

# ENGINEERING & COMPUTING

- Prospectus -  
2024

**SUNWAY**  
UNIVERSITY



A CLASS ABOVE



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## SUNWAY IS ONE OF THE TOP 150 UNIVERSITIES IN THE WORLD UNDER 50 YEARS OLD

As one of Malaysia's leading and internationally recognised private universities, Sunway University is positioned amongst top universities in the world by QS World University Rankings. Sunway University is ranked #586 globally in the QS World University Rankings 2024 and is the #1 non-government linked private university in Malaysia in the Times Higher Education World University Rankings 2023.

Sunway University has been awarded #1 in Graduate Employability among all universities in Malaysia by Talentbank Group for two consecutive years (2022, 2023) through the National Graduate Employability Index.

The University emerged as an Overall 5 Star rated (Excellent) institution in the QS Stars University Ratings, as well as Five-Star ratings for the individual categories: teaching, facilities, employability, social responsibility, inclusiveness, academic development and internationalisation.

Collaborating with world class partners - Lancaster University and Le Cordon Bleu International, Sunway University offers premier education with international repute. The University also partners University of Oxford, University of Cambridge, Harvard University, Massachusetts Institute of Technology and University of California, Berkeley.

**MALAYSIA'S #1**  
**NON-GLU\* PRIVATE UNIVERSITY**  
 as awarded by  
**Times Higher Education**



\*Government-Linked University



EXCELLENT





# INTRODUCTION

Industrial Revolution 4.0, Artificial Intelligence (AI), Internet of Things (IoT), electronics innovation, and the growth of new materials, chemicals and technological platforms have further propelled the demand for tech specialists and engineers. Pandemic of 2020 also highlighted the importance of innovation and technology advances, and the need for such skilled professionals.

The School of Engineering and Technology at Sunway University, Malaysia, stands as a beacon of innovation and academic excellence in the region. With a commitment to nurturing future ready engineers and technology leaders, our school offers a dynamic and inclusive learning environment that merges cutting-edge knowledge with practical skills. Our school comprises accomplished academics and industry experts dedicated to delivering top-tier education, fostering creativity and through state-of-the-art facilities and hands on learning experiences including electrical engineering, mechanical engineering, computer science and many more.

The only private Malaysian university with the **highest number of Top 2% scientist** in their respective disciplines.

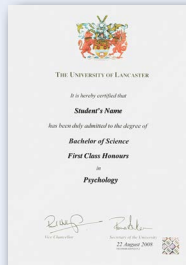
*Stanford University List of Top 2% Scientist 2023*

Recognised for its qualifications and commitment in offering top-notch digital technology degree programmes and generations of highly-skilled graduates for the industry.



Upon successful completion of the programme, graduates are awarded 2 certificates; one from Sunway University and another from Lancaster University.

VALIDATED BY:



## TOWARDS RECOGNITION\* BY BOARD OF ENGINEERS MALAYSIA (BEM)

Through BEM, Malaysia is a signatory to the Washington Accord (WA). Following the WA agreement on mutual recognition of engineering qualifications, graduates from BEM-accredited engineering programmes will be mutually recognised for professional registration and eligible to perform professional engineering services in countries such as the US, Canada, UK, Australia, New Zealand, Korea, China, Singapore, and more.



*\*Sunway University's Engineering programmes are provisionally accredited by the Board of Engineers Malaysia (BEM) and will be ready for full accreditation during its first cohort's final year.*

## COLLABORATIONS WITH INDUSTRY PARTNERS:



# ENTRY REQUIREMENTS

## COMPUTING

PROGRAMME	ENTRY REQUIREMENTS	SPECIFIC REQUIREMENTS	ENGLISH REQUIREMENTS
<b>BSC (HONS) IN COMPUTER SCIENCE</b>	<p><b>STPM</b> Average C or CGPA 2.00 (minimum 2 principals)</p> <p><b>A-Level</b> Minimum 12 points (Minimum Grade D in at least 2 subjects)</p>	<p>Credit in Additional Mathematics at SPM B in Advanced Mathematics in UEC or its equivalent</p> <p>Candidates with the following qualifications or its equivalent:</p> <ul style="list-style-type: none"> <li>• STPM (non-science stream)</li> <li>• STAM</li> <li>• A-Level</li> <li>• Matriculation or Foundation</li> </ul>	<p><b>IELTS or equivalent</b> 6.0</p> <p><b>MUET</b> Band 4</p> <p><b>SPM English</b> B3 or B+</p> <p><b>UEC English</b> Credit</p>
<b>BACHELOR OF SOFTWARE ENGINEERING (HONS)</b>	<p><b>Australian Matriculation</b> ATAR 60</p> <p><b>Canadian International Matriculation Programme</b> 60%</p> <p><b>MUFY</b> 60%</p> <p><b>Sunway Foundation in Arts</b> CGPA 2.30</p> <p><b>Sunway Foundation in Science &amp; Technology</b> CGPA 2.30</p>	<p>who do not have Additional Mathematics at SPM level or its equivalent may be admitted with a credit in Mathematics and any one of the Science, Technology or Engineering subjects at SPM level or its equivalent.</p> <p>Candidates need to enrol and pass a Mathematics Enhancement subject at the beginning of the study.</p> <p>The above requirements can be excluded if the Foundation / Matriculation programmes offered a Mathematics subject and the achievements are equivalent / higher than a requirement of a credit in Additional Mathematics at SPM level or equivalent.</p>	<p><b>O-Level English (1119)</b> Credit</p> <p><b>Sunway Intensive English Programme (IEP)</b> Pass Level 4 with minimum 65%</p> <p><b>ESL/English</b> Satisfactory level in Pre-University programmes, where the medium of instruction is English</p>
<b>BACHELOR OF INFORMATION SYSTEMS (HONOURS) (DATA ANALYTICS)</b>	<p><b>UEC</b> Maximum 26 points from 5 subjects (all grade Bs)</p> <p><b>IB Diploma</b> Completed with minimum 25 points (excluding bonus points)</p>	<p>Credit in Mathematics at SPM B in Mathematics in UEC or its equivalent</p>	<p><b>Note:</b> The following students will be exempted from the English Language requirement: Students from countries that use English as the official language; <b>OR</b> Students with academic qualifications from institutions that use English as a full medium of instruction.</p>
<b>BSC (HONS) INFORMATION TECHNOLOGY (COMPUTER NETWORKING AND SECURITY)</b>	<p><b>Sunway Diploma</b> CGPA 2.50 or equivalent</p> <p><b>Other Qualifications:</b> Any other qualifications will be considered on a case-to-case basis</p>	<p>A credit in Mathematics at SPM level or its equivalent will be required for the following qualifications and its equivalent:</p> <ul style="list-style-type: none"> <li>• STPM</li> <li>• STAM</li> <li>• A-Level</li> <li>• Matriculation or Foundation</li> <li>• Diploma programme that are not in Computing</li> </ul>	
<b>BACHELOR OF SCIENCE (HONOURS) IN INFORMATION TECHNOLOGY</b>		<p>Candidates with only a pass in Mathematics will need to enrol and pass a Mathematics Enhancement subject at the beginning of study.</p>	

Note: For A-Level points calculation  
A = 10 points B = 8 points C = 6 points D = 4 points E = 2 points

