

# Computing & IT





# Future Education @ MCKL

The World Economic Forum has identified 7 Emerging Profession Clusters and 5 Future-Oriented Skills Clusters in the Jobs of Tomorrow, January 2020 report. MCKL, as The Institution of Excellence for Life, is committed to develop future-ready students by delivering quality, relevant and in-demand curriculum.

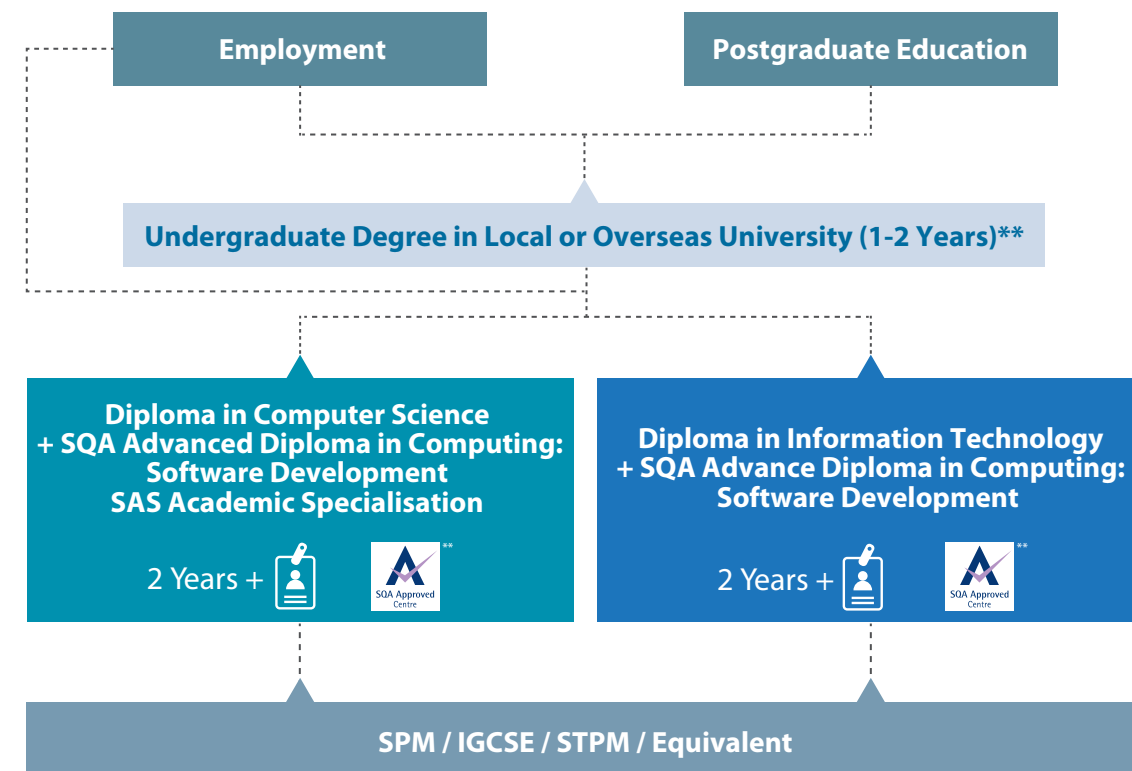
## 7 Emerging Profession Clusters



## 5 Future-Oriented Skills Clusters



## EDUCATION PATHWAY



\* Industrial Training (12 weeks)

\*\* Terms and Conditions Apply

## ENTRY REQUIREMENTS

### SIJIL PELAJARAN MALAYSIA (SPM)

Min. 3 credits including Mathematics and a pass in Bahasa Melayu and Sejarah (History)

### O LEVEL / IGCSE

Min. 3 credits including Mathematics

### UEC

Min. 3Bs including Mathematics

### SIJIL TINGGI PERSEKOLAHAN MALAYSIA (STPM)

Min. a Grade C in any subjects and a credit in Mathematics at SPM level or its equivalent

### OTHER QUALIFICATIONS

Other equivalent qualifications recognised by the Ministry of Higher Education (MOHE) or Malaysian Government will be considered on a case-by-case basis

## English Requirements (International)

CEFR Mid B1

IELTS 4.5

TOEFL iBT 33

### Or Equivalent

### NOTE:

- Candidates with a pass in Mathematics at SPM level (or Mathematics equivalent to SPM) and without a Mathematics subject in their admission qualification need to take and pass the reinforcement Mathematics subject that is equivalent to the SPM level. The reinforcement Mathematics subject must be offered in the first semester or before enrolment with an unconditional offer.
- Candidates with a credit in Computing-related subject(s) at the SPM level (or equivalent to SPM level) may be given preferential consideration.



