationship between parental autonomy support and life satisfaction among adolescents in Malaysia

This study investigated how parental autonomy support influences adolescents' life satisfaction through the mediation effect of reciprocal filial piety. A total of 589 school-going adolescents aged between 13 and 17 years were recruited using the cluster sampling method. The results showed that both paternal and maternal autonomy supports positively correlated with reciprocal filial piety as well as life satisfaction. There was also a positive relationship between reciprocal filial piety and life satisfaction. In addition, the data supported the hypothetical mediation model in which both paternal and maternal autonomy supports are associated with reciprocal filial piety; the gratitude toward parents in turn having a positive link with life satisfaction. The indirect effect of parental support on adolescents' life satisfaction was found evident across gender and the three main ethnic groups in Malaysia. This study not only highlights the positive effects of parental autonomy support on adolescents' filial beliefs and life satisfaction across cultures, but also sheds light on the mechanism of parental support in boosting adolescents' life satisfaction.

Research in numbers: SDG3

164 publications

Course units on SDG3

253 course units

SDG3 related activities

242 activities

27,483 participants



PUBLIC ENGAGEMENT

Providing care for senior citizens

A team of 15 academics and five students from [Faculty of Business and Finance](#) organised the "UTAR We Care: Treasuring the Elderly" on 27 August 2021, at Rumah Seri Kenangan Ulu Kinta. Through the event, they donated 17 Anlene milk powder to the care centre, and four wheelchairs which aimed to facilitate the mobility of the senior citizens. The care centre is managed by Jabatan Kebajikan Masyarakat, which provide residential care and supervision, including treatment and protection to senior citizens. Due to the shortage of wheelchairs, the team also hope the wheelchair donation will ease some of the financial burden faced by the care centre.

Goal 4

4 QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all



Foundation programmes	4
Degree programmes	79
Postgraduate programmes	48
Lifelong learning programmes	165
Graduates in year 2021	5,237
Research centres	35
Clubs & societies	80
MoU partners	500+
*Proportion of 1st generation students	2,183

* This is the FTE (Full Time Equivalent) number of students starting a degree at the university who are first generation students. A first generation student is one who reports they are the first person in their immediate family to attend university at any level.

Note: The individual may have studied at another university previously

RESEARCH

The role of salient beliefs influence on Malaysian academics' intention to publish in indexed journals

To qualify in world top universities rankings, various incentives have been provided by private universities in Malaysia to improve one of the quantifiable performance indicators: imparting, sharing and transferring knowledge through research publication which, however, is still in the embryonic stage. To develop effective tactical strategies, the full version of Theory of Planned Behaviour (TPB), including salient beliefs that can cause the academics to form specific reactions towards attitude, subjective norm, and perceived behavioural control constructs need to be elicited and analysed through preliminary study that nevertheless is limited in the literature. To fill up this important research gap, this paper intends (1) to increase the understanding of what the full-version of TPB constructs measure; (2) to discuss the procedure for eliciting the salient beliefs; and (3) to understand how data on salient beliefs are to be analysed. The results revealed a number of new insightful behavioural, normative and control beliefs that go beyond the current understanding of the theory of planned behaviour. The findings of the study contribute to developing appropriate behavioural intervention programs to enhance academics' intention to publish articles in highly reputable indexed journals. Overall, this article intends to provide useful indications to researchers to understand the importance of applying the full version of the TPB, and how a more structured method can be used to elicit and measure the descriptors of salient beliefs.

Exploring the influence of leadership communication on job satisfaction among staff members in Malaysian private institution of higher learning

This exploratory study investigates the influence of leadership communication on staff members' job satisfaction at a private institution of higher learning in Malaysia, in a multicultural setting. The turnover rate among academics in Malaysia is increasing extensively and leadership communication was identified as one of the factors that contribute to poor job satisfaction at the workplace. Good leadership communication is able to create trust and understanding that would inspire people towards the goals of the organisation and improve job satisfaction of an organisation's staff members. Theoretically, transformational leadership theory discusses that a leader with effective leadership communication skills could contribute to a positive working culture or environment that motivates staff members to progress in their career. However, it was found that leadership communication between leaders and subordinates was not fully explored in a multicultural perspective. A qualitative methodology was utilized in order to gain insights into the influence of leadership communication on job satisfaction from selected academics' perspectives. Data were collected through a series of intensive interviews with 22 informants. Based on the findings, three themes emerged; leadership communication practices, the expectation towards leadership communication, and staff members' feedback towards leadership communication. The findings of this study contribute to a new dimension of leadership communication from a multi-cultural context, specifically from the context of academicians at higher learning institutes. Furthermore, it was discovered that leadership communication affected job satisfaction among academic staffs. A good leadership communication is able to create a positive environment for effective communication among staff members in the organization.

Research in numbers: SDG4

47 publications

Course units on SDG4

549 course units

SDG4 related activities

1,765 activities

154,768 participants

PUBLIC ENGAGEMENT

DSSC organises reading campaign for primary school students

The Department of Soft Skills Competency (DSSC) Sungai Long, with seven UTAR students jointly organised the "We Care, We Act" virtual "Read with Community Camp" on 19 June 2021, via ZOOM. The virtual camp benefited 13 primary school students from San Hao Xue Tang, Jenjarom, Selangor, and aimed to cultivate the practice of reading and enhance the school students' English language skills. The virtual camp conducted storytelling sessions, and additional tasks to enable the school students more opportunities to practise their English skills. At the end of the virtual camp, the school students reported that they learnt more English vocabulary and hoped to have more educational camps organised.

Ensure availability and sustainable management of water and sanitation for all



RESEARCH

Electron generation in water induced by magnetic effect and its impact on dissolved oxygen concentration

pH, oxidation-reduction potential (ORP), and dissolved oxygen (DO) concentration are important parameters in water quality surveillance and treatment. The changes of these parameters are associated with electron density in water. Several techniques including electrolysis and catalysis, which require redox reactions and electron exchange, are employed to improve these parameters. In recent years, studies reported that magnetic effects can impart considerable changes on the pH, ORP, and DO concentration of water. However, the correlation between electron density and magnetic effects on these parameters has yet to be disclosed despite the fact that increased electron density in water could improve water's reductive properties, heat capacity, and hydrogen bonding characteristics. In this study, the magnetic effects on pH, ORP, and DO concentration were investigated using different magnets arrangements and water flow rates based on reversed electric motor principle. Results showed that the improvement of pH, ORP, and DO concentration from 5.40–5.42 to 5.58–5.62 (+ 3.5%), 392 to 365 mV (– 6.9%), and 7.30 to 7.71 mg L⁻¹ (+ 5.6%), respectively were achieved using combined variables of non-reversed polarity magnet arrangement (1000–1500 G magnetic strength) and water flow rate of 0.1–0.5 mLs⁻¹. Such decrement in ORP value also corresponded to 8.0 × 10¹³ number of electron generation in water. Furthermore, Raman analysis revealed that magnetic effect could strengthen the intermolecular hydrogen bonding of water molecules and favour formation of smaller water clusters. The findings of this study could contribute to potential applications in aquaculture, water quality control and treatment of cancer attributed to free radical induced-oxidative stress.

Fabrication of a novel latex-based membrane for oily wastewater filtration: effect of degassing on the properties of membrane

Nitrile butadiene rubber latex/graphene oxide (NBR/GO) membranes were fabricated by latex compounding and curing method. This was a new method to produce membrane, thus, the steps in the production were needed to be evaluated to optimise the performance of the membrane. Degassing is an important step in the production of polymer-based membrane through the common phase inversion method. In this research, the need to perform the degassing step in the latex compounding and curing method was confirmed through the morphology study, permeation flux, and oil rejection rate performance of the new NBR/GO membrane. Membrane without-degassing was prepared for comparison, as well. The highest oil rejection rate was found to be 95.04% with permeation flux of 438.43 Lm⁻² h⁻¹ for the membrane without-degassing, at the operating pressure of 0.3 bar for 1000 ppm of oily wastewater concentration. While for degassed membrane, the oil rejection rate and permeation flux at the same filtration conditions were found to be 91.88% and 2720.53 Lm⁻² h⁻¹, respectively. Surface morphology of the membranes showed ridges and grooves as a result of folds that provided effective surface area for filtration of oily wastewater. From these results, it could be concluded that the degassing step could be eliminated in the preparation of the membrane through the latex compounding and curing method. This decision will reduce the time, cost, and energy for producing the membranes.

Research in numbers: SDG6

70 publications

Course units on SDG6

30 course units

SDG6 related activities

4 activities

391 participants



PUBLIC ENGAGEMENT

We Care We Act programme educates primary schoolchildren on sustainable water management and sanitation

A virtual motivational campaign, organised under the “We Care We Act” programme, by the [Department of Soft Skills Competency \(DSSC\)](#) of Sungai Long was conducted on 13 November 2021 via Google Meet. The main objective of the virtual campaign was to impart knowledge and enhance the understanding of primary school students from SJKC Chung Hua Mantin & SJKC Kuo Min Nilai, Negeri Sembilan on Sustainable Development Goal (SDG) 6: Clean Water and Sanitation for All, outlined by the United Nations. The virtual campaign also aimed to provide a platform for participants to actively participate and share their opinion on various topics. The virtual campaign was led by DSSC staff with assistance from 10 UTAR student helpers. In relation to SDG 6, the activities required participants to choose the right photos and identify current environmental problems that have occurred. It also saw participants brainstorming to identify various words with the given jumbled alphabets. Participants were also shown SDG 6 related images and were required to provide their explanations. At the end of the virtual campaign, participants gained a better understanding of the availability and sustainable water management and sanitation for all.

