



FACULTY OF

COMPUTING and  
INFORMATION TECHNOLOGY

2020

BEYOND EDUCATION



KOLEJ UNIVERSITI TUNKU ABDUL RAHMAN DKU023(W)

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**TARC**  
TUNKU ABDUL RAHMAN  
UNIVERSITY COLLEGE

TAR UC is awarded with the MDEC Premier Digital Tech University status which is a recognition of preferred institution in producing quality digital tech talents. The **Faculty of Computing and Information Technology (FOCS)** currently offers programmes at Diploma, Bachelor and Postgraduate levels. Apart from running academic programmes, the faculty is active in academia-industry collaborations in the area of computer vision, artificial intelligence, machine learning, data science, big data analytics, IoT, Cybersecurity and many more with proven track of records in producing highly demanded computing graduates that meet the needs of the industry.

## What Our Graduates Say

### Tan Kar Cheng



Bachelor of Science (Hons) in Management Mathematics with Computing  
Year Graduated: 2019

TAR UC Degree Programme has not only equipped me with the IT/ Mathematics industry related skills but also the problem solving skills which assist me in my current occupation. Attitude is the main key to determine the quality of your degree certificate, not the grades. The certificate can only be your stepping stone and it cannot stop you from seeking goals which are different from what you studied. Make a decision that you will not regret 3/4 years later. Your Life, Your Choice!

### Chai June Rong



Bachelor of Computer Science (Hons) in Software Engineering  
Year Graduated: 2019

After I was shaped into an IT professional from a tech dabbler by the Computer Science programme at TAR UC, I am able to innovate, communicate and collaborate in ways that enabled me to face any unpredictable yet rewarding challenges in the IT industry. Fundamental skills and knowledge learned in TAR UC have prepared me to contribute to the open source community that I love while still pursuing my original interests.

I always believe that TAR UC is more than just an educational institution, there's something unique about its history, culture, neighborhoods, and more importantly the people. When I say people, I mean not just the students, lecturers, staff or management alone but altogether the entire "community" as a whole. Everyone in the community feels connected and I personally think that the existence of such a community is the greatest asset that TAR UC can have.

### Cheow Jia Jian



Bachelor of Information Technology (Hons) in Information Security  
Year Graduated: 2019

Those 3 years of education in TAR UC have opened up many paths for me in my working life. Yes, to be good at what you do comes from your own effort and desire to achieve it. However, what I noticed after I graduated was the exposure, guidance and resources provided to me when I was studying this programme in TAR UC. This has definitely opened up a world of opportunities for me.

The lecturers in our IT department are very resourceful. It was very important to me as I was at first hesitant to study in IT as this field is a niche field in Malaysia. However, with help from my lecturers, it stirred my interest to learn and self-motivate to achieve more, to be better at it. This has helped me to develop a positive attitude towards my studies.

TAR UC has brought me to where I am today and the learning experiences I gained during my time there will forever remain with me.

# Why Study at the Faculty of Computing and Information Technology

The laboratories are well-equipped with modern facilities and state-of-the-art equipment.

1



Awarded MDEC Premier Digital Tech University, a recognition for TAR UC as preferred institution for future digital talents.

2

Dedicated and qualified academic staff who are committed to their role in providing education to students.

3

4

Close link with industry partners.

Holistic education that instills strong technical and scientific skills as well as personal and character development.

5

6

Wide range of alternative progression routes for further studies, both locally as well as overseas.

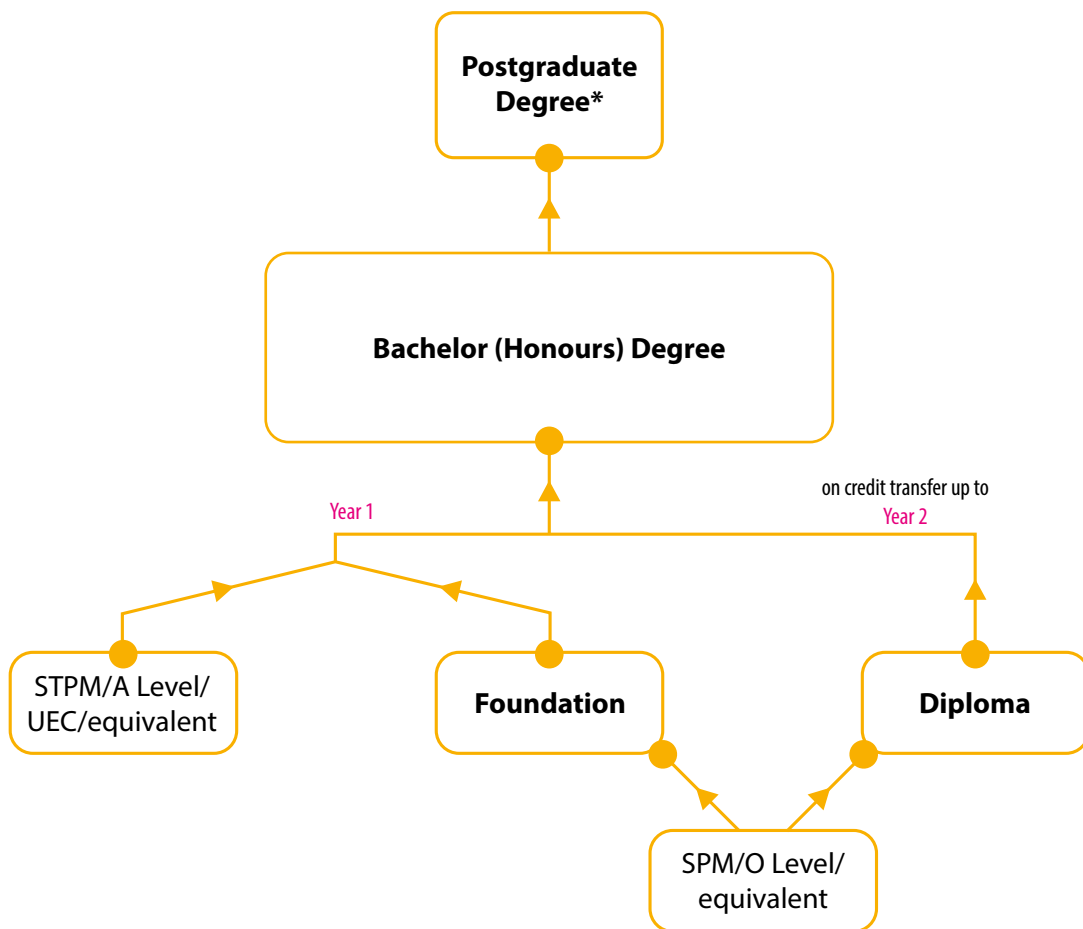
Industrial training which provides students with real-world experience and enhances employment prospects.