### INTAKES

JANUARY • APRIL • SEPTEMBER

### DURATION

3 YEARS



# ENTRY REQUIREMENTS

## ENGINEERING

PROGRAMME	ENTRY REQUIREMENTS	SPECIFIC REQUIREMENTS	ENGLISH REQUIREMENTS	
<b>BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS</b>	<p><b>STPM</b> CGPA 2.00 including Mathematics &amp; one Natural Sciences subject (with minimum Grade C)</p> <p><b>A-Level</b> Minimum 12 points for Mathematics &amp; one Natural Sciences subject (with minimum Grade D)</p> <p><b>Australian Matriculation</b> ATAR 65 (including Mathematics Methods &amp; one Natural Sciences subject)</p> <p><b>Canadian International Matriculation Programme</b> 65% (including Advanced Functions, Calculus &amp; Vectors and one Natural Sciences subject)</p> <p><b>MUFY</b> 65% (including Mathematics &amp; one Natural Sciences subject)</p> <p><b>Sunway Foundation in Science &amp; Technology</b> CGPA 2.30 (including Mathematics and one Natural Sciences subject)</p> <p><b>UEC</b> Maximum 24 points from 5 subjects (all grade Bs including Mathematics and one Natural Sciences subject)</p> <p><b>Diploma</b> CGPA 2.50 from any diploma in Engineering, Science or Technology</p> <p><b>Matriculation/Foundation</b> CGPA 2.50 (including Mathematics and one Natural Sciences subject)</p> <p><b>IB Diploma</b> Completed with minimum 25 points (excluding bonus points)(including Mathematics and one Natural Sciences subject)</p> <p><b>Other Qualifications</b> CGPA 2.50 equivalent and any other qualifications will be considered on a case-to-case basis.</p>	<p>Natural Sciences subjects are Physics, Biology or Chemistry. Chemistry will be given preference.</p> <p>SPM or equivalent in Science stream will be given preference.</p>	<p><b>IELTS or equivalent</b> 6.0</p> <p><b>MUET</b> Band 4</p> <p><b>SPM English</b> B3</p> <p><b>UEC English</b> B3</p> <p><b>O-level English (1119)</b> B3</p> <p><b>Sunway Intensive English Programme (IEP)</b> Pass Level 4 with minimum 65%</p> <p><b>ESL/English</b> Satisfactory level at Pre-University programmes with English as the medium of instruction.</p> <p><b>Additional requirements</b> For Malaysian students entering using an entry qualification whereby the medium of instruction is not in English, MQA requires the student to possess a MUET or international English proficiency qualification in order to register for the Engineering programmes.</p>	
	<b>BACHELOR OF ELECTRONIC AND ELECTRICAL ENGINEERING WITH HONOURS</b>	<p><b>STPM</b> CGPA 2.00 including Mathematics &amp; one Natural Sciences subject (with minimum Grade C)</p> <p><b>A-Level</b> Minimum 12 points for Mathematics &amp; one Natural Sciences subject (with minimum Grade D)</p> <p><b>Australian Matriculation</b> ATAR 65 (including Mathematics Methods &amp; one Natural Sciences subject)</p> <p><b>Canadian International Matriculation Programme</b> 65% (including Advanced Functions, Calculus &amp; Vectors and one Natural Sciences subject)</p> <p><b>MUFY</b> 65% (including Mathematics &amp; one Natural Sciences subject)</p> <p><b>Sunway Foundation in Science &amp; Technology</b> CGPA 2.30 (including Mathematics and one Natural Sciences subject)</p> <p><b>UEC</b> Maximum 24 points from 5 subjects (all grade Bs including Mathematics and one Natural Sciences subject)</p> <p><b>Diploma</b> CGPA 2.50 from any diploma in Engineering, Science or Technology</p> <p><b>Matriculation/Foundation</b> CGPA 2.50 (including Mathematics and one Natural Sciences subject)</p> <p><b>IB Diploma</b> Completed with minimum 25 points (excluding bonus points)(including Mathematics and one Natural Sciences subject)</p> <p><b>Other Qualifications</b> CGPA 2.50 equivalent and any other qualifications will be considered on a case-to-case basis.</p>	<p>Natural Sciences subjects are Physics, Biology or Chemistry. Physics will be given preference.</p> <p>SPM or equivalent in Science stream will be given preference.</p>	<p><b>IELTS or equivalent</b> 6.0</p> <p><b>MUET</b> Band 4</p> <p><b>SPM English</b> B3</p> <p><b>UEC English</b> B3</p> <p><b>O-level English (1119)</b> B3</p> <p><b>Sunway Intensive English Programme (IEP)</b> Pass Level 4 with minimum 65%</p> <p><b>ESL/English</b> Satisfactory level at Pre-University programmes with English as the medium of instruction.</p> <p><b>Additional requirements</b> For Malaysian students entering using an entry qualification whereby the medium of instruction is not in English, MQA requires the student to possess a MUET or international English proficiency qualification in order to register for the Engineering programmes.</p>
	<b>BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS</b>	<p><b>STPM</b> CGPA 2.00 including Mathematics &amp; one Natural Sciences subject (with minimum Grade C)</p> <p><b>A-Level</b> Minimum 12 points for Mathematics &amp; one Natural Sciences subject (with minimum Grade D)</p> <p><b>Australian Matriculation</b> ATAR 65 (including Mathematics Methods &amp; one Natural Sciences subject)</p> <p><b>Canadian International Matriculation Programme</b> 65% (including Advanced Functions, Calculus &amp; Vectors and one Natural Sciences subject)</p> <p><b>MUFY</b> 65% (including Mathematics &amp; one Natural Sciences subject)</p> <p><b>Sunway Foundation in Science &amp; Technology</b> CGPA 2.30 (including Mathematics and one Natural Sciences subject)</p> <p><b>UEC</b> Maximum 24 points from 5 subjects (all grade Bs including Mathematics and one Natural Sciences subject)</p> <p><b>Diploma</b> CGPA 2.50 from any diploma in Engineering, Science or Technology</p> <p><b>Matriculation/Foundation</b> CGPA 2.50 (including Mathematics and one Natural Sciences subject)</p> <p><b>IB Diploma</b> Completed with minimum 25 points (excluding bonus points)(including Mathematics and one Natural Sciences subject)</p> <p><b>Other Qualifications</b> CGPA 2.50 equivalent and any other qualifications will be considered on a case-to-case basis.</p>	<p>Natural Sciences subjects are Physics, Biology or Chemistry. Physics will be given preference.</p> <p>SPM or equivalent in Science stream will be given preference.</p>	<p><b>IELTS or equivalent</b> 6.0</p> <p><b>MUET</b> Band 4</p> <p><b>SPM English</b> B3</p> <p><b>UEC English</b> B3</p> <p><b>O-level English (1119)</b> B3</p> <p><b>Sunway Intensive English Programme (IEP)</b> Pass Level 4 with minimum 65%</p> <p><b>ESL/English</b> Satisfactory level at Pre-University programmes with English as the medium of instruction.</p> <p><b>Additional requirements</b> For Malaysian students entering using an entry qualification whereby the medium of instruction is not in English, MQA requires the student to possess a MUET or international English proficiency qualification in order to register for the Engineering programmes.</p>

Note: For A-Level points calculation

A = 10 points B = 8 points C = 6 points D = 4 points E = 2 points

### INTAKES

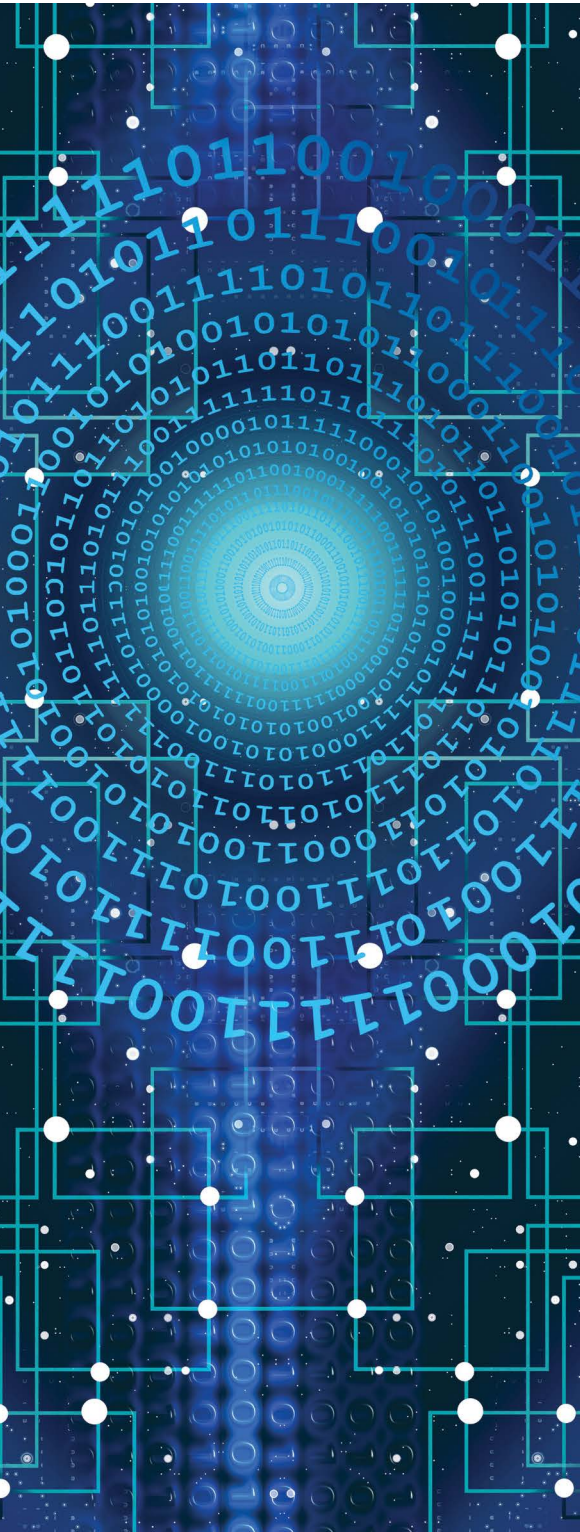
JANUARY • APRIL • SEPTEMBER

### DURATION

4 YEARS

# FIELDS IN COMPUTING

Programme



## SPM / O-LEVEL

### PRE-UNIVERSITY

- Foundation in Arts (FIA)
- Foundation in Science & Technology (FIST)
- Australian Matriculation (AUSMAT)
- Cambridge GCE A-Level
- Canadian International Matriculation Programme (CIMP)
- Monash University Foundation Year (MUFY)

