METHODIST COLLEGE | KUALA LUMPUR

Diploma in Computer Science (Data Science)

KPT/JPS (N/481/4/0825)(MQA/PA14018)12/27

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.

INTAKE

January, May & August

2.5
Years Programme

Specialise in Data Science

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

Future-oriented Curriculum

Exposure to Big Data Architecture, Cloud Computing and Machine Learning.

Compulsory Industrial Training

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

Entrepreneurship Driven

Build foundation as a Technopreneur through studies of Innovation, Entrepreneurship and Digital Business.

Industry Certification

Students can obtain International Certification of Digital Literacy (ICDL) for various IR4.0 skills set, as well as be certified by AWS Academy as a Cloud Practitioner.

aws academy

ICDL The Digital Skills Standard

PROGRAMME STRUCTURE

YEAR 1

- Information Technology and Computer Science
- Computer Organisation and Architecture
- Fundamentals of Databases
- Data Communication and Networking
- Discrete Mathematics
- Calculus and Algebra
- Programming with Python
- Programming with R
- System Analysis & Design
- Design Thinking
- Human Computer Interaction
- Statistics
- MPU I*
- MPU II*
- MPU III*

YEAR 2

- Fundamentals of Data Science
- Introduction to Data Mining
- Big Data Architecture
- Cloud Computing for Big Data Analytics
- Machine Learning
- Project Management
- Data Processing and Visualization
- Introduction to Data Governance
- Data Structure and Algorithms
- Capstone Project
- MPU IV*
- Elective I
- Elective II
- Elective III

YEAR 3

- Industrial Training

ELECTIVE COURSES (choose 3 only)

- Fundamentals of Innovation and Entrepreneurship
- Digital Business
- Mobile Computing
- Web Computing
- Fundamentals of Software Engineering

*MPU Subjects:

- Pengajian Malaysia
- Communication Skills
- Moral Studies
- Service Learning
- Bahasa Kebangsaan A
  - For local students who do not have credit in SPM BM
- Bahasa Melayu Komunikasi 1
  - For international students

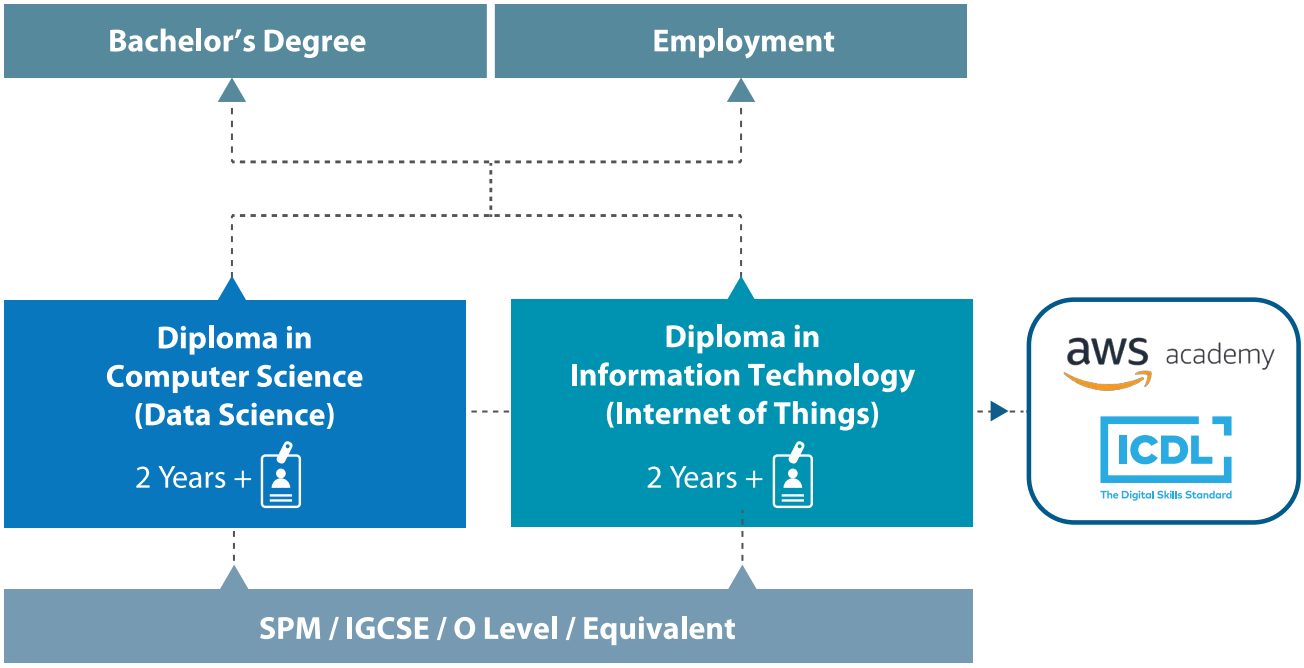
Career Options:

- Applications Developer
- Programmer
- Software Engineer
- Software Architect
- Software Developer
- Systems Analyst
- Research Analyst
- Systems Developer
- Technical Support Engineer
- IT Analyst
- Network Engineer
- Database Administrator
- Data Analyst
- Data 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.

EDUCATION PATHWAY



ENTRY REQUIREMENTS

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

O-LEVELS / IGCSE
Min. 3 credits including Mathematics

UNIFIED EXAMINATION CERTIFICATE (UEC)
Min. 3Bs including Mathematics

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

NOTE:

- Students without a credit in Mathematics at SPM level or its equivalent may be admitted if the Certificate programme contains subjects in Mathematics that are equivalent to Mathematics at SPM level.
- Students with a credit in computing-related subjects at SPM level or its equivalent may be given preferential consideration.