# Diploma in Information Technology

KL : (N/0611/4/0067) (12/27) (MQA/FA14019)  
PG: (N/0611/4/0113) (05/27) (MQA/FA14312)

As the world elevates to the era of Fourth Industrial Revolution (IR4.0), it has created a great demand for talents in the Information Technology (IT) and related industries.

This programme is designed to equip students with broad-based knowledge and future-oriented skills, such as Internet of Things (IoT), Cloud Computing, and Cybersecurity. These Tech Disruptive Skills are highly sought after by the industry.

Upon completion of this programme, students can join the workforce, become technopreneurs or further their studies at our partner universities in any field of specialisation, such as IoT and Cybersecurity.

## One Programme, Two Certificates



MCKL is a Scottish Qualifications Authority (SQA) Approved Centre for delivering the SQA Advanced Diploma in Computing: Software Development. Upon completion, students will receive two certificates: the diploma from MCKL and the advanced diploma from SQA, providing them with more options for future progression.

## Compulsory Industrial Training

12-week industrial training in the final semester provides real-life working experience and seamless transition to employment.

## Industry Certification

As a member institution of AWS (Amazon Web Services) Academy, MCKL offers cloud-related courses using AWS materials, preparing students for the AWS Certified Cloud Practitioner exam.



## Industry-Aligned Skills for Immediate Workforce Entry

Students gain a practical, industry-aligned skillset that ensures they are workforce-ready upon graduation.

## Specialise in IoT and AI

Students explore the convergence of technology and innovation, delving into the realms of Internet of Things (IoT) and Artificial Intelligence (AI) to unlock the potential of interconnected devices and intelligent systems.

## Fast Track to Final Year Degree in High Ranked Universities

Upon completion, students have numerous options for a final year degree at high-ranked universities, accelerating their education.

## Affordable Overseas Pathway

Students can pursue quality education abroad at an affordable cost, providing access to diverse cultural experiences and internationally recognised qualifications. Special discounts are provided through our partner universities.

## Specialised Lab for IoT

A dedicated IoT lab is equipped for students to explore practical applications of IoT equipment like microcontrollers, sensors, and electrical components, enhancing their learning experience.

## PROGRAMME STRUCTURE

### SUBJECTS OFFERED

#### Core

- Computer Organisation and Architecture
- Fundamentals of Database
- Discrete Mathematics
- Calculus and Algebra
- Data Communications and Networking
- Computers and Operating Systems
- Programming with Python
- Systems Analysis and Design
- Statistics
- Cybersecurity
- Professionalism and Ethics in Computing

#### Discipline Core

- Design Thinking
- Human Computer Interaction
- Project Management
- Data Structure and Algorithms
- Mobile Computing
- Web Computing
- Object-Oriented Development
- Cloud Computing

#### Industrial Training

#### Capstone Project

#### Specialisation

- Fundamentals of IoT
- IoT Sensors and Devices
- IoT Data Analytics
- Introduction to Intelligent Systems
- Artificial Intelligence

### \*MATA PELAJARAN PENGAJIAN UMUM (MPU) SUBJECTS:

- Falsafah dan Isu Semasa
- Integrity and Anti-Corruption
- Character Formation
- Service Learning
- Bahasa Kebangsaan A  
For local students who do not have credit in SPM BM
- Bahasa Melayu Komunikasi 1  
For international students

### CAREER OPTIONS:

- Web Designer
- Web Developer
- App Developer
- Software Engineer
- Programmer
- System Analyst
- System Software Programmer
- Analyst Programmer
- IT Analyst
- ICT Manager
- ICT System Administrator
- Network Consultant
- IoT Specialist
- IoT Automation Engineer

#### NOTE:

\* MPU Subjects: The Ministry of Higher Education (MOHE) requires all students to take Mata Pelajaran Umum (MPU) (i.e. General Studies) within the duration of their studies. MCKL established a series of subjects that different programmes need to implement for all students to meet the Ministry's requirements. Subjects will differ depending on the institution and the level of studies of the student.

## INTAKE

January, April & August

# 2.5

Years Programme



\*Terms and Conditions Apply

# Diploma in Computer Science

KL : (N/0613/4/0036)(12/27) (MQA/FA14018)  
PG: (N/0613/4/0065) (12/28) (MQA/FA14314)

As the world elevates to the era of Fourth Industrial Revolution (IR4.0), it has created a great demand for talents in the Computer Science (CS) and related industries.

This programme is designed to equip students with broad-based knowledge and future-oriented skills, such as Data Science, Cloud Computing, and Machine Learning. These Tech Disruptive Skills are highly sought after by the industry.

Upon completion of this programme, students can join the workforce, become technopreneurs or further their studies at our partner universities in any field of specialisation, such as Software Engineering and Data Science.

One Programme, Two Certificates



MCKL is a Scottish Qualifications Authority (SQA) Approved Centre for delivering the SQA Advanced Diploma in Computing: Software Development. Upon completion, students will receive two certificates: the diploma from MCKL and the advanced diploma from SQA, providing them with more options for future progression.