7

8

A variety of programmes that provide differentiation to suit the diverse interests and needs of students.

# General Progression Route



\* The Faculty of Computing and Information Technology offers the following postgraduate programmes:

- Master of Computer Science (N/481/7/0809)(08/23)(MQA/PA10034)
- Master of Information Technology (N/482/7/0156)(02/26)(MQA/PA11406)
- Master of Science in Mathematical Sciences (N/461/7/0030)(04/26)(MQA/PA10771)
- Doctor of Philosophy (Computer Science) (N/481/8/0788)(10/25)(MQA/PA10772)
- Doctor of Philosophy (Information Technology) (N/482/8/0169)(01/26)(MQA/PA11407)
- Doctor of Philosophy (Mathematical Sciences) (N/461/8/0029)(04/26)(MQA/PA10773)

## Intakes

January	May	September	October
<ul style="list-style-type: none"> <li>• Foundation</li> <li>• Cambridge GCE A Level</li> </ul>	<ul style="list-style-type: none"> <li>• Bachelor Degree</li> <li>• Diploma</li> <li>• Foundation</li> <li>• Cambridge GCE A Level</li> </ul>	<ul style="list-style-type: none"> <li>• Foundation</li> </ul>	<ul style="list-style-type: none"> <li>• Selected Bachelor Degree/Diploma programmes only</li> </ul>
<b>Commencement Date:</b>	<b>Commencement Date:</b>	<b>Commencement Date:</b>	<b>Commencement Date:</b>
13/01/2020	12/05/2020 (Foundation & A Level) 18/05/2020 (Diploma & Bachelor Degree)	7/09/2020	12/10/2020

# Programmes Offered

Foundation (1 Year) → Bachelor Degree (3 Years)

➤ Foundation in Computing (Track A) <b>KL/PG</b>	<div>➤ Bachelor of Computer Science (Honours) in Software Engineering <b>KL/PG</b></div> <div>➤ Bachelor of Computer Science (Honours) in Interactive Software Technology <b>KL</b></div> <div>➤ Bachelor of Computer Science (Honours) in Data Science <b>KL/PG/JH</b></div>
➤ Foundation in Computing (Track B) <b>KL/PG</b>	<div>➤ Bachelor of Information Systems (Honours) in Enterprise Information Systems <b>KL</b></div> <div>➤ Bachelor of Information Technology (Honours) in Software Systems Development <b>KL/PG/PK/JH/SB</b></div> <div>➤ Bachelor of Information Technology (Honours) in Internet Technology <b>KL/PG/JH</b></div> <div>➤ Bachelor of Information Technology (Honours) in Information Security <b>KL</b></div>
➤ Foundation in Science (Track A) <b>KL</b>	<div>➤ Bachelor of Science (Honours) in Microelectronics (Embedded Technology) <b>KL</b></div> <div>➤ Bachelor of Science (Honours) in Management Mathematics with Computing <b>KL</b></div>

# Programmes Offered

on credit transfer up to <b>Year 2</b>	
Diploma (2 Years)	Bachelor Degree (3 Years)
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Computer Science and Management Mathematics) <b>KL/PG</b></li> <li>➤ Diploma in Science (Information Systems Engineering) <b>KL/PG/PK/JH/PH/SB</b></li> <li>➤ Diploma in Information Technology (Mobile Application Development) <b>JH</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Information Technology (Honours) in Software Systems Development <b>KL/PG/PK/JH/SB</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Computer Science and Management Mathematics) <b>KL/PG</b></li> <li>➤ Diploma in Science (Computer Science and Computer Mathematics) <b>KL/PG</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Science (Honours) in Management Mathematics with Computing <b>KL</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Computer Science and Computer Mathematics) <b>KL/PG</b></li> <li>➤ Diploma in Computer Science (Data Science) <b>JH</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Computer Science (Honours) in Data Science <b>KL/PG/JH</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Computer Science and Computer Mathematics) <b>KL/PG</b></li> <li>➤ Diploma in Software Engineering <b>SB</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Computer Science (Honours) in Software Engineering <b>KL/PG</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Business Information Systems) <b>KL/PG/PK</b></li> <li>➤ Diploma in Information Systems (ICT Applications) <b>PH</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Information Systems (Honours) in Enterprise Information Systems <b>KL</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Science (Internet Technology) <b>KL/PG/PK/JH</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Information Technology (Honours) in Internet Technology <b>KL/PG/JH</b></li> <li>➤ Bachelor of Information Technology (Honours) in Information Security <b>KL</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ Diploma in Interactive Software Technology <b>KL</b></li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Computer Science (Honours) in Interactive Software Technology <b>KL</b></li> </ul>
<ul style="list-style-type: none"> <li>➤ –</li> </ul>	<ul style="list-style-type: none"> <li>➤ Bachelor of Science (Honours) in Microelectronics (Embedded Technology) <b>KL</b></li> </ul>

■ **KL** - Kuala Lumpur Main Campus■ **PG** - Penang Branch Campus■ **PK** - Perak Branch Campus■ **JH** - Johor Branch Branch■ **PH** - Pahang Branch■ **SB** - Sabah Branch



# Management Mathematics with Computing

This programme is a multi-disciplinary blend with Management Mathematics as the major, Computing as the minor and Business Management as the associate study.