STPM or equivalent

1/1.5 years

### SUNWAY DIPLOMA

- Diploma in Information Technology
- Diploma in Computer Science [Pathway to Bachelor of Information Systems (Hons) (Data Analytics)]

2 years

### AMERICAN DEGREE TRANSFER PROGRAM

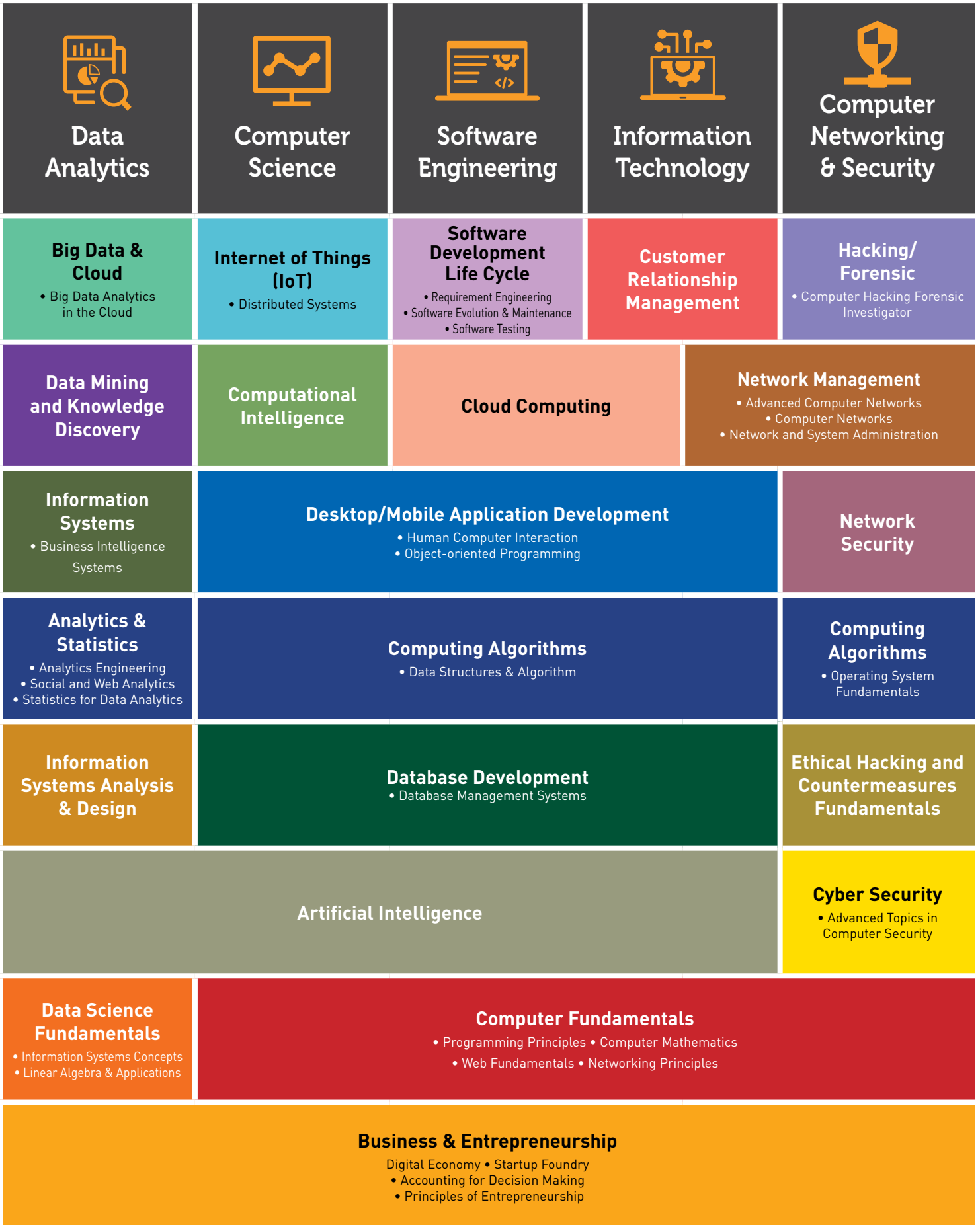
2 years

### US / CANADIAN UNIVERSITIES

2 years

Specialised Fields





# BSC (HONS) IN COMPUTER SCIENCE

## PROGRAMME INTRODUCTION

The Computer Science programme was designed to produce innovators and creators of new computing systems as well as designing and developing various types of software such as systems infrastructure or application technologies.

The programme is developed in accordance to ACM-IEEE(CS) and MQA recommendations, while offering a comprehensive syllabus that enables graduates to thrive in the working world and be leaders in their own niches.

VALIDATED BY:



## CAREER PROSPECTS

- Chief technology officer
- Game developer
- IT executive
- IT project manager
- IT technical solutions consultant
- Mobile app developer
- Software architect/ software engineer
- System administrator
- System designer
- System engineer

### Software Taught

- |                 |                      |
|-----------------|----------------------|
| • Akka          | • Python             |
| • Eclipse       | • Repl.It            |
| • Figma         | • SBT                |
| • Haskell       | • Scala              |
| • IntelliJ IDEA | • SQL                |
| • Java          | • Visual Studio Code |
| • Oracle DBMS   |                      |

## DISTINCTIVE SUNWAY EXPERIENCE

Students are exposed to latest Cloud technologies and principles so that they can be equipped with the fundamentals of Cloud computing via our industry partners such as AWS.



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Computer Mathematics
- Computer Organisation
- Database Fundamentals
- English for Computer Technology Studies
- Networking Principles
- Object-Oriented Programming Fundamentals
- Operating Systems Fundamentals
- Programming Principles
- Web Fundamentals

### Year 2

- Communication Skills
- Data Structures and Algorithms
- Entrepreneurial Mindset & Skills
- Free Electives (Choose 3)
- Object-Oriented Programming
- Software Engineering
- **Discipline Electives (Choose 2)**

### Year 3

- Artificial Intelligence
- Capstone Project 1 & 2
- Distributed Systems
- Human Computer Interaction
- Internship
- **Discipline Electives (Choose 3)**

### Data Science & Analytics

- Social & Web Analytics
- Data Mining & Knowledge Discovery Fundamentals

### Advanced Artificial Intelligence

- Computer Vision
- Computational Intelligence

### Software Solutions

- Database Management Systems
- Digital Image Processing
- Functional Programming Principles
- Concurrent Programming
- Database Engineering
- Mobile Application Development

### Networking and Security

- Data Communications
- Computer Networks
- Computer Security

### Software Design

- Information Systems Analysis & Design
- Programming Languages
- Cloud Computing
- Software Architecture & Design Patterns
- UI/UX Design & Development

### FREE ELECTIVES

*Note: These are just some of the electives*

- Accounting for Decision Making
- Digital Economy
- Principles of Entrepreneurship
- Startup Foundry

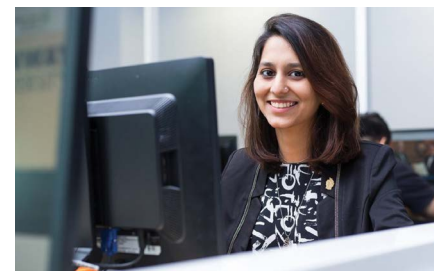
### MOHE COMPULSORY GENERAL STUDIES SUBJECTS

#### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

#### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2





# BACHELOR OF INFORMATION SYSTEMS (HONOURS) (DATA ANALYTICS)

## PROGRAMME INTRODUCTION

The Data Analytics programme focuses on the development of analytical skills in the study of technologies. Harnessing and analysing massive data creates significant value for organisations and it has become the basis for decision-making to achieve greater efficiency while spearheading constant innovation.

During their studies, students will solve practical and real-world problems of companies utilising data sets in the presence of analytics experts.