Ensure access to affordable, reliable, sustainable and modern energy for all

7 AFFORDABLE AND CLEAN ENERGY



RESEARCH

Analytical studies of three different datasets for peak reductions with battery-based storage system

Two basic controllers, namely threshold- and schedule-based controllers, have been used with different advanced features for battery-based energy storage system to perform peak reductions. However, the peak reductions are only influenced by the abilities of the newly featured controllers, but also by the types of datasets being used to calculate the peak demands. There are three different datasets, namely instantaneous, average, and energy load data. The main contribution of this paper is to present how different datasets can affect the peak reductions achieved by the two basic controllers without using any new features. The studies are extended to analyse how different datasets can influence the peak reductions by the controllers under different forecasting errors. The results show that threshold-based controller can achieve the highest peak reductions when the instantaneous load data is used. However, schedule-based controller is better than threshold-based controller when the levels of peak demands are highly unpredictable. These results are important because they can affect the prospective of energy storage system in the future.

Black soldier fly larval valorisation benefitting from ex-situ fungal fermentation in reducing coconut endosperm waste

Oftentimes, the employment of entomoremediation to reduce organic wastes encounters ubiquitous shortcomings, i.e., ineffectiveness to valorise recalcitrant organics in wastes. Considering the cost-favourability, a fermentation process can be employed to facilitate the degradation of biopolymers into smaller organics, easing the subsequent entomoremediation process. However, the efficacy of in situ fermentation was found impeded by the black soldier fly larvae (BSFL) in the current study to reduce coconut endosperm waste (CEW). Indeed, by changing into ex situ fermentation, in which the fungal *Rhizopus oligosporus* was permitted to execute fermentation on CEW prior to the larval feeding, the reduction of CEW was significantly enhanced. In this regard, the waste reduction index of CEW by BSFL was almost doubled as opposed to in situ fermentation, even with the inoculation of merely 0.5 wt % of *Rhizopus oligosporus*. Moreover, with only 0.02 wt % of fungal inoculation size to execute the ex situ fermentation on CEW, it could spur BSFL growth by about 50%. Finally, from the statistical correlation study using principal component analysis, the presence of *Rhizopus oligosporus* in a range of 0.5–1.0 wt % was regarded as optimum to ferment CEW via ex situ mode, prior to the valorization by BSFL in reducing the CEW.

Research in numbers: SDG7

68 publications

Course units on SDG7

19 course units

SDG7 related activities

11 activities

975 participants



PUBLIC ENGAGEMENT

Energy storage for renewable energy

The [Centre for Corporate Community Development](#) in collaboration with [Lee Kong Chian Faculty of Engineering and Science \(LKC FES\)](#) organised a webinar titled "Energy Storage as an Option of Complementing Renewable Energy" on 30 September 2021 via Zoom and Facebook Live. The webinar, which saw more than 150 participants, was presented by LKC FES academics Dr Chong Lee Wai and Assoc Prof Ts Dr Jun Hieng Kiat. The webinar shared the use of energy storage as an option of complementing renewable energy for sustainability and environmental conservation. It also covered the latest updates on renewable energy, energy storage technologies, and new generation battery. Dr Jun spoke about global issues and renewable energy in Malaysia, and provided a brief review of renewable energy, issues and solutions relating to renewable energy. In the webinar, Dr Chong spoke about the challenges of integrating renewable energy with the grid, energy storage technologies, new generation batteries, hybrid energy storage systems, types of batteries and their application.

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8 DECENT WORK AND ECONOMIC GROWTH



The Impacts of Low Financial Literacy in Fintech Growth in Asia



RESEARCH

The relationship between soft skills training and development, human resource outcome and firm performance

The purpose of this paper is to investigate the impact of soft skills training and development on human resource outcome and firm performance. Data were collected from 199 manufacturers in Malaysia using questionnaire survey method and analysed using 'structural equation modelling' methodology. The results indicated that the relationship between soft skills training and development, and firm performance are fully mediated by the human resource outcomes. This study highlights the indirect contribution of soft skills training and development on firm performance via its impacts on human resource outcome.

What do we know about informational efficiency? Three puzzles and the new direction forward

Informational efficiency generally indicates the prevailing market price of assets by focusing on the connection between market participants in reacting to the arrival of new information. However, several authors have suggested that uncorrelated trading strategies across markets are meant for traders who genuinely know the best. Our study aims to survey the most recent literature on informational efficiency. We examine the empirical literature on informational efficiency by discussing the findings from dual perspectives, namely price-volume and spot-futures relations. More research needs to be directed toward understanding how market efficiency responds to impending uncertainties in the real economy. By combining the findings of 109 studies from different financial markets, we discuss essential lessons from market microstructures and behavioural biases in decision-making. Further, we identify three contentious issues yet to be explored in the literature. This study concludes by discussing a new direction for future research.



Research in numbers: SDG8

46
publications



Course units on SDG8

252
course units



SDG8 related activities

87
activities

12,955
participants



PUBLIC ENGAGEMENT

The impacts of low financial literacy in fintech growth in Asia

In line with the UTAR-UBAYA International Webinar series, [UTAR Centre for Accounting, Banking and Finance \(CABF\)](#) parked under the [Faculty of Business and Finance \(FBF\)](#) collaborated with Universitas Surabaya (UBAYA) Faculty of Business and Economics to organise its first webinar titled "The Impacts of Low Financial Literacy in Fintech Growth in Asia" on 31 May 2021 via ZOOM. Invited to speak at the webinar was UBAYA Faculty of Finance and Economics Dean Dr Putu Anom Mahadwartha. Also present at the webinar were UTAR FBF Head of Programme for MBA (Corporate Management) Dr Ng Chee Pung, lecturers and students from both universities. Dr Putu started his webinar by introducing the concept of financial literacy and then moved on to discuss the challenges of financial literacy. Dr Putu also spoke about the current fintech revolution. Finally, he concluded his presentation by emphasising the importance of financial literacy in an era of fintech proliferation. According to Dr Putu, with the fintech revolution, more fintech is gaining access to the personal finance and lending profiles of individuals. Hence, it is critical that the public arms itself with financial literacy to avoid being in a perpetual state of indebtedness and excessive borrowings. The webinar then saw an active interaction between the speaker and the participants. The talk ended with an extensive yet insightful Q&A session.



Build resilient infrastructure, promote sustainable industrialization and foster innovation



Flexural strength test on new profiled composite slab system

This research presents an experimental study on the flexural strength and failure behaviour of a newly developed composite metal decking system. The newly developed metal decking system with a thickness of 0.75 mm and 1.0 mm produced by the industry requires a detailed study in strength and performances before it is launched for commercialisation. A simple-supported conventional reinforced concrete slab is used as the control specimen, and two composite slabs with different metal thickness of steel sheet profiles were constructed and tested under a four-point flexural strength test. The strength and behaviour of the slabs are recorded, and comparisons with conventional slabs with composite deck slabs are made to achieve the objectives. The recorded results of three different slabs were then used to plot a load-displacement graph, and deflection profiles are to be analysed and compared. The yield flexural capacity and average yield displacement of specimens for the composite slabs were 28.0 kN and 0.80 mm respectively. The 1.0 mm metal thickness composite slab has the highest ultimate flexural capacity among all specimens, which is 84 kN, followed by a 0.75 mm metal thickness composite slab with 58 kN, and ends with the lowest 9.1 kN of conventional slab. Two cracking patterns were found during the experimental test, which includes shear cracking and flexural cracking. Besides that, two major failure modes under bending, which are flexure failure at the centre point of the specimen and bond or longitudinal slip failure along the side of the specimen, were found in the experimental test. Bond failure results in slippage between the concrete and metal deck, which can result in cancellation of the composite action at interface. In conclusion, the strength of slabs improved, and ductility was remarkably increased when slabs acted as a composite structure.

Chiral polymorphic hydrazine-based asymmetric liquid crystal trimers with resorcinol as linking group

This is the first report on chiral polymorphic hydrazine-based asymmetric liquid crystal trimers, 1-[4'-(4''-(5-Cholesteryloxy)carbonyl)butyloxy]-3-[N-benzylideneoxy-N'-(4'''-decyloxybenzylidene) hydrazine] butyloxybenzenes, and 1-[4'-(4''-(10-cholesteryloxy)carbonyl)nonyloxy]-3-[N-benzylideneoxy-N'-(4'''-decyloxybenzylidene)hydrazine]butyloxybenzenes., in which the hydrazine and cholesterol arms were connected via two flexible methylene spacers ($n = 3-12$ units and $m = 4$ or 9 , respectively) to the central resorcinol core. FT-IR, 1D and 2D NMR spectroscopy, and CHN microanalysis were used to elucidate the structures of the trimers. Differential scanning calorimetry, polarizing optical microscopy and X-ray diffraction were used to study the transitional and phase properties of the trimers, which were length and spacer parity dependent. Trimers with short spacer length in the cholesteryl arm, $m = 4$ showed an interesting phase sequence of BP/N*-TGBA*-SmA*. The TGBA* phase was sensitive to spacer length as it was only observed in trimers with short ester linkage. For the long analogues, $m = 9$, characteristic visible reflection and a much simpler phase sequence with only N* and SmA* phases were observed.