Specialise in Data Science

An interdisciplinary study of computer science, mathematics, and statistics to harness vital information from big data for decision making.

Fast Track to Final Year Degree in High Ranked Universities

Upon completion, students have numerous options for a final year degree at high-ranked universities, accelerating their education.

Affordable Overseas Pathway

Students can pursue quality education abroad at an affordable cost, providing access to diverse cultural experiences and internationally recognised qualifications. Special discounts are provided through our partner universities.

Integrated Professional Certification

Students will be awarded the SAS Academic Specialization upon completion of this programme.



Compulsory Industrial Training

12-week industrial training in the final semester provides real-life working experience and seamless transition to employment.

Industry Certification

As a member institution of AWS (Amazon Web Services) Academy, MCKL offers cloud-related courses using AWS materials, preparing students for the AWS Certified Cloud Practitioner exam.



Industry-Aligned Skills for Immediate Workforce Entry

Students gain a practical, industry-aligned skillset that ensures they are workforce-ready upon graduation.

\*Terms and Conditions Apply

## PROGRAMME STRUCTURE


SUBJECTS OFFERED		
<b>Core</b> <ul style="list-style-type: none"><li>Computer Organisation and Architecture</li><li>Fundamentals of Database</li><li>Discrete Mathematics</li><li>Calculus and Algebra</li><li>Data Communications and Networking</li><li>Computers and Operating Systems</li><li>Programming with Python</li><li>Systems Analysis and Design</li><li>Statistics**</li><li>Cybersecurity</li><li>Professionalism and Ethics in Computing</li></ul>	<b>Discipline Core</b> <ul style="list-style-type: none"><li>Design Thinking</li><li>Human Computer Interaction</li><li>Project Management</li><li>Data Structure and Algorithms</li><li>Mobile Computing</li><li>Web Computing</li><li>Object-Oriented Development</li><li>Cloud Computing</li></ul> <b>Industrial Training</b> <b>Capstone Project</b>	<b>Specialisation</b> <ul style="list-style-type: none"><li>Fundamentals of Data Science**</li><li>Data Processing and Visualisation**</li><li>Introduction to Data Mining**</li><li>Machine Learning**</li><li>Big Data Architecture</li></ul>
** Uses SAS content and software.		
<b>*MATA PELAJARAN PENGAJIAN UMUM (MPU) SUBJECTS:</b>	<ul style="list-style-type: none"><li>Falsafah dan Isu Semasa</li><li>Integrity and Anti-Corruption</li><li>Character Formation</li><li>Service Learning</li><li>Bahasa Kebangsaan A For local students who do not have credit in SPM BM</li><li>Bahasa Melayu Komunikasi 1 For international students</li></ul>	
<b>CAREER OPTIONS:</b>	<ul style="list-style-type: none"><li>Applications Developer</li><li>Programmer</li><li>Software Engineer</li><li>Software Architect</li><li>Software Developer</li><li>Systems Analyst</li><li>Research Analyst</li></ul>	<ul style="list-style-type: none"><li>Systems Developer</li><li>Technical Support Engineer</li><li>IT Analyst</li><li>Network Engineer</li><li>Database Administrator</li><li>Data Analyst</li><li>Data Engineer</li></ul>
<b>NOTE:</b> * MPU Subjects: The Ministry of Higher Education (MOHE) requires all students to take Mata Pelajaran Umum (MPU) (i.e. General Studies) within the duration of their studies. MCKL established a series of subjects that different programmes need to implement for all students to meet the Ministry's requirements. Subjects will differ depending on the institution and the level of studies of the student.		

INTAKE

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2.5

Years Programme







**METHODIST  
COLLEGE**  
*Veritas Vincit Omnia*

**Kuala Lumpur • Penang**

## CONTACT US

### Business Hours

Monday to Saturday 9AM – 5PM

*(Closed on Sunday and Public Holidays)*

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### ENQUIRIES

#### Kuala Lumpur Campus

Off, Jalan Tun Sambanthan 4, Brickfields,  
50470 Kuala Lumpur, Wilayah Persekutuan Kuala Lumpur

📞 +603 2274 1851

✉️ [admission@mckl.edu.my](mailto:admission@mckl.edu.my)

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#### Penang, Pykett Campus

Lebuhraya Pykett, 10400 George Town, Pulau Pinang

📞 +604 217 5088

✉️ [admission.pg@mckl.edu.my](mailto:admission.pg@mckl.edu.my)

**[mckl.edu.my](http://mckl.edu.my)**

**[Facebook](#)**

**[Instagram](#)**



The information in this brochure was correct at the time of publication (November 2025). Methodist College Kuala Lumpur (MCKL) reserves the right to alter this information should the need arise.