## VALIDATED BY:



## CAREER PROSPECTS

- Big data system architect
- Business intelligence manager/specialist/architecture consultant
- Chief data scientist
- Chief knowledge analyst
- Chief social media scientist
- Credit scorecard specialist
- Customer segmentation specialists
- Forensic experts

### Software Taught

- Cloudera
- Power BI
- Python
- R
- SAS
- SQL
- Tableau

## DISTINCTIVE SUNWAY EXPERIENCE

In this programme, students will be awarded a SAS Joint Certificate in Big Data with Advanced Techniques in Data Science and an academic digital badge to validate their knowledge. As one of the **Top 10 Most Prominent Data Science Institutes\***, Sunway students learn innovative ways to use and leverage data to generate actionable outcomes across a variety of industries.

Python and R languages and the SAS tools are taught in the programme. The collaboration with AWS and Alibaba GET enhance & provide students a 360 degree view of analytics knowledge and skills.

*\*Analytics Insight Magazine (January 2022)*



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Computer Organisation
- Data Mining & Knowledge Discovery Fundamentals
- Database Fundamentals
- English for Computer Technology Studies
- Information Systems Concepts
- Linear Algebra and Applications
- Networking Principles
- Operating System Fundamentals
- Programming Principles

### Year 2

- Analytics Engineering
- Communication Skills
- Enterprise Architecture
- Entrepreneurial Mindset & Skills
- Free Electives (Choose 3)
- Information Systems Analysis & Design
- Statistics for Data Analytics
- Social and Web Analytics

### Year 3

- Advanced Business Analytics
- Artificial Intelligence
- Big Data Analytics in the Cloud
- Business Intelligence Systems
- Capstone Project 1 & 2
- Data Mining & Knowledge Discovery
- Database Management Systems
- Internship
- Project Management

## FREE ELECTIVES

*Note: These are just some of the electives*

- Accounting for Decision Making
- Digital Economy
- Startup Foundry
- Principles of Entrepreneurship

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2



# BSC (HONS) INFORMATION TECHNOLOGY (COMPUTER NETWORKING AND SECURITY)

## PROGRAMME INTRODUCTION

The Computer Networking and Security programme aims to equip students with technical competencies in exploring the technology behind computer networks and security systems.

This programme focuses on networking developments and distributed applications within the Internet, corporate networks and the information systems in which they interconnect. In terms of computer security, students will gain the ability to manage and develop computer systems and applications that enhance networking and security within organisations.

## VALIDATED BY:



## CAREER PROSPECTS

- Digital forensic investigator
- IT security consultant
- Network engineer
- Network infrastructure specialist
- Penetration tester
- Security analyst
- Security engineer

### Software Taught

- Aircrack
- Android Studio
- Burp Suite
- Cisco Packet Tracer
- FTK imager
- Maltego
- Metasploit
- Nmap
- RSA
- Netwitness
- Sleuth Kit
- Virtualisation software

## DISTINCTIVE SUNWAY EXPERIENCE

Students in this programme will experience the latest techniques in IT security and developing critical threat-hunting expertise, developed in collaboration with one of the world's leading cybersecurity organisation, RSA.

Together with EC-Council, our students have the chance to obtain up to two professional certificates during their studies. Students may also choose to attend CCNA professional examination.



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Computer Mathematics
- Computer Organisation
- Database Fundamentals
- English for Computer Technology Studies
- Networking Principles
- Object-Oriented Programming Fundamentals
- Operating Systems Fundamentals
- Programming Principles
- Web Fundamentals

### Year 2

- Communication Skills
- Computer Networks
- Distributed Systems
- Entrepreneurial Mindset & Skills
- Free Electives (Choose 3)
- Network & System Administration
- Network Security
- Probability & Statistics

### Year 3

- Advanced Computer Networks
- Advanced Topics in Computer Security
- Capstone Project 1 & 2
- Computer Hacking Forensic Investigator
- Data Communications
- Ethical Hacking & Countermeasures Fundamentals
- Human Computer Interaction
- Internship

## FREE ELECTIVES

*Note: These are just some of the electives*

- Accounting for Decision Making
- Digital Economy
- Principles of Entrepreneurship
- Startup Foundry

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2





# BACHELOR OF SOFTWARE ENGINEERING (HONS)

## PROGRAMME INTRODUCTION

The Software Engineering programme empowers students with the knowledge and understanding of user requirements in analysing, modelling, designing, and developing large-scale software systems that are reliable and robust. Such Software Engineering (SE) specialists will be able to respond to the ever-growing impact of large-scale software systems in a wide range of situations.

Furthermore, this programme will enable them to select the most appropriate and reliable techniques for producing quality software systems on time and within budget.

## VALIDATED BY:



## CAREER PROSPECTS

- Game developer
- Mobile app developer
- Requirement engineer
- Software architect
- Software engineer
- Software quality assurance officer
- Software tester
- System designer
- Technical analyst
- Web developer

### Software Taught

- |                  |                 |
|------------------|-----------------|
| • Android Studio | • Repl.It       |
| • Eclipse        | • SBT           |
| • Figma          | • SQL           |
| • Java           | • Scala         |
| • IntelliJ IDEA  | • Visual Studio |
| • Oracle DBMS    | • Code          |
| • PHP            | • Web Servers   |
| • Python         |                 |

## DISTINCTIVE SUNWAY EXPERIENCE

Together with Malaysian Software Testing Board (MSTB), member of International Software Testing Quality Board (ISTQB) and through their partnership with International Requirements Engineering Board (IREB), our students have the opportunity to obtain up to two professional certificates known as Certified Tester Foundation Level (CTFL) and Certified Professional in Requirements Engineering-Foundation Level (CPRE-FL) during their study. These industry-linked certificates will be an added advantage for our graduates, making them highly employable.

## PROGRAMME STRUCTURE - Subjects

### Year 1

- Computer Mathematics
- Computer Organisation
- Database Fundamentals
- English for Computer Technology Studies
- Networking Principles
- Object-Oriented Programming Fundamentals
- Operating Systems Fundamentals
- Programming Principles
- Web Fundamentals

### Year 2

- Communication Skills
- Entrepreneurial Mindset & Skills
- Free Electives (Choose 3)
- Project Management
- Requirement Engineering
- Software Engineering
- **Discipline Electives (Choose 2)**

### Year 3

- Capstone Project 1 & 2
- Computer Security
- Internship
- Software Architecture and Design Patterns
- Software Evolution & Maintenance
- Software Processes
- Software Testing
- **Discipline Electives (Choose 3)**

## DISCIPLINE ELECTIVES

### Software Development

- Object-Oriented Programming
- Code Camp
- Concurrent Programming
- Human Computer Interaction

### Networking and Security

- Data Communication
- Network Security
- Advanced Network Security
- Computer Networks

## Software Solutions and Design

- Database Management Systems
- Data Structures and Algorithms
- Digital Image Processing
- Cloud Computing
- Database Engineering

## Artificial Intelligence

- Artificial Intelligence
- Computer Vision

## Mobile App Development

- Mobile Application Development

## FREE ELECTIVES

*Note: These are just some of the electives*

- Accounting for Decision Making
- Digital Economy
- Principles of Entrepreneurship
- Startup Foundry

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2



# BACHELOR OF SCIENCE (HONOURS) IN INFORMATION TECHNOLOGY

## PROGRAMME INTRODUCTION

The Information Technology programme was designed to provide our graduates with strong analytical skills and the knowledge to keep abreast with the rapid advances in technology.

Students undertaking this programme are exposed to both technical and real-world practical experiences through the specially-crafted coursework and industrial training, making our graduates market-ready upon graduation.

During their study, students may select electives to explore and enhance their knowledge in specific fields such as network management and security, database engineering and mobile development.

## VALIDATED BY:



## CAREER PROSPECTS

- Database architect
- IT specialist
- Network specialist
- System engineer
- Web/E-commerce architect

### Software Taught

- Android Studio
- Cisco Packet Tracer
- CSS
- Eclipse
- Figma
- HTML
- Java
- Javascript
- PHP
- Python
- Repl.it
- Scala
- SQL

## DISTINCTIVE SUNWAY EXPERIENCE

This programme will give the students a good mix of knowledge in both software and hardware. With the knowledge from both sides, the students will be equipped with the skills required to develop an organisation's technology infrastructure and support the people who use it.

Students are exposed to latest Cloud technologies and principles so that they can be equipped with the fundamentals of Cloud computing via our industry partners such as AWS.