Research in numbers: SDG9

155 publications

Course units on SDG9

388 course units

SDG9 related activities

46 activities

5,394 participants



Virtual talk focuses on IoT technology in the 21st century

UTAR Department of Soft Skills Competency (DSSC) of Kampar Campus organised a virtual talk titled "Towards Industrial Revolution 4.0 (Industry 4.0): Starting from IoT technology to assist 21st century industry" on 13 January 2021 via Zoom. The webinar was conducted by UTAR Faculty of Information and Communication Technology (FICT) Deputy Dean for R&D and Postgraduate Programmes Ts Dr Goh Hock Guan. It saw more than 300 participants consisting of students, staff and public members. Dr Goh is also a public lecturer for the topic Industrial Revolution 4.0 in Malaysia. His areas of expertise are agriculture monitoring system, cognitive wireless sensor network, environmental monitoring system, internet of things (IoT), mobile networking and wireless communications. He had served as an information and communication technology consultant for companies previously. He first gave a brief introduction on the revolution of industry from Industry 1.0 to Industry 4.0 and elaborated on the concept and framework of Industry 4.0. By using real-life examples, he elaborated on the technologies involved in Industry 4.0 which included digitisation, IoT, cloud computing, big data, AI, machine-to-machine (M2M), human-machine interfaces, blockchain, software defined technologies, cybersecurity, augmented reality, autonomous robots, additive manufacturing, smart grid, and intelligent transportation, and how these technologies play an important role in the Covid-19 pandemic. During the Q&A session, Dr Goh discussed topics related to automatic anomaly detection, quantum technology, and technical and personal skills for Industry 4.0, to name a few.

Reduce inequality within and among countries

10 REDUCED INEQUALITIES



RESEARCH

Antecedents of the attitudes toward singlehood among young adults in Malaysia, Japan, and India

With both theories and empirical studies supporting the benefits of having a romantic relationship, there remains an increasing tendency of staying single being documented globally. It is, thus, important to understand the antecedent factors of such voluntary single movement. Guided by the Investment Model of Commitment (IMC) process, the roles of subjective socioeconomic status (SSES), relational mobility, and desirability of control in attitudes toward singlehood were investigated. A total of 1,108 undergraduate students from Malaysia (n=444), Japan (n=316), and India (n=348) answered an online survey consisting of the Attitudes toward Singlehood Scale, MacArthur Scale of SSES, Relational Mobility Scale, Desirability of Control Scale, Mini-Social Phobia Inventory, and Single Item Narcissism Scale. Hierarchical multiple regression analysis showed a persistent positive relationship between desirability of control, but not socioeconomic status and relational mobility, with attitudes toward singlehood, even after statistically excluding the effects of social anxiety and narcissism. A similar pattern was also observed among those who were currently single. Moreover, an interaction effect of socioeconomic status and relational mobility was found in further exploratory analysis. The results highlight that retaining the autonomy and flexibility of managing one's own life and financial concern are the key reasons young adults prefer staying single than engaging in a romantic relationship. Implications and recommendations for future research are also presented in this study.

Development and validation of the attitudes toward singlehood scale among undergraduate students in Malaysia and India

Although romantic relationships have been found to boost well-being, some studies demonstrated that staying single has similar beneficial effects. One cause of such contradiction is probably due to the lack of a quantitative measurement of attitudes toward singlehood. To address this methodological gap, four studies involving 1,276 undergraduate students in Malaysia and India were conducted to develop and examine the psychometric qualities of the Attitudes toward Singlehood Scale (AtSS). Study 1 selected 15 items from the pool and identified a 3-factor solution using exploratory factor analysis. However, a 9-item second-order factor model was found superior in Study 2 using confirmatory factor analysis. The 9-item AtSS demonstrated good internal consistency and test-retest reliability measured two weeks apart as well as construct and criterion validity. Study 3 further supported the superiority of the 9-item second-order factor model with replicated results of Study 2 on a new sample. Measurement invariance test supported scalar invariance across gender while ANCOVA showed female participants displaying higher scores than male counterparts. Study 4 then examined the properties of the 9-item AtSS on a sample of young adults in India. The results are consistent with Study 2 and 3, lending further support to the usability of the AtSS in different cultural contexts. Overall, the consistent findings promote the AtSS as a promising tool for assessing young adults' attitudes toward singlehood. Implication and suggestions for future studies are also discussed.

Research in numbers: **SDG10**

4
publications

Course units on **SDG10**

51
course units

SDG10 related activities

10
activities

221
participants

PUBLIC ENGAGEMENT

First #globalguytalk in Malaysia sets up conversation among UTAR male students

Many perceive men to be more silent in nature but at the #globalguytalk on "Pandemic Struggles and Guys in Silence: Shared Perspectives of Young Men in a University Setting", organised by the [Centre for Foundation Studies \(CFS\) of Kampar Campus](#), in collaboration with the Embassy of Sweden in Kuala Lumpur on 27 November 2021 via Microsoft Teams, that perception was challenged. The event was attended by Excellency Dr Joachim Bergström, UTAR Vice President for R&D and Commercialisation Prof Ts Dr Faiz bin Abd Rahman, and guest speaker, Heba Eltarifi. Led by Organising Chairperson and moderator CFS Kampar academic Lionel Keith Vytialingam, the panellists for the guy talk consisted of Bachelor of Marketing (Honours) student Bennet Oon Wei Sharn, Bachelor of Arts (Honours) English Education student Jonathan S P Alexander, Foundation in Science student Aiyub Han Ismail, Bachelor of Social Science (Honours) Psychology student Titus David Rasahpandy, and Bachelor of Arts (Honours) English Language student Derrick Tan Lin Kang. In their conversations, the panellists shared their opinions and feelings on breaking stereotypes about men being passive in conversations, especially on topics that involve deeper emotions or portray vulnerabilities. The panellists complimented the conversation for being instrumental in providing them a platform to express freely and break pre-conceived gender expectations. #globalguytalk is an initiative by the Swedish foundation Make Equal which is now being spread to the rest of the world by the Swedish Institute. The concept is easy – gather a group of guys and start talking about things that men rarely talk about. The ambition with #globalguytalk is to give men the chance to contribute to a more equal society by starting with themselves.

Make cities inclusive, safe, resilient and sustainable



RESEARCH

Developing standard window to floor ratio (WFR) system for green residential buildings in subtropics

The window system is generally regarded as the most vulnerable building system for the indoor energy performance of green buildings. Window systems are given significant attention by architects and engineers, especially in areas with long summer and high solar radiation such as the subtropics. This study aims to develop a standard window-to-floor ratio (WFR) system for green residential buildings in the subtropics. Using Autodesk Revit as the interface, a real high-rise residential building was digitalised and imported into Ecotect for energy consumption analysis. Comparative analyses were conducted to determine the optimal WFR for building energy efficiency. Results demonstrated 0.23 as the optimal WFR in Xiamen, one of the typical subtropical cities in Asia. Furthermore, accompanied by a four-sidefins sunshade device and a double glass window (DGW) with clear "glass+air gap+reflective" glass, the building energy consumption was further reduced by 34.47% compared to the initial model, which successfully met the optimization target of 30%, set according to the green building standard. The results of this study are helpful to architects and building engineers when designing or retrofitting green buildings as we provide specific support for design features for energy performance.

Internet of things: The acceptance and its impact on well-being among millennials

This study explores millennials' intentions to use smart home appliances and devices, and the impacts on their perceived quality of life. It focuses on perceived usefulness, perceived ease of use, attitude and behavioural intention. Considering the intention-behavioural gap, this study extends the technology acceptance model by including expected quality of life as an effect of behavioural intention. A total of 206 respondents completed the questionnaire. The findings reveal that perceived usefulness, perceived ease of use, and attitude have a positive significant influence on millennials' intentions to use smart home devices and appliances. Furthermore, the findings demonstrate that attitude partially mediates the relationship between perceived usefulness and behavioural intention. The outcome shows that intention to use smart technology will influence one's expectation of a better quality of life. This study contributes to the development of the smart home device and appliance industry, particularly in developing new technology.

Research in numbers: SDG 11

65 publications

Course units on SDG 11

141 course units

SDG 11 related activities

20 activities

1,275 participants



PUBLIC ENGAGEMENT

Preparing future leaders to achieve SDGs

With the aim to impart understanding on the roles of higher learning institutions in encouraging youths to work on achieving the Sustainable Development Goals (SDGs), outlined by United Nations, as well as implementing the New Urban Agenda (NUA), the fourth International Youth Development Virtual Conference (IYDC) 2021 was successfully co-organised by Department of Student Affairs, Department of Soft Skills Competency (DSSC), and IOI Properties Group Berhad from 6 to 7 November 2021 via ZOOM and Facebook live. The virtual conference attracted more than 370 local and international participants, combined, from Brunei, China, Indonesia, Philippines, Singapore, Thailand, Vietnam and Taiwan. Themed *The Role and Participatory of Youth in Building Sustainable Cities*, the conference conducted a competition related to SDG 11: Sustainable Cities and Communities, to provide contestants a platform to share their past projects, as well as to inspire and encourage others to play their role in contributing to building sustainable cities. Five groups were shortlisted and presented their projects on the second day of the virtual conference.