Management Mathematics covers mathematical techniques for business management, including resource allocation and planning, optimisation, project management, quantitative decision, applied statistics, quality control and financial mathematics.

Computing courses prepare students for software design and development, including skills on programming and information management.

This programme also prepares graduates to branch into other disciplines for further academic pursuit such as Master in business management, statistics, and information technology. It also lays the foundation for graduates to achieve further professional qualifications in actuary, financial planning, financial analysis and risk management.

## Career Prospects

- Officers in financial institutions such as banks, insurance firms, and investment houses
- Quantitative Analysts
- Quality Managers
- Research Officers
- Investment Analysts
- Financial Analysts
- Management Consultants
- Financial Planners and Advisors
- Pricing Analysts
- Market Risk Managers
- Credit Risk Managers
- Asset/Liability Managers
- IT Managers
- Internal Auditors

## Level & Campus

Bachelor of Science (Honours) in Management Mathematics with Computing - 3 years

- **KL** (R/461/6/0004)(09/23)(MQA/FA3925)

# Information Security

This programme is designed to equip students with technical abilities and knowledge of information security in the areas of network and Internet security, information assurance and governance, system administration and secure software development besides giving students the opportunity to learn and explore various penetration testing, vulnerability assessment, forensics tools and techniques. Students will learn how to prevent, detect and defend organisations' assets from internal and external threats.

Students will also have an opportunity to work with information security related industry through their 6 months industrial training and to carry out real-life projects which are relevant to information security domains. Such training will add value to their qualification and later to their employment opportunities and career development.

## Career Prospects

- Information Security Analysts
- Information Security Consultants
- Information Security Managers
- Information Security Engineers
- Information Security Administrators
- Information Security Auditors
- Forensics Analysts
- Forensics Investigators
- Security Software Developers
- Mobile Application Developers
- Network Security Engineers

## Level & Campus

Bachelor of Information Technology (Honours) in Information Security - 3 years

- **KL** (R/482/6/0380)(09/23)(MQA/FA3934)

# Software Engineering

Graduates of this programme will be able to develop, manage and maintain high-quality software in a systematic, controlled and efficient manner through software engineering methodology inclusive of software requirements engineering, software testing and software project management. With the coverage of fundamentals of computer science such as human computer interaction and artificial intelligence, graduates of this programme will have a solid foundation to create innovative solutions for the industry or to pursue further studies at postgraduate level in the area of computer science or software engineering.

Students will have an opportunity to work with the industry through their 6 months industrial training and to carry out real-life projects on software engineering. All such training will add value to their qualification and later to their employment opportunities.

## Career Prospects

- Software Engineers
- Software Testers
- Software Quality Assurance Engineers
- Software Developers
- Software Architects
- Systems Analysts
- Web Developers
- Mobile Application Developers
- IT Consultants
- IT & Project Managers
- Programmers

## Level & Campus

Bachelor of Computer Science (Honours)  
in Software Engineering - 3 years

- **KL** (R/481/6/0375)(09/23)(MQA/FA3930)
- **PG** (N/481/6/0818)(10/24)(MQA/PA10814)

Diploma in Software Engineering - 2 years

- **SB** (N/481/4/0779)(08/22)(MQA/PA7566)

# Enterprise Information Systems

Information systems are the heart of many organisations that support their daily business processes and in turn promote business growth. As the size and demand of information systems has grown tremendously, many of the business functions like sales & marketing, finance & accounting, manufacturing & processes, human resources, supply chain management, customer relationship management, knowledge management and many other business functions are integrated into enterprise information systems to further improve organisational performance.

This programme is designed to equip students with the ability to solve practical problems in the implementation of enterprise information systems in business organisations. In addition to fundamentals of computing, the programme covers Business and Information Systems, Systems Analysis and Design, Enterprise Systems, Enterprise Resource Planning, Data Warehouse Technology, Business Intelligence, Business Process Management and Information Systems Implementation.

Students will have an opportunity to work with the industry through their 6 months industrial training and to carry out real-life projects on software development, implementation of enterprise information systems and data analysis. All such training will add value to their qualification and later to their employment opportunities.

## Career Prospects

- Business Process Consultants
- ERP Consultants
- Business and Systems Analysts
- Business Intelligence Analysts
- Business Intelligence Specialists
- Data Warehouse Developers
- IT Consultants
- IT Managers
- Programmers
- Web Designers
- Database Administrators

## Level & Campus

Bachelor of Information Systems (Honours) in  
Enterprise Information Systems - 3 years

- **KL** (R/482/6/0376)(09/23)(MQA/FA3931)



# Software Systems Development

The aim of this programme is to produce and equip graduates with in-depth knowledge and skills that are essential to work as professionals in the software systems development and computer networking sector.

Students graduating from this programme will be capable of developing software systems in various platforms to fulfill the needs and requirements from organisations using appropriate software engineering methodologies and software project management techniques. In addition, the students will also be capable to design, configure and maintain computer networks in organisations.

Students will have an opportunity to work with the industry through their 6 months industrial training and to carry out real-life projects in software systems development, network communications or database management. All such training will add value to their qualification and later to their employment opportunities.

## Career Prospects

- Programmers
- Web Developers
- Multimedia Developers
- Mobile Application Developers
- Systems Analysts
- Software Engineers
- Database Administrators
- Network Engineers
- IT Consultants
- IT Managers
- IoT Developers

## Level & Campus

Bachelor of Information Technology  
(Honours) in Software Systems  
Development - 3 years

- **KL** (R/482/6/0379)(09/23)(MQA/FA3933)
- **PG** (N/482/6/0170)(12/23)(MQA/PA10769)
- **PK** (N/482/6/0172)(12/23)(MQA/PA10768)
- **JH** (N/482/6/0171)(12/23)(MQA/PA10767)
- **SB** (N/482/6/0185)(09/24)(MQA/PA12302)



# Internet Technology

The growth and development of the Internet is rapid and innovative and that has allowed many companies to use web-based systems to operate their business processes to become more efficient and effective. The use of the Internet has also led companies to be competitive.