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Computer Mathematics
- Computer Organisation
- Database Fundamentals
- English for Computer Technology Studies
- Networking Principles
- Object-Oriented Programming Fundamentals
- Operating Systems Fundamentals
- Programming Principles
- Web Fundamentals

### Year 2

- Communication Skills
- Computer Networks
- Entrepreneurial Mindset & Skills
- Free Electives (Choose 3)
- Software Engineering
- Web Programming
- **Discipline Elective (Choose 2)**

### Year 3

- Project Management
- Capstone Project 1 & 2
- Cloud Computing
- Human Computer Interaction
- Internship
- **Discipline Electives (Choose 3)**

## DISCIPLINE ELECTIVES

### Software Development and Design

- Database Management Systems
- Data Structures and Algorithms
- Object-Oriented Programming
- Database Engineering
- Mobile Application Development
- UI/UX Design and Development
- Software Architecture and Design Patterns

### Networking and Security

- Data Communications
- Network Security
- Advanced Computer Networks
- Advanced Network Security
- Computer Security
- Distributed Systems
- Network & System Administration
- Network Management

### Business Solutions and AI

- Customer Relationship Management
- Enterprise Application Development
- Artificial Intelligence

### Data Science

- Data Mining and Knowledge Discovery Fundamentals
- Big Data Analytics in the Cloud

### FREE ELECTIVES

*Note: These are just some of the electives*

- Accounting for Decision Making
- Digital Economy
- Principles of Entrepreneurship
- Startup Foundry

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2



# BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS

## PROGRAMME INTRODUCTION

Chemical Engineering is a discipline dealing with creating, developing and designing processes to produce, transform or transport products and materials. It combines the knowledge of natural, experimental and life sciences as well as aspects of maths and economics to investigate problems and design solutions for issues such as safety, efficiency and sustainability. Chemical Engineers pioneer new materials and technologies of the future; they design equipment for chemical manufacturing, develop and manage industrial processes that turn raw materials into the most useful products.

Chemical engineers solve major societal challenges in energy, human health, manufacturing and sustainability. They use the knowledge of material and energy balances, heat and mass transfer, thermodynamics, fluid mechanics, separations technologies, chemical reaction kinetics, reactor design, and process design to create sustainable manufacturing processes, robust chemical plants and safe equipment design.

This programme is recognised as equivalent to that of the Lancaster University's MASTER OF ENGINEERING CHEMICAL ENGINEERING WITH HONOURS (MEng Hons). Upon successfully completing the programme, graduates will also be awarded the MEng Hons degree from Lancaster University. They will be awarded two certificates, making them graduates of both Sunway University and Lancaster University.

VALIDATED BY:



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Chemical Process Calculations
- Design and Innovative Thinking
- Engineering Materials
- Engineering Mathematics 1
- Engineering Mathematics 2
- Fluid Mechanics
- Organic Chemistry
- Physical Chemistry
- Sustainable Engineering Design

### Year 2

- Advanced Engineering Calculus
- Chemical Engineering Lab 1
- Chemical Engineering Thermodynamics
- Communication Skills
- Engineers in Society
- Engineering Statistics & Probability
- Entrepreneurial Mindset & Skills
- Heat Transfer
- Mass Transfer & Separation Processes
- Numerical Methods for Chemical Engineers
- Project Management & Engineering Design

### Year 3

- Advanced Transport Phenomena
- Chemical Engineering Lab 2
- Chemical Engineering Lab 3
- Chemical Process Safety
- Chemical Reaction Engineering
- Data Analytics for Engineers
- Design Project 1
- Multiphase System
- Plant Design and Process Synthesis
- Process Dynamics and Control
- Reactor Design and Analysis

## CAREER PROSPECTS

- Environmental engineer
- Process engineer
- Petroleum process engineer
- Design engineer
- Product development scientist
- Production engineer
- Chemical data analyst
- Material engineer

### Year 4

- Design Project 2
- Final Year Project 1
- Final Year Project 2
- Industrial Training

### Year 4 Electives (Depth) (Choose all)

- Advanced Biochemical Engineering
- Advanced Electrochemical Engineering
- Advanced Process Control
- Advanced Wastewater Engineering

### Year 4 Electives (Breadth) (Choose 2)

- Carbon Capture & Storage
- Environment & Climate Change
- Nanomaterials & Nanotechnology
- Petroleum Refining & Gas Processing

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2



# BACHELOR OF ELECTRONIC AND ELECTRICAL ENGINEERING WITH HONOURS

## PROGRAMME INTRODUCTION

Electronic and Electrical Engineering specialises on electrical and electronic equipment, interfaces and communications. Electrical engineering tends to focus on larger scale electrical equipment and power, whilst electronic engineering is more focused on electronic circuits and devices, computer and communication systems. It gives a fascinating insight into how electrical devices and technology work and in a future that will likely be full of new electric technologies.

The programme gives students a strong technical knowledge in a variety of areas, which include electronics, signal processing, power engineering, computer and communication systems and engineering management. Alongside the theories, students also learn through hands-on practical exposure to ensure that they are prepared for engineering work upon graduation.

This programme is recognised as equivalent to that of the Lancaster University's MASTER OF ENGINEERING ELECTRONIC AND ELECTRICAL ENGINEERING WITH HONOURS (MEng Hons). Upon successfully completing the programme, graduates will also be awarded the MEng Hons degree from Lancaster University. They will be awarded two certificates, making them graduates of both Sunway University and Lancaster University.

VALIDATED BY:



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Analogue Electronic Fundamentals
- Digital Electronic Fundamentals
- Electrical Circuits
- Engineering Materials
- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Physics
- Instrumentation, Measurement & Controls
- Programming for Engineers

### Year 2

- Advanced Engineering Calculus
- Artificial Intelligence
- Communication Skills
- Communication Systems
- Control Systems
- Electrical Power Systems
- Electronic Systems
- Engineers in Society
- Engineering Mathematics 3
- Sustainable Engineering Design
- Entrepreneurial Mindset & Skills
- Microprocessor Systems
- Project Management and Engineering Design
- Signals and Systems

### Year 3

- Advanced Digital Design
- AI for Engineering Applications
- Computer Networks
- Data Analytics for Engineers
- Digital Image & Video Processing
- Digital Signal Processing
- Electrical Machines
- Engineering Electromagnetics
- Integrated Design Project 1
- Integrated Design Project 2
- Numerical Methods for Engineers

## CAREER PROSPECTS

- Communication engineer
- Computer engineer
- Control engineer
- Design engineer
- Electrical engineer
- Electronic engineer
- Engineering consultant
- Hi-tech entrepreneur
- Product development engineer
- Robotics engineer

### Year 4

- Advanced Computer Architecture
- Engineering Design for Industrial Revolution 4.0
- Final Year Project 1
- Final Year Project 2
- Industrial Training
- Networked Embedded Systems
- Power Electronics & Drives
- Wireless & Optical Communications

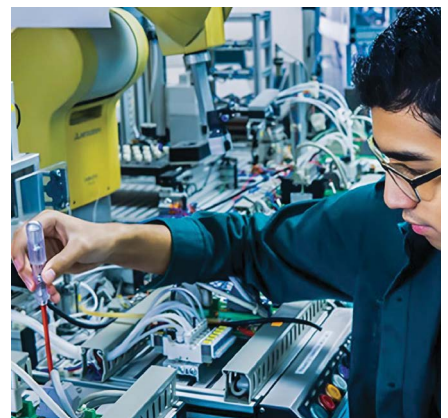
## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2



# BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS

## PROGRAMME INTRODUCTION

The Mechanical Engineering programme is a modern, project-based degree which aims to produce graduates who address the Grand Challenges for Engineering and the UNSDG's.

As a project-based degree, our students will Conceive-Design-Implement-Operate at least 4 engineering systems (or projects) throughout their degree, with at least 2 of such projects being based in real-life industry challenges.

Their projects will address the Grand Challenges and the UNSDG's. To assist them, students will also be taught to meaningfully use current Industry 4.0 tools and softwares such as 3-D Printing, Computational Fluid Dynamics and Finite Element Method.

This programme is recognised as equivalent to that of the Lancaster University's MASTER OF ENGINEERING MECHANICAL ENGINEERING WITH HONOURS (MEng Hons). Upon successfully completing the programme, graduates will also be awarded the MEng Hons degree from Lancaster University. They will be awarded two certificates, making them graduates of both Sunway University and Lancaster University.