Ensure sustainable consumption and production patterns

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



RESEARCH

Acoustic properties of lightweight foamed concrete with eggshell waste as partial cement replacement material

Nowadays, almost every industry needs to undergo green and sustainable industrial revolution due to pollutions like waste dumping and noise that deteriorate the environment. Therefore, feasibility study on application of eggshell waste as partial cement replacement in lightweight foamed concrete was conducted by aiming to solve environmental and acoustical issues, i.e. reduce eggshell waste and improve acoustic properties. In this study, compressive strength and acoustic properties of 1300 kg m⁻³ lightweight foamed concrete with and without 5% eggshell powder as partial cement replacement material were tested. Optimal water to cement ratio of 0.6 was obtained for acoustic properties test by comparing compressive strength result. The result shows that application eggshell powder has generally reduced 7 days compressive strength but improved 28 days compressive strength, and either improve or maintain acoustics properties, in which lightweight foamed concrete, which contained eggshell powder, has improved noise reduction coefficient at testing ages of 7, 28, and 90 days, and improved sound transmission class at testing age of 56 and 90 days. Based on these results, 5% of eggshell powder is feasible to be incorporated into lightweight foamed concrete as partial cement replacement material for sound insulation and strength development purposes.

Knowledge and attitude of Malaysian fruit growers on integrated pest management (IPM)

Integrated pest management (IPM) is a sustainable approach for pest control. However, the adoption of IPM remains low in Malaysia. The main objectives of this study were to identify the knowledge level and attitude of Malaysian fruit farmers on IPM. A total number of 150 respondents were selected through a non-random sampling method and the data was collected through an online questionnaire. The knowledge level and attitude of the respondents were accessed on a scoring scale of one to five. The respondents recorded a moderate knowledge of IPM with a mean score of 3.36. However, farmers showed poor knowledge on different modes of action of pesticides (2.25), and the ability to identify insect pests (2.25). The respondents showed a positive attitude on IPM with a mean score of 3.58. Among the attitude aspects, farmers displayed a positive attitude on the cost-effectiveness of IPM (3.53) and are willing to learn and adopt IPM practices (4.35). The Spearman's correlation test revealed that there was no significant correlation between age and educational level of farmers on their knowledge on IPM. The findings of this study could assist in the development of IPM programs for better country wide IPM adoption.

Research in numbers: SDG12

45 publications

Course units on SDG12

208 course units

SDG12 related activities

16 activities

1,384 participants



PUBLIC ENGAGEMENT

Public Relation students organise PAlette 2021: Green Mania campaign

To educate the public about the effective use of recyclable and reusable items to reduce waste, as well as the consequences of improper waste disposal towards the environment, a group of 15 passionate Bachelor of Communication (Honours) Public Relations students of Green Group Mania organised a "Green Mania" online campaign from 15 to 19 March 2021 via Facebook page "PAlette 2021: Green Mania". The highlights of the campaign activities were "Fabric Mask DIY Workshop" and the #RabbitRingChallenge. The #RabbitRingChallenge served as a way to encourage the public to turn waste into cute accessories by using the discarded face mask, while "Fabric Mask DIY Workshop" encouraged the public to showcase their creativity and practice 3R (Reduce, Reuse, and Recycle) by making their own masks. A live streaming video which was conducted in both English and Mandarin was carried out to explain the steps to make the fabric mask. In hopes to stimulate the public's interest and instil environmental awareness among the public through informative and innovative contents, the group also shared information and held activities such as lucky draws, posters, video, infographics, memes, animations and Augmented Reality (AR) filter on the social media accounts. The campaign received tremendous support from the public as there were more than 50 participants who participated in the #RabbitRingChallenge. The campaign also gained over 3.2k audience engagements during the Facebook Live of the "Fabric Mask DIY Workshop".

Take urgent action to combat climate change and its impacts

13 CLIMATE ACTION



RESEARCH

A novel data-driven modeling method for the spatial-temporal correlated complex sea clutter

The sea clutter, referred to as the time-varying radar backscatter from the ocean surface, plays a significant role in marine radar development. The ocean's complex hydrodynamics cause it to exhibit non-Gaussian and non-stationary characteristics, which brings challenges in the sea clutter modelling, especially for establishing its spatial-temporal correlated and coherent model. In this article, a data-driven method based on the Koopman mode decomposition (KMD) is proposed for modelling spatial-temporal correlated complex sea clutter. The method decomposes the coherent sea clutter dynamic behaviour in terms of Koopman modes and corresponding temporal patterns. Then, these spatiotemporal patterns are used to construct the sea clutter state over time according to the approximate solution. Furthermore, this proposed state-of-the-art data-driven approach is benchmarked by the measured sea clutter data from intelligent PIXel processing radar (IPIX). It is demonstrated that the proposed approach accurately models the complex sea clutter with actual statistic characteristics, phase information, and spatial-temporal correlations. The mean absolute error (MAE) and root mean square error (RMSE) between the obtained and actual sea clutter are only 0.1817 and 0.2349, respectively. This work offers a practical approach for modelling sea clutter, especially when the spatial-temporal correlation and coherence information is needed.

The heterogeneous effects of urbanisation and institutional quality on greenhouse gas emissions in Belt and Road Initiative countries

The rise of urbanisation in Belt and Road Initiative (BRI) countries that contribute to the disruption of the ecosystem, which would affect global sustainability, is a pressing concern. This study provides new evidence of the impact of urbanisation and institutional quality on greenhouse gas (GHG) emissions in the selected 48 BRI countries from the years 1984 to 2017. The models of this study are inferred by using panel regression model and panel quantile regression model to meet the objectives of our study as it contemplates unobserved country heterogeneity. From the panel regression model, the findings indicate that although urbanisation in BRI supports the 'life effect' hypothesis that could dampen the environment quality, this effect could be reduced through better institutional quality. Using the quantile regression method, this study concludes that one-size-fits-all strategies to reduce GHG emissions in countries with different GHG emissions levels are improbable to achieve success for all. Hence, GHG emissions control procedures should be adjusted differently across high-emission, middle-emission and low-emission countries. Based on these results, this study provides novel intuitions for policymakers to wisely plan the urbanisation blueprints to eradicate unplanned urbanisation and improve institutional quality in meeting pollution mitigation goals.

Research in numbers: SDG13

25 publications

Course units on SDG13

30 course units

SDG13 related activities

8 activities

236 participants



PUBLIC ENGAGEMENT

Going green with solar energy at UTAR Kampar Campus

In collaboration with Ditrolc Solar, a 4.1 MWp on-site rooftop solar system was deployed at UTAR Kampar Campus buildings early this year whereby installation of approximately 9,000 pieces of solar modules started. This solar system can generate enough power for 75 percent of peak power demand. Over its lifetime, the rooftop solar system will be able to generate about 108,142MWh of clean energy, enabling UTAR to avoid 75,699 tonnes of CO2 emissions. UTAR entered into this 20-year rooftop solar Power Purchase Agreement (PPA) with Ditrolc Solar to deploy this on-site rooftop solar system. Under Ditrolc Solar's SunLease programme, UTAR Kampar Campus buildings in Perak will enjoy the clean energy that will be generated without any capital outlay and purchase the energy at a discounted rate from the regular TNB tariff. This initiative is mooted by UTAR as part of its commitment to contribute to the Sustainable Development Goals (SDGs) outlined by the United Nations (UN) in support of clean natural energy and working towards carbon neutrality.

Conserve and sustainably use the oceans, seas and marine resources

14 LIFE BELOW WATER



Abalone harvest in Balik Pulau



CHRISTINA CHIN

COMMUNITY
Friday, 03 Apr 2009 12:00 AM MYT



TUCKED away in the sleepy hollow of Sungai Burung in Balik Pulau, Penang, is an abalone-breeding facility which is little known to the outside world.

2006-2009
Nice try!

FLEXIBLE, PART-TIME, ONLINE SHORT COURSES IN SUSTAINABLE AQUACULTURE FROM THE UNIVERSITY OF ST ANDREWS

The Fish Site

Breeding & genetics Farm management Health & welfare Nutrition Env All sections

Segari Set To Emerge As Hub For Producing Abalone

by The Fish Site
15 May 2006, at 1:00am

MALAYSIA - Malaysia-New Zealand joint venture company NZ Silverdale Maring Hatchery Sdn Bhd is set to turn Segari, near here, into a hub for producing and exporting abalone by 2010. The company's director Ben Ngoi said that the company has submitted an application to the state government in August for a 40 ha land to undertake the project using the latest New Zealand aquaculture technology called fully recirculating saltwater system. He expects the



RESEARCH

Effect of coastal development on larval fish abundance in Klang Strait (Malaysia)

Changes in larval fish assemblages were studied before (1985-86) and after (2013-2014) rapid coastal development in the Klang Strait, Malaysia, based on a Before-After-Control-Impact (BACI) experimental design. Fish larvae were sampled by bongo-nets along an 18-km transect from the impact station at the Kapar power station (KPS) to four control stations in increasingly offshore waters. Families Gobiidae, Clupeidae, Sciaenidae and Engraulidae were most abundant at both sampling periods; demonstrating their adaptability and resilience to the natural and anthropogenic disturbances. Coastal development has reduced larval fish abundance at KPS, inevitably shifting higher larval abundance to the control stations. This shift is related to lower sea surface temperature and higher pH. Despite the coastal disturbances, there was an overall increase in total larval fish abundance attributed to the preflexion stage of the Gobiidae, Sciaenidae, Engraulidae, Cynoglossidae and Callionymidae, and the yolk-sac and preflexion larvae of unidentified taxa.