Bachelor of Information Technology (Honours) in Internet Technology programme produces graduates who have in-depth knowledge and skills that are essential to work as professionals in the web development, mobile development and computer networking sectors. In addition, graduates of this programme can apply relevant skills in the area of Internet Security, as well as venturing into developing web applications for enterprises.

Students will also have an opportunity to work with the industry through the industrial training module incorporate throughout the diploma and bachelor degree level of study and to carry out real-life projects on web development, mobile development or computer networking. All such training will add value to their qualification and later to their employment opportunities.

## Career Prospects

- Web Developers
- Multimedia Developers
- Mobile Application Developers
- Systems Analysts
- Network Engineers
- IT Consultants
- IT Managers
- IoT Developers

## Level & Campus

Bachelor of Information Technology (Honours) in Internet Technology - 3 years

- **KL** (R/482/6/0377)(09/23)(MQA/FA3932)
- **PG** (N/482/6/0182)(05/24)(MQA/PA10736)
- **JH** (N/482/6/0179)(05/24)(MQA/PA10741)

Diploma in Science (Internet Technology) - 2 years

- **KL** (R/482/4/0055)(08/23)(AA0112)
- **PG** (R/482/4/0058)(09/23)(AA0142)
- **PK** (R/482/4/0059)(09/23)(AA0155)
- **JH** (R/482/4/0060)(09/23)(AA0164)

# Data Science

This programme is designed to train students in both computer science and data science, which prepares them well for data professionals or data scientist career pathway. Graduates of this programme are highly demanded in the increasingly data-driven world where their main role is to make sense of big data to improve business processes, optimise resources, increase profits, increase customer satisfaction, personalised experience, automation, and so on.

Artificial Intelligence, Machine Learning, Internet of Things, Business Intelligence, Data Warehouse Technology, Cloud Computing are some of the specialisation courses covered in this programme in addition to core courses of Computer Science, for example, Programming, Database Management, Software Engineering and Computer Networks.

Students will have an opportunity to work with the industry through their 6 months industrial training and carry out real-life projects on data science and computer science. All such training will add value to their qualification and increase their employment opportunities.

## Career Prospects

- Data Scientists
- Data Engineers
- Data Analysts
- Data Modelling Engineers
- Software Developers
- Mobile Application Developers
- Computer Science Researchers
- Machine Learning Engineer

## Level & Campus

Bachelor of Computer Science (Honours) in Data Science - 3 years

- **KL** (N/481/6/0808)(02/24)(MQA/PA10784)
- **PG** (N/481/6/0815)(06/24)(MQA/PA10813)
- **JH** (N/481/6/0809)(02/24)(MQA/PA10856)

Diploma in Computer Science (Data Science) - 2 years

- **JH** (N/481/4/0761)(07/21)(MQA/PA7636)

# Interactive Software Technology

The main aim of this programme is to equip students with the technical knowledge and skills in computer science, with a further focus on the design and development of interactive software. The widespread use of interactive multimedia across all digital content and platforms ensure that the skill sets developed during the course of study of this programme are highly sought after upon graduation. These skills can be utilised for the development of mobile applications, video games, simulators, data visualisation, electronic magazines, digital marketing content and platforms, educational and training materials, as well as other interactive multimedia applications.

Students will study courses related to game development and programming, as well as game design and graphics programming. Students will be exposed to other computer science fields like artificial intelligence and human computer interaction.

Students will have an opportunity to work with the industry through their 6 months industrial training and carry out real-life projects on interactive software development. All such training will add value to their employment opportunities and career development.

## Career Prospects

- Games Designers
- Games Developers
- Games Programmers
- Games Software Engineers
- Games Producers
- Games Testers
- Graphic/Visualisation programmers
- Web Designers/Web Developers
- Multimedia Developers
- Software Developers/Software Programmers
- Mobile Application Developers
- Systems Analysts

## Level & Campus

Bachelor of Computer Science (Honours)  
in Interactive Software Technology - 3 years

- **KL** (R/481/6/0374)(09/23)(MQA/FA3929)

Diploma in Interactive Software Technology - 2 years

- **KL** (R/481/4/0349)(08/23)(AA0117)

■ **KL** - Kuala Lumpur Main Campus



# Microelectronics (Embedded Technology)

Embedded systems is specialised computer systems used in almost all modern electronics appliances, for example, smart toys & gadgets, smart meters, smart medical devices, and driverless car. Lately, it is becoming cost effective to include wired/wireless connectivity capability into embedded systems fuelling the much talked about topic—the IoT (Internet-of-Things).

The rise of demands for smart connected systems is inevitable as more people are interested in investing in smart homes or buildings, personal assistant robots and connectivity to improve the quality of life; be it safety, energy efficiency, cost efficacy, convenience, smart living, and companionship. Also, we are now beginning to see a new industrial revolution, known as Industry 4.0, where manufacturing facilities are enhanced with industrial IoT devices to become smart factories. All these open up opportunity for innovations and creativity to continuously improve our lives and business operations.

This bachelor degree equips you with skills for designing embedded systems that are highly sought after by all electronics industries. Our programme trains students to be adept in both embedded software and hardware development. Students are trained in analogue and digital electronics, application specific IC (ASIC), field programmable array (FPGA) and IC design using current professional tools. These knowledge and skills will be important to meet the demand of fabless design firms. To complement the microelectronics content of the programme, students are also trained in embedded systems design using current microcontrollers (ARM/PIC) as well as real time operating systems (RTOS) with emphasis on efficient programming techniques. Graduates will be sought after by design houses/companies in IC design and fabrication, automation, robotics, identification and monitoring, test and measurement, and consumer electronics.

We provide maker space which offers excellent environment to collaborate and share ideas. The space is equipped with relevant tools and machinery like 3D printers to enable fast prototyping of gadgets to bring sketchy ideas to life quickly.