VALIDATED BY:



## PROGRAMME STRUCTURE - Subjects

### Year 1

- Engineering Materials
- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Physics
- Programming for Engineers
- Sustainable Engineering Design

### Year 2

- Advanced Engineering Calculus
- Communication Skills
- Computer Modelling & 3D Printing
- Electrical Power Systems
- Engineering Mathematics 3
- Engineers in Society
- Entrepreneurial Mindset & Skills
- Fluid Mechanics
- Project Management & Engineering Design
- Statics
- Thermodynamics & Heat Transfer

### Year 3

- Advanced Fluid Mechanics
- Advanced Thermodynamics & Heat Transfer
- Dynamics
- Instrumentation, Measurement & Controls
- Manufacturing Processes
- Microprocessor Systems
- Numerical Analysis & Simulation Tools in Engineering Design
- Solid Mechanics
- Vibrations



## CAREER PROSPECTS

- Automotive Engineer
- Automation Engineer
- CAD/CAM Engineer
- Design Engineer
- Manufacturing Engineer
- Materials Engineer
- Mechanical Engineer
- Project Engineer
- Robotic Engineer
- Systems Engineer

### Year 4

- Final Year Project 1
- Final Year Project 2
- Industrial Training
- Mechanical Engineering Group Project 1
- Mechanical Engineering Group Project 2

### Year 4 Electives (Choose 5)

- Construction Technology
- Introduction to Statistics with SPSS Lab
- Introduction to Business
- Introduction to Business Finance
- Introduction to Psychology
- Machine Learning
- Principles of Entrepreneurship
- Principles of Marketing
- Robotics I
- Sustainable Digital Construction

## MOHE COMPULSORY GENERAL STUDIES SUBJECTS

### For Local students:

- Appreciation of Ethics & Civilisation
- Bahasa Kebangsaan A  
*(Applicable to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu) / Critical Thinking*
- Community Service for Planetary Health
- Integrity & Anti-Corruption
- Philosophy & Current Issues

### For International students:

- Appreciation of Ethics & Civilisation
- Community Service for Planetary Health
- Critical Thinking
- Integrity & Anti-Corruption
- Malay Language for Communication 2





# FACILITIES

## SCHOOL OF ENGINEERING & TECHNOLOGY LABS

The School of Engineering & Technology is well-equipped with state-of-the-art facilities to meet our teaching and research needs. We constantly invest in upgrading, constructing or acquiring new facilities to enhance the learning experience and advance our research possibilities.



CyberSecurity Intelligence (CSI) Lab



House of Multimodal Evolution (HOME) Lab

School of Engineering & Technology (SET) Labs building







Electronic Engineering Lab



Electronic Engineering Lab



Electrical Power Lab



Chemistry Instrument Lab



Control Lab



Engineering Physics Lab



Heat Transfer Lab



Fluid Mechanics Lab



Sunway Centre for Electrochemical Energy and Sustainable Technology Lab



Chemical Engineering Lab equipped with Mass Spectrometer



Research Centre for Nano-Materials and Energy Technology Lab

**MORE LABS COMING SOON:**

- Mass Transfer Lab
- Instrumentation & Control Lab
- Renewable Energy Lab
- Advanced Electronics Engineering Lab
- Chemistry Lab (Organic & Inorganic)
- Process Control & Simulation Lab
- Mechanical Workshop
- Solid Mechanics & Materials Lab
- Sustainable Systems Lab & more!

# MOBILITY & STUDY ABROAD

PROGRAMME	MOBILITY OPTIONS*				
	Lancaster University		University of California, Berkeley		Korean Summer/Winter programme
	Summer programme	Study abroad	Start-up semester	Bootcamp	
DURATION	3 weeks	1 semester	1 semester	4½ days	2 weeks
COMPUTER SCIENCE	✓	✓	✓	✓	✓
INFORMATION SYSTEMS (DATA ANALYTICS)	✓	✓	✓	✓	✓
INFORMATION TECHNOLOGY (COMPUTER NETWORKING AND SECURITY)	✓	✓	✓	✓	✓
SOFTWARE ENGINEERING	✓	✓	✓	✓	✓
INFORMATION TECHNOLOGY	✓	✓	✓	✓	✓
CHEMICAL ENGINEERING	✓	✓	-	-	✓
ELECTRONIC & ELECTRICAL ENGINEERING	✓	✓	-	-	✓
MECHANICAL ENGINEERING	✓	-	-	-	✓

\*Terms & conditions apply. The study plan may change on a case-by-case basis.





# ACTIVITIES BEYOND THE CLASSROOM

## COMPETITION AND RECOGNITION



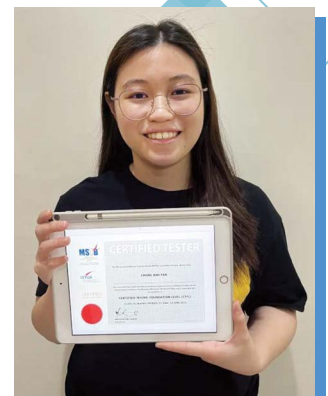
Our students made it to the Top 5 of the recent nationwide Blockchain Hackathon, winning a total of USD 650 with their project called "Mint Cycle", which aims to enhance the ESG footprint of companies in Malaysia by utilising a smart recycling machine. The winning team: Deaberniswarar Sharma and Sasitheran Pathmanathan (Data Analytics students); Low Kwok Chung and Kirthyiban Nair (Computer Science students).



11 & 12 June 2023 - Student team participated in Robocon Competition 2023. (Soong Jia Le, Kho Zi Jian, Brandon Choo Wee Kheong, Lilian Ung Wei Fang, Misha Camelia bt Raemos Ridzuan, Koh Ji Shin, Andres Ernesto Pujazon Cheng, Ooi Ke Vin, Tang Wei Liang)



Alicia Chong Tsui Ying, Data Analytics student, was one of the winner for the Problem Statement Category Award during the Microsoft Code; Without Barriers Hackathon 2023 launched by Microsoft in collaboration with iTrainAsia and Girls in Tech APAC Malaysia on 16 June 2023.



Software Engineering alumni, Venessa Ngu Qian Hui and Chong Kah Yan has successfully passed the International Software Testing Qualifications Board (ISTQB) Certified Tester Foundation Level (CTFL) examination and has been recognized as an ISTQB Certified Software Tester – Foundation Level.



# WORKSHOPS



**SUNWAY UNIVERSITY** School of **ENGINEERING & TECHNOLOGY**

**IEM Recruitment Drive**

Date: 26<sup>th</sup> June 2023 (Mon)  
Time: 10am – 1pm  
Venue: LT4, Level G, Uni Building

**SYNOPSIS**

**Highlights:**

- Welcoming and future plans for Sunway IEM Student Section
- "Introduction to IEM" by IEM Speakers
- Registration as student members for Engineering Students

**Items to Bring**  
(For Registration as IEM Student Member):

- Copy of IC (for local students) or passport (for foreign students)
- Passport photo (if any)
- One-time RM50 registration fee (in cash)

Registration starts at 11.30am

**THE SPEAKER**



**IEM**  
The Institution of Engineers, Malaysia  
Institution of Engineers Malaysia (IEM)

The Institution of Engineers Malaysia (IEM) was established in 1959 and its primary function is to promote and advance the science and profession of engineering and to facilitate the exchange of information and ideas related to engineering. IEM regularly organizes many courses, seminars, talks and visits, which are of interest to the engineering profession as well as to the developers and well-being of engineers. These activities provide an avenue for IEM members to network, socialise and be exposed to the outside world. Engineers and engineering students who have joined IEM as members would be informed regularly of the events and upcoming activities of the IEM through the monthly bulletins, the Juniors write enjoying a cheaper rate for IEM-organised activities if there is a charge.

**REGISTRATION**

Please click [here](#) to register



Sunway University  
A member of the Sunway Education Group  
No. 5, Jalan Universiti, Bandar Sunway,  
47500 Selangor Darul Ehsan, Malaysia.  
[www.sunway.edu.my](http://www.sunway.edu.my)

Owned and governed by the  
**Jeffrey Cheah Foundation**  
Member of the Sunway Group



26 June 2023 - The Institution of Engineers Malaysia (IEM) Recruitment Drive

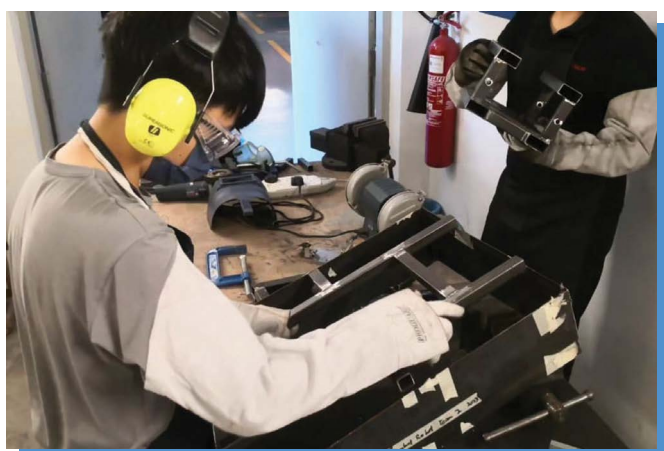
5 July 2023 - IT Recruitment Drive with participating companies such as Silverlake, Huawei, DKSH, RHB, UOB, VLAN Asia and HILTI.



