

Nurturing innovative engineers

THE Universiti Tunku Abdul Rahman's (UTAR) Bachelor of Telecommunications Engineering with Honours degree is designed to provide a thorough understanding of state-of-the-art telecommunications systems. Parked under the Lee Kong Chian Faculty of Engineering and Science (LKC FES), the programme also provides an edge with the latest technologies that are in line with 5G networks, the Fourth Industrial Revolution and Artificial Intelligence (AI).

Fully accredited by the Engineering Accreditation Council (EAC) Malaysia, UTAR graduates have the opportunity to register as Graduate Engineers with the Board of Engineers Malaysia (BEM) upon completing the programme. The accreditations also give assurance that UTAR graduates have met the academic standards for engineering practices.

This degree offers students the opportunity to develop skills necessary to be at the forefront of the ever-expanding and highly sought-after telecommunications sector emerging with fresh technologies.

LKC FES' Department of Electrical and Electronic Engineering head Assoc Prof Ir Dr Chang Yoong Choon explains, "UTAR's Bachelor of Telecommunications Engineering with Honours degree programme blends practice with theories; this will equip students with the skills and knowledge required to design, develop and deploy next generation telecommunication systems with a strong emphasis on AI and cloud computing.

"This involves communication electronics, digital signal processing, signal coding, optical communications, broadband multimedia communications and fixed broadband network. In addition to that, AI, machine learning, IoT and cloud computing are some of the descriptive technologies that enable next-generation networks. Our strong partnership with the industry has allowed us to develop a practice-focused course, which is essential for the needs of the rapidly changing telecommunications industry. In this programme, AI and

communications syllabuses are taught by Huawei Certified Academy Instructors (HCAI). Acquiring the industry-relevant technical knowledge will prepare students to take the Huawei Certified ICT Associate (HCIA) certificates.

"Upon completing the programme, students will gain in-depth understanding of engineering principles and gain the ability to use mathematical and statistical tools to evaluate networks and assess their performances.

"Apart from that, students will be equipped with knowledge about data networks and digital transmission systems, in particular, design, construction, testing, management, programming and usability. The programme will also pave the way for students to develop commercially viable network applications, understand threats to security and implement protective measures.

"Students will be able to deepen their theoretical knowledge and develop extensive analytical and problem-solving skills, with the opportunity to give presentations, and take part in group work and discussions; aiding in preparing the students to be part of a developing team and bringing the best out of the individual's capabilities."

The UTAR Bachelor of Telecommunications Engineering with Honours programme is fully accredited by EAC Malaysia and takes four years for a full-time student to complete the programme.

UTAR offers undergraduate and postgraduate programmes in areas including Accountancy, Actuarial Science, Applied Mathematics, Arts, Chinese Studies, Malaysia Studies, Business and Economics, Biotechnology, Engineering and Build Environment, Information and Communication Technology, Life and Physical Sciences, Medicine and Health Sciences, Media and Journalism, Education and General Studies, and Agriculture and Food Science. The university also engages in the provision and conduct of research, consultation,

management and leadership training, and other related educational services at its Sungai Long and Kampar campuses in Malaysia.

From as low as RM309, you would be able to enrol into UTAR foundation or undergraduate studies and also enjoy a 100% application fee waiver. UTAR is

offering a study grant of RM1,000 to students whose sibling is currently studying or completed studies at UTAR and to children of UTAR Alumni (terms and conditions apply).

■ For more information, WhatsApp 016-2233 557 or visit www.study.utar.edu.my.



Less common careers in computer science

PEOPLE often think that computer science only involves programming work and nothing else. This is only partly true. While a lot of the work computer scientists perform will involve programming, there are other areas for

such professionals to attend to.

Computer scientists must first understand the design of computers and the computing process. They then apply

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- Clinical Psychology (Master) **NEW**
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SEP
- Counselling (Master)
KPT/JPT(N/762/7/0046)09/2026 | MQA/FA12002
SEP
- Digital Health
KPT/JPT(N/482/6/0209)03/2028 | MQA/PSA14380
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- Medicine
KPT/JPT(R3/311/6/0033)09/2026 | MQA/FA6155
FEB | SEP
- Psychology
KPT/JPT(R3/311/6/0013)09/2027 | MQA/AB177
FEB | SEP

SCHOOL OF DENTISTRY

- Dentistry
KPT/JPT(R3/724/6/0010)01/2030 | MQA/FA7026
FEB
- Endodontics (PG Dip)
KPT/JPT(R/721/7/0043)05/2024 | MQA/SWA12162
MAY
- Implant Dentistry (PG Dip)
KPT/JPT(R/724/7/0019)06/2026 | MQA/SWA6111
OCT
- Prosthodontics (PG Dip)
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JUN