Use of fish and shrimp hydrolysates as dietary supplements to increase feeding and growth of juvenile striped catfish (Pangasius hypophthalmus)

A 7-week feeding trial was conducted to investigate the effect of two protein hydrolysates: fish hydrolysate (FH) and shrimp hydrolysate (SH) as feed supplement on growth performance and feed utilization of juvenile striped catfish, Pangasius hypophthalmus. Three isonitrogenous (32% crude protein) and isolipidic (12% crude lipid) experimental diets were formulated: diet 1, control (no supplementation of protein hydrolysates); diet 2, supplemented with 2% FH; and diet 3, supplemented with 2% SH. Each of the diets was fed to triplicate groups of 15 juveniles (initial mean weight of 6.99 g) twice a day until apparent satiation. The results showed that both FH and SH diets exerted positive impact on the growth and feed conversion ratio (FCR) of fish, but the improvement was more pronounced in the former as fish fed with FH diet showed significantly higher ($P < 0.05$) specific growth rate (2.20% day⁻¹), weight gain (193.68%), and better FCR (1.23) compared to those fed with control, yet no significant difference was recorded for these metrics between the control and SH group. Besides, fish fed with SH diet had significantly higher hepatosomatic index than those fed with control, and its viscerosomatic index was the highest among all treatment groups. The present study suggested that FH is a potential feed supplement for enhancing feed utilization and growth performance of juvenile striped catfish.

Research in numbers: SDG14

10 publications

Course units on SDG14

17 course units

SDG14 related activities

6 activities

362 participants



PUBLIC ENGAGEMENT

Sustainable aquaculture discussed at 20th AgriTech seminar series

Themed 'Advanced Technologies for Sustainable Aquaculture', the Agriculture Technology Seminar Series XX: Advanced Technologies for Sustainable Aquaculture was successfully held on 4 Dec 2021 via Zoom. It was jointly organised by the Centre for Agriculture and Food Research (CAFR), Faculty of Science (FSc), and Universiti Malaysia Terengganu (UMT), and sponsored by Cargill Feed Sdn Bhd and Sunzen Feedtech Sdn Bhd. Titles that were discussed at the seminar included, the impact of Covid-19 on aquaculture, the business sustainability of abalone aquaculture, nutritional concept in low fish meal aquafeed, and the application of pre- and probiotics in aquaculture.

Goal 15

Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

15 LIFE ON LAND



RESEARCH

Evaluation of milk deterioration using simple biosensor

In this study, a simple pH-colorimetric film was developed to detect the spoilage of pasteurised milk. The biosensor was fabricated by incorporating the pH-sensitive anthocyanin (AC) extracted from blue pea (*Clitoria ternatea* L.) flower into a starch-based edible film. The colour responses of both AC aqueous extracts and edible films incorporated with different AC concentrations towards different pH buffers (pH 2–11) were measured using Ultraviolet-visible (UV-Vis) spectrophotometer and colorimeter, respectively. Based on the results, there were significant differences ($p < 0.05$) for both total colour changes (ΔE) and L^*a^*b colour system of the pH-sensitive edible film in different pH buffers. It indicated that the AC incorporated edible films were able to exhibit colour changes over a wide range of pH. The potential application of the pH-sensitive film in spoilage detection was then carried out. Colour changes of the film in commercial pasteurised milk were measured at predetermined intervals (24, 48, and 72 h) under storage conditions of 25 °C. Meanwhile, milk samples were collected for the microbiological test [total plate count (TPC)]. Results showed that the pH-sensitive films were able to detect pH changes of pasteurised milk, which was associated with milk spoilage with visually observable colour changes from deep blue to a light blue, and showed a significant ΔE ($p < 0.05$) of 19.95 ± 0.009 . The ΔE of the films in spoilage detection has a significant correlation with the pH changes of milk ($R = -0.9932$) and TPC with a desirable coefficient ($R = 0.9918$). Therefore, the pH-sensitive edible film can provide a highly sensitive and non-destructive way of monitoring the food quality or spoilage without creating safety issues in the food industry.

Sexual dimorphism of antennal and ovipositor sensilla of *Tetrastichus* sp. (Hymenoptera: Eulophidae)

Tetrastichus sp. (Hymenoptera: Eulophidae) is a primary parasitoid of the *Metisa plana* (Lepidoptera: Psychidae), an oil palm bagworm. The sensilla on the surface of the antenna and ovipositor of *Tetrastichus* sp. were examined using a scanning electron microscope. The antennae of both male and female *Tetrastichus* sp. are geniculate in shape and hinged at the scape-pedicel joint. The female antenna is about 200 μm longer than the male antenna. However, the male antenna has an additional flagellomere compared to the female antenna. In total, eight different types of antennal sensilla were observed on the antenna of *Tetrastichus* sp.: trichoid sensilla type 1, 2, 3, 4, placoid sensilla type 1 and 2, basiconic sensilla, and campaniform sensilla. The antenna of the female *Tetrastichus* sp. lacks placoid sensilla type 2 and campaniform sensilla. The distribution and abundance of the antennal sensilla were compared between the male and female *Tetrastichus* sp. and discussed. On the ovipositor stylet of *Tetrastichus* sp., coeloconic sensilla, styloconic sensilla and campaniform sensilla were observed. Trichoid sensilla were observed at the medial part of the distal extremity of the ovipositor.

Research in numbers: SDG15

11 publications

Course units on SDG15

23 course units

SDG15 related activities

8 activities

366 participants



PUBLIC ENGAGEMENT

UGCC and LPP promote awareness of wildlife conservation

To create and promote awareness on wildlife conservation, a talk titled "How Citizen Science Efforts Help Conserve the Dusky Langurs?" was conducted by [UTAR Green Campus Committee \(UGCC\)](#) of [Centre for Foundation Studies \(CFS\), Sungai Long Campus](#) in collaboration with Langur Project Penang (LPP) on 23 April 2021 via Microsoft Teams. Present to deliver the talk was LPP Founder-cum-Director Jo Leen Yap. Jo Leen is a wildlife researcher and environmental educator, studying the ecology and behaviour of dusky leaf monkeys (*Trachypithecus obscurus*) in Penang. As a PhD candidate of Universiti Sains Malaysia, she founded LPP, a community science project on primate research and conservation that serves as wildlife conservation and environmental education platform for the community. She is the first Malaysian to be awarded the Environmental Educators 30 under 30 (EE 30U30) in the year 2018. She also initiated the installation of Malaysia's 1st urban canopy bridge in the year 2019. In addition, she is also a TEDxPetaling Street speaker. The LPP was featured in the BBC Earth series, 'Primates' in May 2020. During the talk, Jo Leen shared how one can raise awareness to coexist with wildlife. According to her, wildlife are not pets and we should respect nature. She shared about road ecology, and encouraged citizens to report if they ever encounter a Dusky Langur or other animal species being hit by a car or injured by vehicles. She also urged them to take photos to help identify the next location for the canopy bridge.

Promote just, peaceful and inclusive societies

16 PEACE, JUSTICE AND STRONG INSTITUTIONS



RESEARCH

Compulsory vaccination for children: Violation of human rights?

Immunisation protection includes vaccination programme that is very crucial to prevent the spread of disease among children or those with low immune systems. However, the cases of contagious diseases, such as measles, have increased dramatically in many countries around the world, including Malaysia. This may be partly due to the rise of certain groups or movements that do not believe in the efficacy of the vaccines. This paper outlined the scenario and existing framework on the administration of the vaccines in Malaysia, with respect to the practices of some countries, namely the United State, Italy, and Singapore on the implementation of the immunisation programme to its community. Subsequently, this paper highlighted the issues on compulsory vaccination on whether it violated the fundamental liberties incorporated in the Federal Constitution. The researchers adopted a doctrinal approach, whereby materials were compiled from the Malaysian and other jurisdictions' legislations, case laws, journal articles, and databases. This paper is intended for policymakers as well as the public to understand the possibility for implementing compulsory vaccinations from a legal perspective.

Awareness and recognition on signs and symptoms of child sexual abuse (CSA) among Malaysian parents of Malay, Chinese and Indian Descent

The number of childhood sexual abuse (CSA) cases in Malaysia has increased over the years but many have gone unreported. The current study thus aimed to investigate the awareness and recognition on signs and symptoms of CSA among Malaysian parents of Malay, Chinese and Indian descent. A total of 402 multi-ethnic parents participated in this quantitative, cross-sectional, and interviewer-administered survey. Prior to the study, informed consent was obtained from the respondents. The CSA Myth Scale and the Recognition on Signs and Symptoms of CSA Scale were used to measure the variables of the study. The findings indicated that Malaysian Indian (MI) parents have the highest awareness and knowledge of CSA, while the Malaysian Chinese (MC) parents have the lowest. The Malaysian Malay (MM) parents have average awareness and knowledge of CSA. Moreover, it was found that less than half of the 402 respondents were able to positively identify the signs and symptoms of CSA and that 41.8% of the respondents believed that their children would never be sexually abused. Further probing is henceforth warranted to ascertain the reason(s) for their confidence. Finally, this study has helped close the knowledge gap by providing a peek into the awareness and knowledge of CSA among Malaysian parents of the three major ethnicities in the country.