*\* This programme is a Bachelor of Science Degree, not Bachelor of Engineering Degree*



## Career Prospects

- Research & Development Engineers
- Microelectronic Engineers
- Embedded Systems Design Engineers
- Firmware Engineers
- IC Design Engineers

## Level & Campus

Bachelor of Science (Honours) in Microelectronics  
(Embedded Technology) - 3 years

- **KL** (R/523/6/0155)(09/23)(MQA/FA3928)



# Computer Science and Management Mathematics

Emphasis is on analysis, development and implementation of computer systems, as well as mathematical techniques for financial and managerial applications.

## Career Prospects

- Junior Software Developers
- Junior Application Developers
- Junior Systems Engineers
- Junior Database Administrators
- Junior Systems Analysts
- Junior Statistical Analysts
- Junior Quantitative Analysts
- Junior Quality Control Engineers
- Junior Data Analysts

## Level & Campus

Diploma in Science (Computer Science and Management Mathematics) - 2 years

- **KL** (R/481/4/0347)(08/23)(AA0108)
- **PG** (R/481/4/0356)(09/23)(AA0138)

# Computer Science and Computer Mathematics

Students are trained in both theoretical knowledge and practical skills for software development, system design and related mathematical techniques.

## Career Prospects

- Junior Analyst Programmers
- Junior Systems Analysts
- Junior Software Engineers
- Junior Systems Engineers
- Junior Research Officers
- Junior Quantitative Analysts
- Junior Software Developers

## Level & Campus

Diploma in Science (Computer Science and Computer Mathematics) - 2 years

- **KL** (R/481/4/0345)(08/23)(AA0109)
- **PG** (R/481/4/0354)(09/23)(AA0139)

■ **KL** - Kuala Lumpur Main Campus

■ **PG** - Penang Branch Campus



# Information Systems Engineering

Students will learn and be equipped with the technical knowledge and skills in information systems development. Courses like Web Design and Development, Object-Oriented Programming, GUI & Web Application Programming, Computer Systems Architecture (assembly language) and Fundamentals of Computer Networks are offered in addition to the foundation of computer science (programming concepts, database, analysis and design of information systems and operating systems).

## Career Prospects

- Junior Programmers
- Junior Systems Analysts
- Junior Network Support Officers
- Junior IT Support Executives
- Junior IT Executives

## Level & Campus

Diploma in Science (Information Systems Engineering) - 2 years

- **KL** (R/481/4/0348)(08/23)(AA0111)
- **PG** (R/481/4/0357)(09/23)(AA0141)
- **PK** (R/481/4/0360)(09/23)(AA0154)
- **JH** (R/481/4/0362)(09/23)(AA0163)
- **PH** (R/481/4/0431)(12/23)(AA0168)
- **SB** (R/481/4/0352)(12/23)(AA0122)