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JUL | SEP

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JUL | SEP
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KPT/JPT(N-DL/0915/7/0004)11/2027 | MQA/PSA16046
MAR | JUL
- Dietetics with Nutrition
KPT/JPT(N-DL/0915/7/0004)11/2027 | MQA/PSA16046
JUL | SEP
- Medical Biotechnology
KPT/JPT(R2/545/6/0014)09/2027 | MQA/FA15505
JUL | SEP
- Nursing
KPT/JPT(R/723/6/0125)04/2027 | MQA/FA8944
SEP
- Nursing*
KPT/JPT(N-DL/0913/6/0001)09/2029 | MQA/PA14397
FEB | SEP
*Available to registered nurses only
- Nutrition
KPT/JPT(R2/726/6/0001)06/2027 | MQA/FA1298
JUL | SEP

SCHOOL OF POSTGRADUATE STUDIES

- Analytical and Pharmaceutical Chemistry* (MSc)
KPT/JPT(R2-CDL/442/7/0001)01/2027 | MQA/FA1191
KPT/JPT(N-DL/442/7/0022)02/2026 | MQA/PSA11367
MAR | SEP
- Business Administration in Healthcare Management (PG Cert / PG Dip / Master)
KPT/JPT(R/345/7/1082)09/2028 | MQA/PSA11354
KPT/JPT(R/345/7/1090)12/2028 | MQA/SWA11355
KPT/JPT(R/345/7/1085)10/2028 | MQA/SWA11353
MAR | SEP
- Health Professions Education (PG Cert* / PG Dip / Master)
KPT/JPT(N-DL/145/7/0120)02/2026 | MQA/SWA14379
KPT/JPT(R/145/7/0066)09/2025 | MQA/SWA05162
KPT/JPT(R/145/7/0064)09/2025 | MQA/PSA15163
KPT/JPT(R/145/7/0070)09/2025 | MQA/SWA5164
MAR | SEP
- Health Informatics and Analytics (PG Cert / PG Dip / Master)
KPT/JPT(N-DL/145/7/0131)09/2025 | MQA/SWA13973
KPT/JPT(N-DL/145/7/0130)09/2025 | MQA/PSA13972
KPT/JPT(N-DL/145/7/0129)09/2025 | MQA/SWA13974
SEP
- Molecular Medicine* (MSc)
KPT/JPT(R2/545/7/0078)07/2027 | MQA/FA1299
KPT/JPT(N-DL/545/7/0101)09/2025 | MQA/SWA11357
MAR | SEP
- Pharmacy Practice (Master)
KPT/JPT(R2/0916/7/0013)03/2029 | MQA/SWA02796
MAR | SEP
- Public Health* (MSc)
KPT/JPT(R2/720/7/0077)09/2025 | A10261
KPT/JPT(N-DL/720/7/0811)09/2028 | MQA/SWA11356
MAR | SEP
- Medical and Health Sciences (MSc / PhD)
KPT/JPT(R2/720/7/0049)06/2026 | A10618
KPT/JPT(R2/721/8/0043)01/2027 | A3767
Throughout the year

CENTRE FOR COMPLEMENTARY AND ALTERNATIVE MEDICINE

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KPT/JPT(R/721/7/0071)03/2027 | MQA/SWA8570
SEP
- Chinese Medicine
KPT/JPT(R2/721/6/0059)01/2027 | MQA/A10260
SEP
- Chiropractic
KPT/JPT(R/726/6/0054)08/2026 | MQA/A9294
MAR | SEP

Available in Conventional and Open & Distance Learning mode (ODL)



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Enticing prospects in healthcare

AS healthcare is one of the fastest-growing economic sectors worldwide, the needs and demand for digital health are growing exponentially. One of the drivers of digital health is the global pandemic which has acted as a catalyst for policymakers to digitise healthcare at a breakneck pace to make healthcare accessible for all.

A career in digital health involves working in a discipline that includes digital care

programmes and technologies with health and society to enhance the efficient delivery of healthcare as well as make medicine more precise and personalised. This is a career which uses information and communication technologies to facilitate the understanding of health problems and challenges faced by people receiving medical treatment.

A professional working in the area of digital health works with patient records and data

in a healthcare setting. They are often employed by healthcare providers such as clinics and hospitals, pharmaceutical companies, commercial insurance companies, medical device manufacturers and governmental or other policy-focused institutions. A digital health professional can also work in project management, analytical, consulting or support capacities depending on an organisation's needs.