Research in numbers: SDG16

7 publications

Course units on SDG16

77 course units

SDG16 related activities

13 activities

948 participants



PUBLIC ENGAGEMENT

UTAR staff and students show appreciation to Covid-19 frontliners

The Covid-19 pandemic has placed significant pressure on our safety and security system. As part of the frontline workers, the police force had to sacrifice their time with family in order to devote their time and energy to contain this pandemic. With the extension of the lockdown, the responsibilities of the police such as crowd control, public order management, and the investigation against the breach of Standard Operating Procedure (SOP) as well as helping those who need urgent help to reach the hospital, were also extended. As a means of expressing gratitude to the police force for their hard work, a group of UTAR lecturers from the Department of Commerce and Accountancy parked under the [Faculty of Business and Finance \(FBF\)](#) organised a project titled "Community Work to Decorate Mambang Diawan Police Station and Contributions to Police Officers at Roadblocks in Kampar District". This project was organised as part of the [Committee for Community Outreach \(CCO\)](#) programme. It is supported by Chief of Mambang Diawan Police Station, Kampar Sergeant Major Tuan Zamri bin MD Deris. The activity took place on 14 August 2021 and it was led by the FBF Department of Commerce and Accountancy academics-cum-committee. It was also participated by two UTAR Environmental Engineering students. The group first visited the Mambang Diawan Police Station before heading to the Malaysian Movement Control Order (MCO) Roadblocks in the Kampar area. The community activity to decorate the PERKEP area started with a brief instruction by Head of Police Officer Superintendent Hasron Nazri bin Hashim. Then, six UTAR lecturers assisted in carrying out the community works including cleaning and painting the walls at PERKEP. As a symbol of this collaboration activity, Chief of Mambang Diawan Police Station Sergeant Major Tuan Zamri planted two date palm trees in the yard of the police station. The group later visited the MCO Roadblocks at Kilang Kacang, Petronas Station, Jalan Iskandar, UTC Gopeng and Tol Gopeng to distribute meals, bottles of mineral water and masks.

Revitalize the global partnership for sustainable development

17 PARTNERSHIPS FOR THE GOALS



RESEARCH

Unfolding the impact of supply chain quality management practices on sustainability performance: an artificial neural network approach

In today's globalised and heavily industrialized economy, sustainability issues that negatively affect the human population and external environment are on the rise. This study aims to investigate a synergistic combination of supply chain management and quality management practices in strengthening the sustainability performance of Malaysian manufacturing firms. The findings of this study have the potential to provide valuable guidance and insights that can help all manufacturing firms enhance their SP from the optimum combination of the selected SCQM practices with a focus on sustainability.

Reshaping higher educational institutions through frugal open innovation

Many private higher educational institutions (PHEI) are facing poor profitability, increased short term debts with under-resourced cash flow and insufficient funds that could lead to financial distress. To address the issues of ever-changing business environments and to deliver value propositions, PHEI should focus on their intangible assets to increase their capabilities to achieve frugal open innovation. The objective of this paper is to investigate the challenges faced by private universities from the practitioners' points of view and offer a practical solution. This paper also attempts to identify whether there is a need for any changes in business model or operations required by private universities to sustain their competitive advantage in the current environment. This study is exploratory in nature due to scarcity of past literature on frugal open innovation in PHEI context. Interviews were conducted with experienced practitioners to elicit their experience managing challenges in PHEI. As a result, this paper sheds light on the ability of PHEI to formalize, capture, and leverage its intangible assets rather than only investing and managing tangible assets in order to achieve frugal open innovation. Frugal open innovation is the enabler for PHEI to focus on core functions, create closer integration with industry, local and international communities and promote greater efficiency in operations. This paper is novel because it seeks to contribute to the current debate in the literature, positioning frugal open innovation (FOI) within the sphere of intellectual capital research, through exploring the effect of intellectual capital on frugal innovation is mediated through the information technology capability. The result indicates that sales and operating planning (S&OP) can be panacea for the five main challenges faced by PHEI includes structural challenges, operational challenges, financial challenges, social challenges and technological challenges. We conclude that there is a role for intellectual capital to achieve FOI by influencing IT capabilities, thus warrants more research to fill this research gap.

Research in numbers: SDG17

7 publications

Course units on SDG17

111 course units

SDG17 related activities

25 activities

1,615 participants



PUBLIC ENGAGEMENT

UTAR hosts inaugural International Forum on the Belt and Road Initiative

With the objective to enhance public awareness on the Belt and Road Initiative (BRI) as well as to provide a platform for students, researchers and the public to discuss and share ideas on BRI, UTAR organised the inaugural International Forum on the Belt and Road Initiative 2021 on 15 November 2021. Held at UTAR Multipurpose Hall of Kampar Campus with a limited number of physical participants, the forum was also live-streamed through Zoom. The forum, jointly organised by the [Department of Student Affairs \(DSA\)](#), [Department of Soft Skills Competency \(DSSC\)](#), [Centre for Accounting, Banking and Finance](#), and [Belt and Road Strategic Research Centre](#) of UTAR, was a success and saw the participation of over 100 participants. Themed 'Belt and Road Initiative: Paving the Way to Mutual Respect, Sincerity and Sustainable Development', the half-a-day forum served as a strategic platform, enabling participants to gain experiences and insights on topics such as the benefits and impacts of BRI on Malaysian economics. Invited to officiate the forum was Deputy Minister of Education 1, Ministry of Education Malaysia Senator Dato' Dr Mah Hang Soon, UTAR Council Chairman and Board of Trustees Member Tan Sri Dato' Seri Dr Ting Chew Peh, Consul General of the People's Republic of China in Penang Dr Lu Shiwei, UTAR President Ir Prof Dr Ewe Hong Tat, UTAR Planning and Development Committee Advisor Tan Sri Hew See Tong, UTAR Council Members Ir Academician Datuk Hong Lee Pee and Hew Fen Yee, Organising Chairperson of International Forum on the Belt and Road Initiative 2021-cum-Vice President for Student Development and Alumni Relations of UTAR Prof Dr Choong Chee Keong, Universiti Malaya Dean of Faculty of Economics and Administration Prof Dr Edmund Terence Eric Boniface Gomez, and Universiti Kebangsaan Malaysia Emeritus Professor Prof Dr Tham Siew Yean. Also present at the opening ceremony of the forum were Head of DSA Kampar Chiang Jeng Fong, UTAR academics and staff. The ceremony ensued with the launching of the Belt and Road Activity Centre by Consul General Dr Lu, witnessed by Dato' Mah and Prof Ewe. The Belt and Road Initiative Activity Centre aims to provide a facility to run a variety of soft skills programmes, activities and services for UTAR students. It is also to support UTAR students in performing online collaborative learning with students from different institutions. The Centre will serve as a conference facility, book reading sharing corner and handicraft or New Village product selling and display store.



Awards & Recognition

The call for sustainable actions continues to inspire people of all ages to do their parts. In UTAR, staff and students demonstrate their dedication towards achieving sustainability through the various activities and researches conducted to benefit the community and environment, and as means of giving back to society. These contributions of theirs are highly appreciated and the awards given recognize their effort towards achieving the Sustainable Development Goals. Among the many, here are some of the noteworthy awards:



UTAR team made it to Top 10 of Global Final at Alibaba GDT Global Challenge 2021



UTAR's Team Quadrifoglio was shortlisted as the Top 10 of Global Final in the Alibaba GDT Global Challenge 2021 on 7 December 2021. Team Quadrifoglio was among over 2,000 teams from 12 countries, namely China, Colombia, France, Indonesia, Kazakhstan, Malaysia, Mongolia, Philippines, South Korea, Thailand, the United Kingdom and the United States. The team consisted of Faculty of Accountancy and Management (FAM) students Wilson Wong Wee Sen, Chong Pei Xin, Izzatt Ikhwan bin Kamarol Jamal and Lee Kong Chian Faculty of Engineering and Science (LKC FES) student Yeoh Zhao Wei. Mentoring the team was

FAM lecturer Assoc Prof Dr Mohammad Falahat Nejadmahani. Alibaba holds Alibaba GDT Global Challenge every year to expose the students to the know-hows of DTC brand building and 4C model of research, brand purpose, brand positioning and digital marketing strategies. It also provided students with the opportunities to pitch to and work with manufacturing partners and showcase their talents to Alibaba GDT Network and Business Ecosystem. 2021 Alibaba GDT Global Challenge calls upon young entrepreneurs to identify new niches, design products and services that meet the unmet needs and use ecosystem resources to create digital native brands.