19 October 2023 - Hacking 101: Introduction to Hacking



2 November 2022 - Industry panel and networking event for knowledge-sharing with industry leaders, data science professionals, students and alumni.



Sunway Robotics Club



Sunway Analytics Society



# TALKS

**BIG DATA ALGORITHMS**  
THE K-NEAREST NEIGHBOUR CLASSIFICATION ALGORITHM EXPLAINED

**JAN-WILLEM MIDDELBURG**

- Author of the Enterprise Big Data Framework publications.
- A decade of experience in Big Data, Machine Learning and AI algorithms design and applications.

**06 JUNE 2023 TUESDAY** | LECTURE THEATER 1  
**2:00-3:00 PM (GMT+8)**

Organized by: MDEC, Sunway University, Sunway College

Chaired and governed by the Jeffrey Cheah Foundation

6 June 2023 - Big Data Algorithms Talk by Mr Jan-Willem Middelburg (CEO of Cybiant).

**ALUMNI & INVITED INDUSTRY SPEAKERS TALKS**

**JAMES GARNER** (Sticky CEO)  
**PRISCILLA ISRAEL** (Sticky Co-Founder-COO)  
**CHIRAG GUDE** (Amazon Web Services Delivery Practice Manager)

**MICROSOFT TEAMS**

**22 MARCH 2023**  
**6 PM - 7 PM**

Organized by: Sunway University, Sunway College, MDEC, etc.

Chaired and governed by the Jeffrey Cheah Foundation

22 March 2023 - Lancaster Alumni and Invited Industry Speakers Series. Speakers are from United Kingdom.



**Machine Learning & Agriculture Automation**

Date: 12<sup>th</sup> May 2023  
Time: 10.00AM  
Venue: UC-6-10

**SYNOPSIS**

In this sharing session, Dr Kuang will introduce and share recent research work at the University of Waikato in the area of Machine Learning in Agriculture. This session will serve as a platform for audience to exchange ideas and explore potential collaboration between Sunway University and University of Waikato.

**THE SPEAKER**

**Dr Kuang Ye Chow**  
Programme Leader - EEE  
School of Engineering, University of Waikato, New Zealand

**REGISTRATION**

Please click [here](#) to register

Sunway University, A member of the Sunway Education Group  
No.5, Jalan Universiti, Bandar Sunway, 47500 Selangor Darul Ehsan, Malaysia.  
university@sunway.edu.my

Chaired and governed by the Jeffrey Cheah Foundation

12 May 2023 - Research Sharing on Application of Machine Learning in Agriculture: Recent Project in Waikato by Dr. Kuang Ye Chow (University of Waikato).



# COMPANY VISITS



Company visit to Air Asia.



Company visit to SAS.



Company visit to Daikin Malaysia.



# BRINGING YOU FURTHER

## INTERNSHIP AND EMPLOYMENT OPPORTUNITIES

### Accounting

- Deloitte SEA Services Sdn Bhd
- Ernst & Young (EY)
- KPMG
- Pricewaterhouse Coopers

### Aerospace

- GE Aerospace
- Honeywell
- Lockheed Martin

### AgriTech

- IOI Corporation Bhd

### Automotive

- BMW
- Mercedes-Benz (M) Sdn Bhd
- Perodua
- Proton
- Sime Darby

### Banking

- CIMB Bank Bhd
- Hong Leong Bank Bhd
- Malayan Banking Berhad
- OCBC Bank
- Public Bank Berhad
- RHB Bank
- UOB Bank

### Building Material

- Tasek Corporation Bhd
- YTL

### Business service

- Experian
- FUJIFILM Business Innovation
- GrowthOps
- Ikano Insight
- INFOPRO
- NielsenIQ
- Konica Minolta Business Solutions
- Priority Dynamics Sdn Bhd
- Roche Services (APAC) Sdn Bhd

### Computer Software

- Acestor Sdn Bhd
- Aptivity Lab Sdn Bhd
- AS Networks (M) Sdn Bhd
- Ascentrio Sdn Bhd
- BASS Sdn Bhd
- Commerce.Asia
- Cornet Research
- Dassault Systèmes
- Fusionex Corp Sdn Bhd
- Juris Technologies Sdn Bhd
- Netiquette Software (M) Sdn Bhd
- PeopleQuest
- Philip Solutions PLT
- PulseSync Sdn Bhd
- SAS Institute Sdn Bhd
- Service Rocket

### Computer Hardware

- Dell
- Hewlett-Packard
- Western Digital

### Construction

- Gamuda
- IJM Corporation
- Sunway Construction

### Consumer Goods & Services

- Carlsberg
- Dutch Lady Milk Industries
- Estee Lauder
- F&N
- FOS Apparel Group Sdn Bhd
- Heineken
- Nestle
- Sherwin Williams Services (M) Sdn Bhd

### Cybersecurity

- Condition Zebra (M) Sdn Bhd
- LGMS Malaysia
- Sysarmy Sdn Bhd
- Vigilant Asia (M) Sdn Bhd

### E-commerce Service

- iPay 88 Sdn Bhd
- Shopee

### Electronics

- Dyson Manufacturing Sdn Bhd
- Flextronics Group
- Globetronics
- Panasonic Group
- Samsung Group
- Sony

### Energy Solutions

- Baker Hughes
- First Solar Malaysia Sdn Bhd
- General Electrics (GE)
- Ranhill Worley
- Schneider Electric
- Technip

### Food & Beverage

- MyBurgerlab
- Sushi Kin Sdn Bhd

### Information Technology

- Accenture
- Delaware Consulting (M) Sdn Bhd
- Hilti Asia IT Services (HAITS)
- IBM Malaysia
- Mesiniaga Berhad
- Metacloud Sdn Bhd
- Quandatics Sdn Bhd
- Sunway Group IT Shared Services Sdn Bhd



**Manufacturing**

- Continental Tyres
- Daikin
- Hartalega
- Top Glove

**Marketing & Advertising**

- Bean Search Expert Sdn Bhd
- C27
- IPG Media Brands Malaysia
- Moving Walls Sdn Bhd
- SearchGuru Sdn Bhd

**Media and Broadcast Solutions**

- Grass Valley (M) Sdn Bhd
- Media Prima Berhad

**Media/Entertainment**

- Cinema Online Sdn Bhd

**Oil & Gas**

- Exxon
- Petronas
- Shell

**Oilfield Services & Equipment**

- Schlumberger

**Oleochemicals**

- Kuala Lumpur Kepong Berhad
- FPG Oleochemicals

**Publishing**

- Penerbitan Pelangi Sdn Bhd

**Research**

- Institute for Democracy and Economic Affairs (IDEAS)
- MIMOS Berhad

**Semiconductors**

- Intel Group
- Infineon Technologies
- OSRAM Opto
- Semiconductors Malaysia Sdn Bhd
- Carsem (M) Sdn Bhd
- Unisem (M) Bhd
- SilTerra Malaysia Sdn Bhd

**Telecommunication**

- Digi Telecommunications
- Huawei Technologies (M) Sdn Bhd
- Maxis Bhd
- Motorola
- Telekom Malaysia
- TIME dotcom Bhd
- Webe Digital

**Theme Park**

- Sunway Lagoon

**Transportation/Logistics**

- Commerceone Solution Sdn Bhd
- DHL Information Services
- DKSH
- Grab

**Transportation Solution**

- Alstom
- Mott-Macdonald

**Travel Agency**

- Sunway Travel Sdn Bhd

**Utilities**

- TNB
- YTL Power
- Powertek
- Genting Sanyen Power

**Web Development**

- Ebryx Tech
- Excelfixer



**Sunway University**  
**awarded #1 in**  
**Graduate Employability**  
**2022 & 2023**



# EXTERNAL ADVISORY COMMITTEE

External Advisory Committee (EAC) acts as an advisory committee for the Programmes Committee. It comprises of leaders in academia and industry as well as student alumni who support and are able to provide counsel and guidance for programme development in order for the programme to achieve its goals.