The main contribution of digital health lies in three main areas of interest: patient-centric, diagnostics-centric and R&D centric. Examples include telemedicine, medicine distribution, chronic disease management, personalised medicine, clinical trials and tracking and tracing applications such as MySejahtera.

Those who are interested in this line of career will need to obtain a basic degree in digital health. With this in mind, International Medical University (IMU) is now offering a Bachelor in Digital Health (Honours) which is a programme that blends Computing, Data Analytics and Health Sciences. It will make graduates more knowledgeable about healthcare organisations, systems and regulations, needs and problems.

The digital health programme at IMU is the first undergraduate programme in Malaysia and Southeast Asia that focuses on digital health. The programme is aimed at equipping students with an in-depth understanding and know-how of the healthcare field, particularly digital health.

The digital health curriculum at IMU provides students with the

necessary skills and knowledge to meet industry needs. The programme is embedded with research-led teaching and an up-to-date structure to meet the ever-changing needs of the IT and healthcare industries. In addition, students have the opportunity to work in a digital health-related company or hospital in their final semester for about 20 weeks as part of the industrial training.

IMU senior lecturer and programme director of the digital health programme Dr Tan Ee Xion says, "Leveraging on the university teaching staff diversity – including computer science and informatics, biomedical, clinical and health sciences – alongside that of external industrial partners, the digital health programme will deliver training across the breadth of computing-related to digital health applications such as programming, application development, data analytics including machine learning, artificial intelligence, and digital healthcare ecosystem."

It is a three-year programme with intakes in July and September. Those who joined in July will start the general studies (MPU) modules followed by the first semester. The digital health programme is open to students from any discipline with the required pre-university qualifications together with a credit in Mathematics at the SPM level or equivalent. The programme is also open to diploma holders in any discipline, subject to a rigorous internal assessment process.

After the three-year digital health

undergraduate programme, students can progress to the Master in Health Informatics and Analytics. It is a one-year full-time master's programme, which provides the perfect pathway for undergraduates who intend to pursue health informatics and analytics. The students will be more focused on linking and analysing large complex datasets, using techniques that transform medical research and create exciting new commercial opportunities in the healthcare sector.

If you are interested to join this programme, make an online application today.

If you have just completed your SPM and do not have a pre-university qualification, consider enrolling in the one-year IMU Foundation in Science (FIS), the direct route for entry into any of the university's degree programmes.

■ For more information, call 03-2731 7272, email start@imu.edu.my or visit www.imu.edu.my.

IMU's Digital Health programme equips students with the skills needed to thrive in the healthcare industry.



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Up to date with technology

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their knowledge in practical and theoretical computing science to solve problems, thus involving software designing and even the development of artificial intelligence (AI).

Here are some of the less common but still equally rewarding careers in computer science.

Database administrator

Although this job is considered more as an IT career, graduates of computer science can also hold such a position. The role of database administrators is to develop and design database strategies and database systems. They monitor and perform the installation, upgrading, configuration and maintenance of the databases of an organisation.

To become a database administrator, you would need at least a bachelor's degree in computer science or IT.

Computer hardware engineer

Computer hardware engineers are responsible for designing, developing and testing new computer equipment. This

equipment includes routers, processing chips, circuit boards and graphic cards. Computer hardware engineers develop computer equipment that performs better and consumes less energy while being compatible with the latest operating systems and software.

Because of this, computer hardware engineers often work together with software engineers so that they can develop better software and hardware for the future generation of computing.

If you want to become a computer hardware engineer, you need a bachelor's degree in either computer science or computer engineering. Electrical engineering degrees are also usually accepted by most organisations.

Artificial intelligence programmer

AI programmers are responsible for writing and programming codes which simulate human-like intelligence to perform tasks and solve problems.

AI is often used in machines and software. An example of a machine that runs on AI is an industrial robot. They perform

specific tasks in manufacturing lines such as assembling car doors.

A notable example of integrated AI software is Siri, an intelligent personal assistant and knowledge navigator for iPhones.

Being an AI programmer requires you to do a lot of research and reading. This is because you need to understand all the programming languages available to create something new that will enable machines to carry out tasks effectively.

Information security analyst

The job of an information security analyst is to create, maintain and protect the data of an organisation. They are responsible for developing countermeasures for cyber-attacks and other forms of network security breaches.

They are also responsible for keeping up with the latest trends in system security so that the organisation's security systems are constantly up-to-date.

To become an information security analyst, you would need a bachelor's degree in computer science. A degree in programming or any related field is also acceptable.