Unique architecture designs bag prizes at the Guangdong-Hong Kong-Macao Greater Bay Area: ASEAN International Colleges Bamboo Design and Construction Competition



"The Blossoming Motif" winning bamboo structure was built in The Nansha Bird Park (left photo) and under construction at the 29th Guangzhou Garden Expo Ground - Haixinsha Square (right photo) in Guangzhou China



Two teams of Architecture students from the Department of Architecture and Sustainable Design (DASD) in the UTAR Lee Kong Chian Faculty of Engineering and Science (LKC FES) bagged several impressive wins at the International level of the 2021 Guangdong-Hong Kong-Macao Greater Bay Area: ASEAN International Colleges Bamboo Design and Construction Competition. The first team from UTAR won Second place in the overall competition championship and First place in the Engineering & Structural Design category. The team consisted of Architecture students Wong Puy Yan, Boon Jing Jack, Oo Zhi Ling, Chan Qi Wei and Chin Mann Yui. Their design was titled "The Blossoming Motif". They were supervised by Department of Architecture and Sustainable Design (DASD) Specialist I Ar Loh Khang Yong. The second team from UTAR also won Second place in the overall competition championship. In addition, they won First place in the Comprehensive Expression category and Second place in the Engineering & Structural Design category. Their architecture design titled "Golden Wings" was supervised by LKC FES DASD Specialist I Abd Muluk bin Abd Manan. The team members were Chor Zhao Gen, Lim Chen Hee, Amelia Low Chuan Yin, Cheong Li bin and Ng Chee Xin.

BloodBank app wins Tech Women's Award



The team, TechnoPro, consisting of three Bachelor of Computer Science (Honours) students from the Faculty of Information and Communication Technology (FICT), namely Tan Zhi Xian, Andy Wee Jin Hong and Lim Hui Ying won the Tech Women's Award at the virtual Huawei HMS App Innovation Contest "Apps Up 2021", organised by Huawei from June to October 2021. The Tech Women's Award was intended to support and encourage more exceptional women in the tech world to stand out. The main contribution of this project is to provide an alternative way that could help the hospitals and blood seekers in Malaysia to find suitable blood donors easier and faster. Presently, there is a lack of available platforms that are able to help solve the difficulty of finding

blood and solve the shortage of blood supply in Malaysia. Through the proposed app, the hospitals and blood seekers who are in need of blood can use the app to connect with nearby potential blood donors and request blood donations. The app also provides information about blood donation to raise the awareness of Malaysians to donate blood actively. The app includes the details of upcoming blood donation campaigns. Hence, interested blood donors can get the details through the app and schedule their time to attend for blood donation. The team also highlighted that BloodBank is related to Sustainable Development Goal 3: Good Health and Well-being, which focuses to ensure healthy lives and promote well-being for all at all ages.



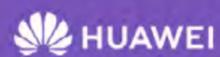
Navigating the New Norm for a Thriving Tomorrow

13 - 20 | MARCH

First runner-up: ValorQ by Quennie Lim Jia Yinn from UTAR



Apps UP 2021 | APAC



WINNING CATEGORY

TECH WOMEN'S AWARD



BloodBank
An app that makes donating blood easier



Organiser officially announcing TechnoPro as the recipient of Tech Women's Award

UTAR wins second place at UDG 2021



Representing UTAR at the Unipreneurship Development Grant Programme (UDGP) Grand Finale were Faculty of Accountancy and Management (FAM) student Kow Shuen Teng with his business proposal titled "Trivia", and Foundation students Quennie Lim Jia Yinn and Karmughil Jaya Sangkar with their proposal titled "ValorQ" and "Cyberdocks" respectively. Quennie Lim also won The Best Exhibitor award. Themed 'Navigating the New Norm for a Thriving Tomorrow', the event was part of a joint digital transformation Corporate Social Responsibility (CSR) initiative under the MCM GIC Members Week Virtual Fair, organised by Max Capital Management Holding Ltd (MCM). The virtual fair aimed to bring together various industry-driven experts to connect with mutually global influential key personnel as well as to celebrate the fifth-anniversary milestone of the MCM Global Investment Community (MCM GIC), while the UDG event aimed to encourage the building of university students' confidence and competency to increase their pre-seed business marketability in presenting business pitch deck presentations.



Scholarships & Financial Aid



As a university by the people, for the people, UTAR ensures equality for all, regardless of gender and age, by providing equal opportunities for all to gain access to quality education through the various financial aids available. These financial aids will also ensure access to full and effective participation for skills development to be used in various fields, whether economically or in public life.

UTAR TOP ACHIEVER SCHOLARSHIPS

This Scholarship is awarded to the applicants with outstanding academic performance upon admission to pursue their studies at UTAR Foundation and undergraduate programmes.

- ▶ UTAR Top Achiever Scholarships Foundation
- ▶ UTAR Top Achiever Scholarships Undergraduate (Non FMHS)
- ▶ UTAR Top Achiever Scholarships Undergraduate (FMHS, non MBBS)
- ▶ UTAR Top Achiever Scholarships Undergraduate (FMHS, MBBS)

Over RM169 million of internal scholarship imbursed to more than 58,000 students

Over RM22 million of external scholarships imbursed to more than 660 students

Other internal scholarships

- ▶ Nursing Scholarship (UTAR Degree)
- ▶ Nursing Scholarship (Diploma in Nursing)
- ▶ UTAR-UEC Scholarships
- ▶ UTAR-The Star Education Fund
- ▶ UTAR-Sin Chew Daily Scholarship
- ▶ UTAR-Sport Scholarship
- ▶ UTAR-Talent Scholarship
- ▶ Mr. Ng Chin Kiat S.M.J. Scholarship
- ▶ Tan Sri (Dr) Lim Goh Tong-UTAR Scholarship Fund
- ▶ Datuk Sim Mow Yu-UTAR Scholarship Fund

UTAR Zero Interest (0%) Student Loans



Students who are pursuing the UTAR foundation or undergraduate degree programmes are eligible to apply for the UTAR INTEREST-FREE loan for each year of study up to a maximum of RM15,000 per year. The closing date for the submission of the application is four weeks after the commencement of every new trimester.

- ▶ UTAR Student Loan
- ▶ UTAR Student Bridging Loan
- ▶ UTAR Student Bridging (Instant) Loan*

**A one-time interest-free loan to support students' living expenses*

Other Financial Aid

- ▶ Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)
- ▶ Koperasi Jayadiri Malaysia Bhd (KOJADI)
- ▶ Kuok Foundation Half Loan & Half Grant
- ▶ Ng Teck Fong Foundation Zero Interest Loan

Over RM10.09 million of internal loans imbursed to more than 1500 students

Over RM1.1 billion of external loans imbursed to more than 79,000 students

UTAR Caring Financial Aid



The setting up of the "UTAR Caring Financial Aid" aims to provide financial assistance to UTAR underprivileged students who are faced with an unforeseen emergency or personal crisis. It provides timely, short-term financial support to these students when overcoming challenging times resulted from an emergency or personal crisis.

Postgraduate Programmes Financial Aid



- ▶ EPF Education Withdrawal
- ▶ KOJADI Education Loan
- ▶ Alumni Rebate
- ▶ Postgraduate Research Assistantships

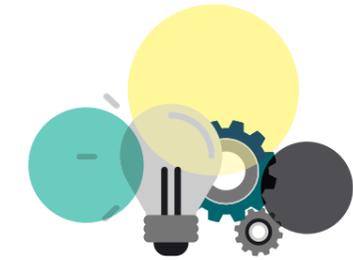
Over 14 million scholarships imbursed to more than 440 postgraduate students under the Research Scholarship Scheme

For more information, please visit the UTAR Department of Scholarships and Financial Aid website at deas.utar.edu.my/Financial-Aid.php





Soft Skills Development Programmes



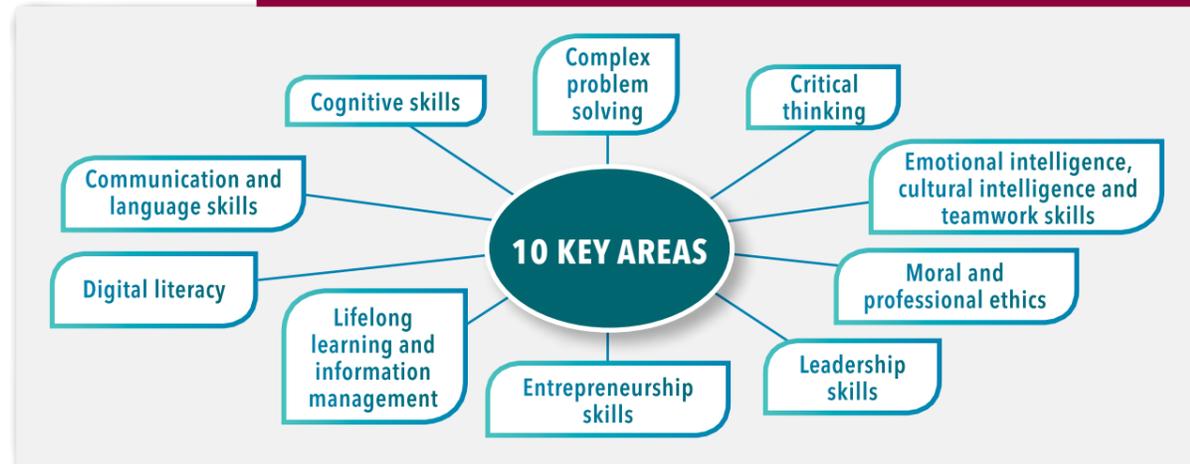
UTAR SOFT SKILLS DEVELOPMENT CERTIFICATE (USSDC)

The Department of Soft Skills Competency (DSSC) offers short programmes to equip students with the necessary soft skills and life skills to enhance their competitive edge in the job market and excel in life. The department also coordinates the University's compulsory unit on co-curricular.