## DEPARTMENT OF COMPUTING & INFORMATION SYSTEMS



**Ms Emily Chang Ming Li**  
BSc (Hons) Computer Science alumna  
**Company:** Gitlab Inc  
**Position:** Support Engineer



**Dr David Chieng Heng Tze**  
**Institution:** University of Nottingham Ningbo China  
**Position:** Associate Professor



**Mr Daniel Ng**  
**Company:** Neo4j  
**Position:** Senior Director APAC



**Mr Eddy Lee**  
**Company:** The Estee Lauder  
**Position:** Director, Architecture



**Mr Fong Choong Fook**  
**Company:** LGMS Berhad  
**Position:** Chairman



**Herman Bin Md Tahir**  
**Company:** Appfuxion Consulting Sdn Bhd  
**Position:** Senior Test Manager



**Mr Julius Uy**  
**Company:** SMRT Corporation Ltd, Singapore  
**Position:** Head of Technology



**Mr Kevin Khoo Min Sinn**  
**Company:** Sunway Group  
**Position:** Chief Information Officer



**Mr Khor Swee Kweng**  
**Institution:** SAS Institute, Malaysia  
**Position:** Principal Adviser, Education & Academic Program



**Dr Leslie Tiong Ching Ow**  
MSc in Computer Science (by Research) alumnus  
**Institution:** Samsung Electronics  
**Position:** Senior Engineer



**Dr Lim Kai Li**  
MSc in Computer Science (by Research) alumnus  
**Institution:** The University of Queensland  
**Position:** Research Fellow



**Dr Tan Ee Xion**  
**Institution:** International Medical University (IMU)  
**Position:** Senior Lecturer



**Dr William Yeoh**  
**Institution:** Deakin University, Australia  
**Position:** Associate Professor

## DEPARTMENT OF ENGINEERING



**Ir Dr Calvin Chok Vui Soon**

**Company:**  
KL-Kepong Oleomas

**Position:**  
Technology Manager



**Ir Chang Yew Cheong**

**Company:**  
Abbaco Controls Sdn Bhd

**Position:**  
Director



**Ir Chen Thiam Leong**

**Company:**  
Primetech Engineers Sdn Bhd

**Position:**  
Advisor



**Dr Chin Wai Meng**

**Company:**  
Daikin Research & Development Malaysia Sdn Bhd

**Position:**  
Deputy General Manager, Development Support Division



**Mr Chin Wei Rick**

**Company:**  
Smith & Nephew

**Position:**  
Project Manager



**Ir Chong Chew Fan**

**Company:**  
Greatians Consulting Sdn Bhd

**Position:**  
Director



**Mr Chong Kee Yum**

**Company:**  
Bursa Malaysia

**Position:**  
Manager, PMO



**Mr Henry Lee Siew Hang**

**Company:**  
Nrol Sdn Bhd

**Position:**  
Director of Corporate Sustainability



**Ir Dr Ng Kok Chiang**

**Company:**  
ACO Group Berhad

**Position:**  
Member Board of Directors



**Ir Rafil Elyas**

**Company:**  
East One-Zero-One Sdn Bhd

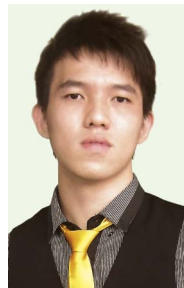
**Position:**  
CEO



**Ir Rozali Ahmad**

**Company:**  
RNZ Integrated (M) Sdn Bhd (RNZ) and DAR Energy Sdn Bhd (DAR)

**Position:**  
CEO



**Mr Tan Lim Wee Kwan**

**Company:**  
Top Glove Berhad

**Position:**  
Senior Project Manager



**Mr Tan Yeong Shun**

**Company:**  
Texas Instruments

**Position:**  
Automation & Analytics Manager



# WHERE ARE OUR GRADUATES NOW?



**Aida Natasha Binti Khalil Ong**  
**BSc (Hons) Information Systems**  
**(Business Analytics)**  
*Now known as Bachelor of Information Systems (Honours) (Data Analytics)*  
**Company:** Maybank Investment Bank  
**Position:** Executive, Project Management



**Fennie Lee Jia Xian**  
**BSc (Hons) in Computer Science**  
**Company:** Hilti Asia IT Services (HAITS)  
**Position:** UX Cohort Lead



**Chaang Yunhua**  
**BSc (Hons) in Computer Science**  
**Company:** Tencent Cloud International  
**Position:** Senior Partner Business Development Manager



**Joanavene Tan Qie Ven**  
**BSc (Hons) Information Technology**  
**(Computer Networking and Security)**  
**Company:** SeaMoney (Singapore)  
**Position:** Digital Banking IT Risk and Compliance Associate



**Cheah Yung Jien**  
**BSc (Hons) Information Technology**  
**(Computer Networking and Security)**  
**Company:** Tridentech Solutions Sdn Bhd  
**Position:** Chief Technical Officer



**Lee Shu Yi**  
**Bachelor of Software Engineering (Hons)**  
**Company:** Alibaba Group  
**Position:** Product Manager



**Chee Chem Zing**  
**Bachelor of Science (Honours) in Information Technology**  
**Company:** Digital Route Sdn Bhd  
**Position:** Senior Software Engineer



**Lee Yi Fei**  
**BSc (Hons) Information Systems**  
**(Business Analytics)**  
*Now known as Bachelor of Information Systems (Honours) (Data Analytics)*  
**Company:** BASF Asia Pacific Service Centre Sdn Bhd  
**Position:** Senior Analyst, Reporting & Business Intelligence, Controlling



**Chen Kah Weng**  
**BSc (Hons) in Computer Science**  
**Company:** Accenture Singapore  
**Position:** Technology Consultant



**Marcus Lu Xian-Zheng**  
**BSc (Hons) in Computer Science**  
**Company:** Cognitive Consulting Sdn Bhd  
**Position:** Robotics Process Automation Technical Manager



**Choong Moon Zhe**  
**Bachelor of Science (Honours) in Information Technology**  
**Company:** KPMG Malaysia  
**Position:** Software Developer



**Ngho Chin Joe**  
**BSc (Hons) in Computer Science**  
**Company:** Decision Science Agency Pte Ltd  
**Position:** Full Stack Developer



**Natalie Choo Yin Yii**  
Bachelor of Software Engineering (Hons)

**Company:** Grab Malaysia  
**Position :** Software Engineer-backend



**Tan Tze Hong**  
Bachelor of Software Engineering (Hons)

**Company:** Maybank Berhad  
**Position :** Technical Analyst



**Neeven Hossam Mohamed Elafifi**  
BSc (Hons) Information Systems  
(Business Analytics)  
*Now known as Bachelor of Information Systems (Honours)  
(Data Analytics)*

**Company:** PwC (Middle East)  
**Position :** Senior Associate,  
Risk Assurance



**Tsai Yao Cherng**  
BSc (Hons) in Computer Science

**Company:** Deloitte  
**Position :** SEA IT Manager  
(SEA Services)



**Nicholas Chan Khin Whai**  
BSc (Hons) Information Systems  
(Business Analytics)  
*Now known as Bachelor of Information Systems (Honours)  
(Data Analytics)*

**Company:** Standard Chartered Bank  
Malaysia  
**Position :** Analyst, Risk and Control



**Tunku Intan Sophia Binti  
Tunku Noorzaman**  
BSc (Hons) in Computer Science

**Company:** Access World  
**Position :** IT Developer



**Nyow Ning Xin**  
BSc (Hons) Information Technology  
(Computer Networking and Security)

**Company:** AVEVA Singapore  
**Position :** Information Technology  
Business Analyst



**Vinudha A/P Jeya Sangar**  
BSc (Hons) Information Systems  
(Business Analytics)  
*Now known as Bachelor of Information Systems (Honours)  
(Data Analytics)*

**Company:** Maybank Shared Services  
Group  
**Position :** Senior Executive,  
Business Data Analysis



**Prashanth George A/L Mathew**  
Bachelor of Science (Honours) in  
Information Technology

**Company:** Ricoh (Malaysia) Sdn Bhd  
**Position :** Regional Technical  
Account Support  
Specialist



**Yap Zhi Kai**  
Bachelor of Science (Honours) in  
Information Technology

**Company:** Fusionex Group  
**Position :** Senior Project Manager



**Tan Jia Wen**  
Bachelor of Science (Honours) in  
Information Technology

**Company:** Pulsifi  
**Position :** Backend Developer



**Yeap Khor Chin**  
Bachelor of Software Engineering (Hons)

**Company:** Woow Moment Limited  
**Position :** System Analyst

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UNIVERSITY



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**2022 & 2023**

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We are immensely proud of our graduates who have gone on to excel in their chosen fields and made such a huge positive impact to the performances of Malaysia's and some of the world's biggest companies.

**Sunway University Graduates, Truly A CLASS ABOVE.**

\*Talentbank GE Index 2023



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