■ **KL** - Kuala Lumpur Main Campus

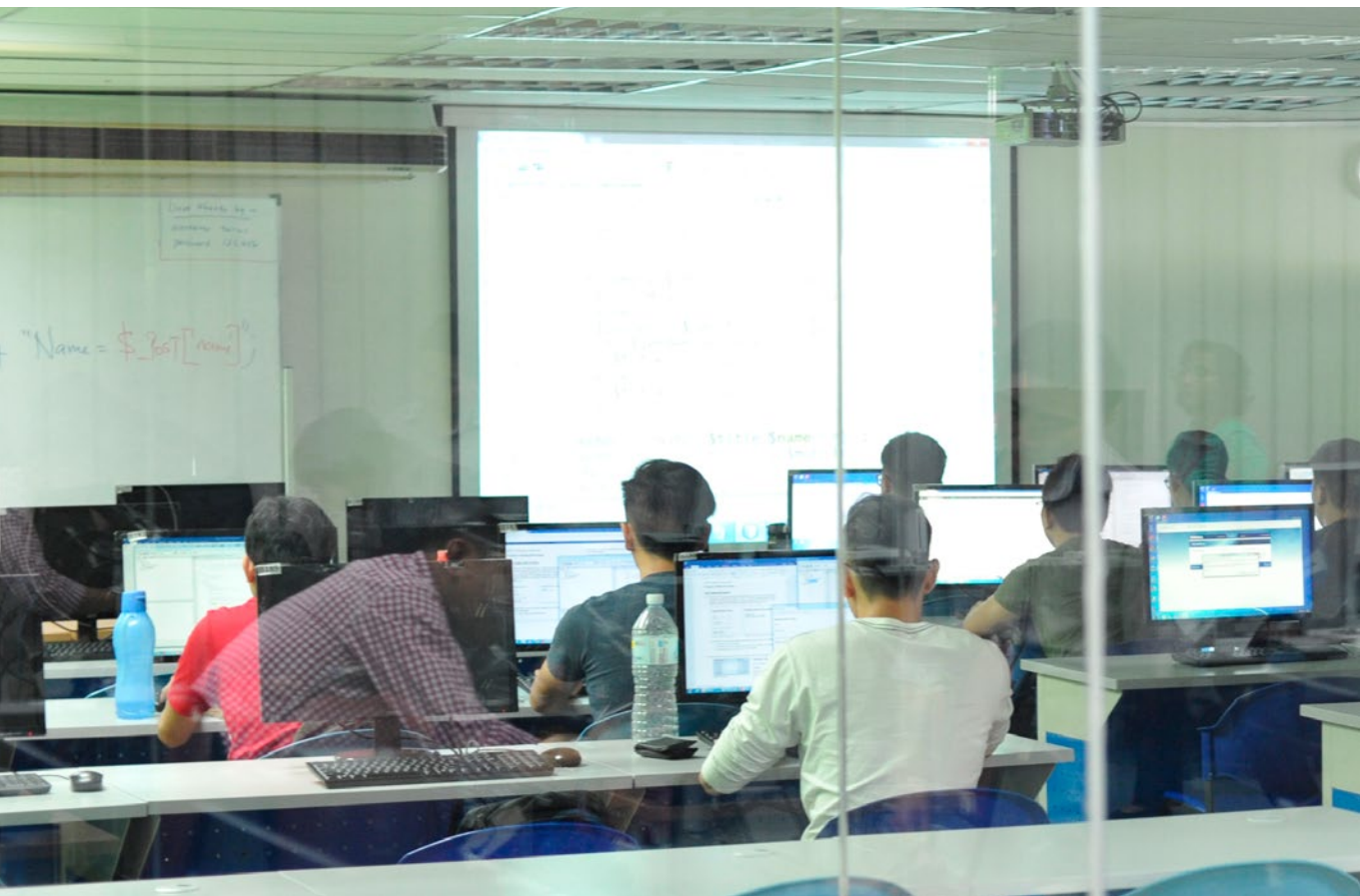
■ **JH** - Johor Branch Branch

■ **PG** - Penang Branch Campus

■ **PH** - Pahang Branch

■ **PK** - Perak Branch Campus

■ **SB** - Sabah Branch





# Business Information Systems

The Business Information Systems programme prepares students to effectively implement information systems in organisations. In addition to analysing, planning and developing software programs, business aspects of the organisations like Accounting and Logistics Operation are also emphasised to aid the understanding of the common business processes available in organisations, and later on to enterprise resource planning using the SAP systems.

## Career Prospects

- Junior Programmers
- Junior Systems Analysts
- Junior SAP Support Consultants
- Junior IT Support Executives
- Junior IT Executives

## Level & Campus

Diploma in Science (Business Information Systems) - 2 years

- **KL** (R/481/4/0346)(08/23)(AA0110)
- **PG** (R/481/4/0355)(09/23)(AA0140)
- **PK** (R/481/4/0359)(09/23)(AA0153)

■ **KL** - Kuala Lumpur Main Campus

■ **PG** - Penang Branch Campus

■ **PK** - Perak Branch Campus



# Information Systems (ICT Applications)

The Diploma in Information Systems (ICT Applications) programme is geared to produce graduates equipped with knowledge and skills that are essential to work in information technology and software & information systems development sector. Graduates will be equipped with concepts and skills to solve daily business tasks and problems using IT Software solutions and productivity tools. Students will also be trained in the area of software & information systems development and database management. Graduates will have good employment prospects in various sectors ranging from banking and finance sector, software companies, IT Integrators, IT consultancy, manufacturing sector, businesses and any sector that requires ICT skills. They are also prepared to enhance their knowledge and skills through further studies at Bachelor's Degree level in the field of Information Systems.

## Career Prospects

- Entry-level User Support Specialists
- Help-desk support
- Junior Programmers
- Junior Database Administrators
- Junior Systems Analysts

## Level & Campus

Diploma in Information Systems  
(ICT Applications) - 2 years

- **PH** (N/482/4/0135)(08/22)(MQA/PA7558)

■ **PH** - Pahang Branch



# Mobile Application Development

The Diploma in Information Technology (Mobile Application Development) programme produces graduates with relevant skills in the area of mobile application development. Students will also be trained in the area of Mobile Commerce and Marketing, Mobile Application Design, Mobile Application Development, Mobile Web Development and Mobile Game Development. They will also learn Programming, Web Application programming, Web-based Multimedia Applications, Database Management and Computer Networking, which are the essential skills required in the industry.

## Career Prospects

- Junior Mobile Solution Specialists
- Junior Web Developers
- Junior Mobile Application Developers
- Junior Technical Supports
- Junior Application Programmers
- Junior Software Engineers
- Junior Web Developers

## Level & Campus

Diploma in Information Technology  
(Mobile Application Development) - 2 years

- **JH** (N/482/4/0119)(07/21)(MQA/FA7595)

■ **JH** - Johor Branch Campus





# Academia-Industry Collaboration



MDEC Premier Digital Tech University



Cisco Academy



CompTIA ACADEMY



IBM Center of Excellence



AWS Educate



Oracle Academy



SAP University Alliance Programme

Microsoft Azure DevTools for Teaching

## Industry Professional Certification

Students are prepared to go for Industry Professional Certification to be well equipped for the workforce according to focus areas:

Programme	Industry Professional Certification
Bachelor of Computer Science (Honours) in Software Engineering	ISTQB® Certified Tester Foundation Level (CTFL)
Bachelor of Information Technology (Honours) in Software Systems Development	Cisco Certified Network Associate (CCNA) CompTIA Linux+ - Elective Course Cisco Certified Network Associate Security (CCNA Security) - Elective Course
Bachelor of Information Technology (Honours) in Internet Technology	Cisco Certified Network Associate (CCNA) Cisco Certified Network Associate Security (CCNA Security) - Elective Course
Bachelor of Information Technology (Honours) in Information Security	Cisco Certified Network Associate (CCNA) Cisco Certified Network Associate Security (CCNA Security) CompTIA Security+ CompTIA Linux+

*Note: The above arrangement is valid at the point of printing and may change from time to time to ensure the best value and quality is offered to students. Students are advised to obtain the latest information from the Faculty from time to time.*

# Bachelor Degree Entry Requirements

	STPM	A Level	SAM	UEC	TAR UC	Other IHL
Bachelor of Computer Science (Honours) in Interactive Software Technology	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects	■ Foundation in Computing (Track A) OR ■ Relevant Diploma (with minimum CGPA 2.5000)^	■ Relevant Foundation accredited by MQA  Relevant Diploma (with minimum CGPA 2.5000)^
Bachelor of Computer Science (Honours) in Software Engineering	AND SPM Credit in Additional Mathematics OR O Level Grade C in Mathematics-Additional OR UEC Grade B in one Mathematics subject					
Bachelor of Computer Science (Honours) in Data Science	AND SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**					
	OR					
	Grade C in one Mathematics and one science/ ICT subject (Science Stream)	Grade C in one Mathematics and one science/ICT subject				
	AND SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**					
	OR					
	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects		
	AND SPM Credit in Mathematics and one science/technology/engineering subject OR O Level Grade C in Mathematics and one science/technology/engineering subject					
	AND SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**					
	AND Grade C in AMMS0204 Mathematics conducted by TAR UC					

^ Graduates with CGPA 2.0001 - 2.4999 are required to sit and pass a Qualifying Test.