With its vision of providing holistic education, the University looks beyond developing students' academic performance by providing them with other skills that enhance their contributions to the workplace and society.

Soft skills are essential skills in the workplace. Students with excellent soft skills can fit into most environments because they are adaptable, committed and persevering, and display the right attitude. Such qualities cut across all disciplines. In order to perform well and advance in one's career, one needs to have high levels of soft skills in dealing with people. In short, technical skills need to be complemented with soft skills.

Soft skills take years to develop. Students are, therefore, encouraged to start developing their soft skills while pursuing their academic studies. DSSC engages experienced trainers and also collaborates with organisations from the public and private sectors to conduct the following key areas of soft skills and life skills programmes for students:



DSSC also organises a wide range of activities, such as Speakers' Corner, UTAR New Village Community Project, and Overseas Study Tours and Student Exchange Programmes.

With effect from January 2009, UTAR has introduced UTAR SOFT SKILLS DEVELOPMENT CERTIFICATE (USSDC), a certification system to recognise students' achievements and efforts on improving themselves in the above areas of soft skills and life skills.

For more information, please visit softskill.utar.edu.my



UTAR COMMUNITY AND VOLUNTARY ENGAGEMENT PROGRAMME (UTAR CARE PROGRAMME)

UTAR Community and Voluntary Engagement Programme (UTAR CARE Programme) was introduced in January 2021 as an effort to cultivate and recognise students' contribution and efforts in the community and voluntary projects.

The UTAR CARE transcript will record students' contribution in community /volunteering projects within their study period in UTAR (from Foundation Studies to Postgraduate Studies), which includes University Social Responsibility (USR) projects, Knowledge Transfer Program (KTP), Student-initiated Community Project and Voluntary Services to the university.

The new system is expected to increase the participation of students in the Community Outreach Project/ Voluntary Work. With the 5 tier grading system, students will have targets and motivations to earn service hours to reach the highest tier (Tier 5) before their completion of study.

Objectives

✓ New System

UTAR CARE Programme represents a new system that recognises students' achievements towards community engagement.

✓ Developing interpersonal skills

Undergraduates who have a high level of involvement in community service would show positive changes in behaviour, values, aspirations and career preparations. From the social aspect, they also learn empathy, and cultivate positive attitude and higher level of internalised moral standards. Volunteering also gives students the opportunity to practice crucial skills like teamwork, communication, problem-solving, project planning, task management and organisational skills to prepare them better for future workplace.

✓ Real World Learning

Students are given opportunities to experience out-of-the-classroom learning, where they are exposed to current issues faced by the communities in the real world.

✓ Expanding Network

Students are also given a platform to expand their network with various parties such as the local communities, local authorities, NGOs, government agencies and even industry players.

✓ Enhancing Employability

Many companies have a strong social responsibility core and showing one's charitable side displays a good cultural fit. Candidates who volunteer stand out in a positive way because their passion and involvement with the community is evident. Volunteering can add depth to a candidate's experience and helps one to stand out.

Grading System for UTAR CARE Programme

Star Rating	Total Hour of Contribution
1-star ★	20-39 hours
2-star ★★	40-59 hours
3-star ★★★	60-79 hours
4-star ★★★★	80 hours or above
* 5-star ★★★★★	100 hours or above

* In order to obtain a 5-star rating, students must join at least 1 community activity from each category of SDGs below:

- I. People, Dignity, Justice (SDGs 1, 2, 3, 4, 5)
- II. Planet (SDGs 6, 12, 13, 14, 15)
- III. Prosperity (SDGs 7, 8, 9, 10, 11)
- IV. Peace, Partnership (SDGs 16, 17)



For more information, please visit softskill.utar.edu.my/UTAR_CARE_Programme.php

UTAR at a Glance



2 campuses
3.7 million square feet of built-up area, the equivalent of 275 Olympic-size swimming pools



15
9 faculties, 3 centres and 3 institutes



130+
programmes from foundation studies, undergraduate to postgraduate



35
research centres



74,000+
alumni



21,000+
students



2,000+
academic and administrative staff



140+
industry advisors



100+
external examiners from 19 economies



80
student clubs and societies



307,600+
volumes of books, publications and numerous online resources



9
endowed chairs in key research areas since 2009



46
economies where our international students come from



500+
memoranda signed with industry partners and universities from 30 economies for collaborative activities



80+
international and national awards received by students in 2021



Around 95%
graduate employability rate (within 9 months after graduation) as at 2021

UTAR has gained recognition from numerous leading professional bodies:

- ✓ Asian Institute of Chartered Bankers
- ✓ Board of Architects Malaysia
- ✓ Board of Engineers Malaysia
- ✓ Board of Quantity Surveyors Malaysia
- ✓ Board of Valuers, Appraisers, Estate Agents and Property Managers
- ✓ CPA Australia
- ✓ Financial Planning Association of Malaysia
- ✓ Institute of Chartered Accountants in England and Wales
- ✓ Malaysia Board of Technologists
- ✓ Malaysian Association of Company Secretaries
- ✓ Malaysian Institute of Accountants
- ✓ Multimedia Super Corridor Status
- ✓ Royal Institution of Chartered Surveyors
- ✓ Royal Society of Chemistry
- ✓ Society of Actuaries
- ✓ The Alliance on Business Education and Scholarship for Tomorrow a 21st century organization
- ✓ The Association of Chartered Certified Accountants
- ✓ The Chartered Institute of Building
- ✓ The Chartered Institute of Logistics and Transport
- ✓ The Chartered Institute of Management Accountants
- ✓ The Chartered Tax Institute of Malaysia
- ✓ The Institute of Chartered Secretaries and Administrators
- ✓ The Malaysian Institute of Certified Public Accountants
- ✓ The Society of Logisticians Malaysia

All figures are correct as at April 2022



- World University Rankings 2022 **#1001-1200**
- Emerging Economies University Rankings 2022 **#401-500**
- Asia University Rankings 2022 **#351-400**
- Young University Rankings 2022 **#351-400**
- University Impact Rankings 2022 **#201-300**
- Impact Rankings 2022 - SDG4: Quality Education **#77**
- Business & Economics Rankings 2022 **#601+**
- Computer Science Rankings 2022 **#601-800**
- Engineering Rankings 2022 **#601-800**
- Physical Sciences Rankings 2022 **#801-1000**
- Social Sciences Rankings 2022 **#601+**



- World University Rankings 2023 **#801-1000**
- World University Rankings 2023 *Employer Reputation* **#302**
- Asia University Rankings 2022 **#167**
- Graduate Employability Rankings 2022 **#201-250**
- Business & Management Studies 2022 **#451-500**
- Engineering - Electrical & Electronic 2022 **#451-500**



World's Most Sustainable University 2021 **#84**



5-Star
(Very Competitive)
in SETARA 2018/2019 (Mature University)
Malaysia Integrated Rating for Higher Education Institutions
by Ministry of Higher Education Malaysia



Tier 5
(Excellent)
in D-SETARA for Engineering

Tier 4
(Very Good)
in D-SETARA for Health Sciences
Discipline-Based Rating System (D-SETARA)
for Higher Education Institutions



Self-accreditation Status
awarded by the Malaysian Qualifications Agency
of the Ministry of Education



MBOT Supportive University/College Award
awarded by the Malaysian Board of Technologists (MBOT)



Premier Digital Tech University Status
awarded by the Malaysia Digital Economy Corporation (MDEC)



Outstanding Educational Institutions Award
(Private Universities/Colleges Category)
awarded by Sin Chew Education Award 2019



Corporate Social Responsibility Excellence Award
(CSR Excellence Award Category)
awarded by Sin Chew Business Excellence Award 2017



A University where "Confucius meets Einstein"

"All of science is nothing more than the refinement of everyday thinking."

Albert Einstein
1897-1955

"He who learns but does not think is lost. He who thinks but does not learn is in great danger"

Confucius
551BC - 479BC



"Without an endless exercise of thinking and learning, how could both Einstein and Confucius manage to stand tall and outshine their contemporaries and even posterity as models of inspiration and innovation?"

Universiti Tunku Abdul Rahman (UTAR), amid the constant convergence of civilisations, strives to contribute to the sustainable development of humanities, science, engineering and technology with an unrelenting mind on progressiveness, ethics and sparks of wisdom from the East and the West.



UTAR Kampar Campus, Perak



UTAR Sungai Long Campus, Selangor



Education Journey at UTAR



UTAR offers more than 130 programmes in the following fields of study.

- Accounting, Business and Economics • Actuarial Science, Mathematics and Process Management
- Agricultural and Food Sciences • Arts, Social Sciences and Education • Chinese Studies
- Creative Industries and Design • Engineering, Technology and Built Environment
- Information and Communication Technology • Life and Physical Sciences • Medicine and Health Sciences

Contact us

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Malaysia

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☎ +6(05) 466 1313

Sungai Long Campus



📍 Universiti Tunku Abdul Rahman
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Malaysia

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sdg.utar.edu.my



www.utar.edu.my



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UTAR Website



UTAR Facebook



UTAR Twitter



UTAR Instagram



UTAR YouTube



UTAR TikTok



UTAR LinkedIn