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

Note:

- a) SPM holders must have at least a pass in Bahasa Melayu and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.
- b) Students without a credit in SPM Bahasa Melayu are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
- c) TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
- d) Equivalent qualifications/qualifications from other Institution of Higher Learning (IHL) will be considered on a case-by-case basis.
- e) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.

# Bachelor Degree Entry Requirements

Bachelor of Science (Honours) in Management Mathematics with Computing	STPM	A Level	SAM	UEC	TAR UC	Other IHL
	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects	<div>▪ Foundation in Science (Track A) OR Diploma in Science ▪ Computer Science &amp; Management Mathematics OR ▪ Computer Science &amp; Computer Mathematics</div>	<div>▪ Relevant Foundation/ Diploma accredited by MQA</div>
	AND SPM Credit/O Level Grade C in Mathematics/ UEC Grade B in one mathematics subject					
	AND SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**					

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

Note:

- a) SPM holders must have at least a pass in Bahasa Melayu and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.
- b) Students without a credit in SPM Bahasa Melayu are required to pass Bahasa Kebangsaan A before the award of Bachelor Degree.
- c) TAR UC Diploma will be accepted on credit transfer into Bachelor Degree programmes.
- d) Equivalent qualifications/qualifications from other Institution of Higher Learning (IHL) will be considered on a case-by-case basis.
- e) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.



# Bachelor Degree Entry Requirements

Bachelor of Information Systems (Honours) in Enterprise Information Systems	STPM	A Level	SAM	UEC	TAR UC	Other IHL
	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects	<ul style="list-style-type: none"> <li>Foundation in Computing (Track B) OR</li> <li>Diploma in Science (Business Information Systems) (with minimum CGPA 2.5000)^</li> <li>OR</li> <li>Diploma in Information Systems (ICT Applications) (with minimum CGPA 2.5000)^</li> </ul>	<ul style="list-style-type: none"> <li>Relevant Foundation accredited by MQA</li> <li>Relevant Diploma (with minimum CGPA 2.5000)^ accredited by MQA</li> </ul>
	<b>AND</b> <b>SPM Credit/O Level Grade C in Mathematics/</b> <b>UEC Grade B in one mathematics subject</b>					
	<b>AND</b> <b>SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**</b>					
Bachelor of Information Technology (Honours) in Internet Technology	STPM	A Level	SAM	UEC	TAR UC	Other IHL
	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects	<ul style="list-style-type: none"> <li>Foundation in Computing (Track B) OR</li> <li>Diploma in Science (Internet Technology) (with minimum CGPA 2.5000)^</li> </ul>	<ul style="list-style-type: none"> <li>Relevant Foundation accredited by MQA</li> <li>Relevant Diploma (with minimum CGPA 2.5000)^ accredited by MQA</li> </ul>
	<b>AND</b> <b>SPM Credit/O Level Grade C in Mathematics/</b> <b>UEC Grade B in one mathematics subject</b>					
Bachelor of Information Technology (Honours) in Information Security	<b>AND</b> <b>SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**</b>					

^ Graduates with CGPA 2.0001 – 2.4999 are required to sit and pass a Qualifying Test.

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

Note:

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

# Bachelor Degree Entry Requirements

Bachelor of Information Technology (Honours) in Software Systems Development	STPM	A Level	SAM	UEC	TAR UC	Other IHL
	Grade C in 2 relevant subjects	Grade C in 2 relevant subjects	ATAR 70 and minimum Grade B in one mathematics subject	Grade B in 5 relevant subjects	<ul style="list-style-type: none"> <li>Foundation in Computing (Track B) OR Diploma in Science (with minimum CGPA 2.5000)^</li> <li>Computer Science &amp; Management Mathematics OR</li> <li>Information Systems Engineering OR</li> <li>Diploma in Information Technology (Mobile Application Development) (with minimum CGPA 2.5000)^</li> </ul>	<ul style="list-style-type: none"> <li>Relevant Foundation accredited by MQA</li> <li>Relevant Diploma (with minimum CGPA 2.5000)^ accredited by MQA</li> </ul>
	AND SPM Credit/O Level Grade C in Mathematics/ UEC Grade B in one mathematics subject					
	AND SPM Pass/O Level Grade E(Pass)/UEC Grade C in English Language**					
Bachelor of Science (Honours) in Microelectronics (Embedded Technology)	STPM	A Level	SAM	UEC	TAR UC	Other IHL
	Grade C in one mathematics subject and Physics/ Chemistry/ Biology	Grade C in one Mathematics subject and Physics/ Chemistry/ Biology	ATAR 70 and minimum Grade B in one mathematics subject and Physics/ Chemistry/ Biology	Grade B in 5 relevant subjects which must include Advanced Mathematics (I or II) and Physics/ Chemistry/ Biology	<ul style="list-style-type: none"> <li>Foundation in Science (Track A)</li> </ul>	Relevant Foundation/ Diploma accredited by MQA
	AND SPM Credit/O Level Grade C in Mathematics					
	AND SPM Pass/O Level Grade E (Pass)/UEC Grade C in English Language**					

^ Graduates with CGPA 2.0001 – 2.4999 are required to sit and pass a Qualifying Test.

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

Note:

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

# Diploma Entry Requirements

<b>Diploma in Science (Computer Science and Computer Mathematics)</b>  <b>Diploma in Interactive Software Technology</b>  <b>Diploma in Computer Science (Data Science)</b>	SPM	O Level	UEC	Certificate
	3 Credits in the relevant subjects	3 Grade C in the relevant subjects	3 Grade B in the relevant subjects	■ Relevant Certificate accredited by MQA  OR  ■ Relevant Skilled/ Technical/ Vocational Certificate recognised by the Malaysian Government
	<b>Compulsory subjects:</b> (i) <b>SPM</b> Credit in Additional Mathematics/ <b>O Level</b> Grade C in Mathematics- Additional/ <b>UEC</b> Grade B in one mathematics subject (ii) <b>SPM</b> Pass/ <b>O Level</b> Grade E (Pass)/ <b>UEC</b> Grade C in English Language**			

*\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.*

*Note:*

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



# Diploma Entry Requirements

	SPM	O Level	UEC	Certificate
Diploma in Science (Business Information Systems)	3 Credits in the relevant subjects	3 Grade C in the relevant subjects	3 Grade B in the relevant subjects	■ Relevant Certificate accredited by MQA
Diploma in Science (Information Systems Engineering)	<b>Compulsory subjects:</b> (i) <b>SPM Credit/O Level</b> Grade C in Mathematics/ <b>UEC</b> Grade B in one mathematics subject (ii) <b>SPM Pass/O Level</b> Grade E (Pass)/ <b>UEC</b> Grade C in English Language**			OR ■ Relevant Skilled/ Technical/ Vocational Certificate recognised by the Malaysian Government
Diploma in Science (Internet Technology)				
Diploma in Science (Computer Science and Management Mathematics)				
Diploma in Information Technology (Mobile Application Development)				
Diploma in Information Systems (ICT Applications)				
Diploma in Software Engineering				

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

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

# Foundation Entry Requirements

BACHELOR DEGREE	FOUNDATION	ENTRY REQUIREMENTS		
		SPM	O LEVEL	UEC
<b>Bachelor of Information Systems (Honours) in Enterprise Information Systems</b>  <b>Bachelor of Information Technology (Honours) in Software Systems Development</b>  <b>Bachelor of Information Technology (Honours) in Internet Technology</b>  <b>Bachelor of Information Technology (Honours) in Information Security</b>	Foundation in Computing (Track B)	5 Credits in the relevant subjects which must include,  <b>SPM Credit/O Level Grade C/UEC Grade B</b> in one mathematics subject  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**	5 Grade C in the relevant subjects which must include,  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**	3 Grade B in the relevant subjects which must include,  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**
<b>Bachelor of Computer Science (Honours) in Software Engineering</b>  <b>Bachelor of Computer Science (Honours) in Interactive Software Technology</b>  <b>Bachelor of Computer Science (Honours) in Data Science</b>	Foundation in Computing (Track A)	5 Credits in the relevant subjects which must include,  <b>SPM Credit in Mathematics AND Additional Mathematics/O Level Grade C in Mathematics AND Mathematics-Additional/UEC Grade B in Advanced Mathematics (I or II)</b>  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**	5 Grade C in the relevant subjects which must include,  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**	3 Grade B in the relevant subjects which must include,  <b>AND</b>  <b>SPM Pass/O Level Grade E (Pass)/UEC Grade C</b> in English Language**

\*\*Grade C and above in AELE0364 English Language conducted by TAR UC is accepted as having fulfilled the English Language requirement for applicants who fail English Language at SPM/O Level/UEC.

- Note:
- a) SPM holders must have at least a pass in Bahasa Melayu and SPM holders from Year 2013 onwards must have at least a pass in Sejarah.
  - b) Equivalent qualifications other than the above will be considered on a case-by-case basis.
  - c) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.



# Foundation Entry Requirements

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

Note:

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

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

c) Information is correct at the point of printing. Subject to the Ministry of Education latest requirements.





# Achievements



TAR UC is awarded the Premier Digital Tech University by MDEC



TAR UC students certified with ISTQB® Certified Tester Foundation Level (CTFL)

# Achievements



**GOLD MEDAL IN WORLDSKILLS MALAYSIA BELIA (WSMB) 2017 COMPETITION**  
 Wong Sheng Chuang (front, fourth from right) receiving his award from the then Minister of Human Resources, Datuk Seri Richard Riot Jaem



**44TH WORLDSKILLS COMPETITION 2017 AT ABU DHABI, UAE**  
 Medallion for Excellence won by Teoh Jia Jun (second from right)



# Achievements



## CISCO PACKET TRACER COMPETITION 2019

TAR UC students emerged as Champion for CISCO Packet Tracer Competition 2019



## HACK2HIRED SOFTWARE HACKATHON 2018

TAR UC students emerged as Champion, 2nd runner-up for Main Hack Challenge and special prizes for Mini Hack and Warm Up Challenges in Hack2Hired Software Hackathon 2018

# Achievements



**CIMB 3D CONQUEST REGIONAL CHAMPION 2019**  
 The Champion team from TAR UC comprising Yee Mun Hong (leftmost), Yong Zhen Qiang (second from left) and Khoo Wai Kang (rightmost) together with Ms Tan Wai Beng (second from right), Lecturer of the Department of Information And Communication Technology, Faculty of Computing and Information Technology



**CIMB 3D CONQUEST MALAYSIA CHAMPION 2018**  
 From left : Dato' Ng Wan Peng (Chief Operating Officer, MDeC), Yee Mun Hong, Yong Zhen Qiang, Khoo Wai Kang, and Dato' Hamidah Naziadin (Group Chief People Officer, CIMB Foundation)



# Merit Scholarship

## Diploma/Foundation/Cambridge GCE A Level Programmes

Entry Qualification	Criteria	Waiver of Tuition Fee
SPM O Level	9As and above 8As	<b>100%</b>
SPM O Level	8As 7As	<b>50%</b>
SPM O Level	7As 6As	<b>25%</b>
SPM	6As	<b>20%</b> Foundation programmes only
SPM	5As	<b>15%</b> Foundation programmes only

**SPM: A+, A and A-**

## Bachelor Degree Programmes

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

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

\*\*For all subjects with a minimum of 6 subjects  
Automatically offered upon admission. Terms & Conditions apply

## For further information, please contact:

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**Faculty of Computing and Information Technology**

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