

# INFORMATION TECHNOLOGY



**State-of-the-art facilities** that inspires innovation



**Collaboration** with **leading industry partners**



**Academic experts** with **industry experience**

In collaboration with



**University of  
Sunderland**

University of  
Hertfordshire **UH**



**SEGi**  
University &  
Colleges

**18,000**  
Students

Malaysian  60%  
International  40%

**550**  
Academics

**9.1%**  
foreign faculty staff

**546**  
Management & support staff



Quality education accredited and assured by the Malaysian Ministry of Education and other organisations



Internal processes in compliance with international standards

ISO 9001:2015 Certified



Cert no: MY14/05009

Cert no: MY14/01588



# INTRODUCTION TO SEGi UNIVERSITY & COLLEGES

Established for more than 46 years, SEGi has equipped graduates from diverse backgrounds with exceptional foundations for career achievement and personal success.

SEGi first opened its doors as Systematic College in 1977 in the heart of Kuala Lumpur's commercial district, offering professional qualifications. Since then, SEGi has experienced significant growth by adapting and catering to an increasing demand for higher academic and professional qualifications in Malaysia.

Today, SEGi is one of the largest private higher education providers in Malaysia and serves more than 18,000 students through its five major campuses located in Kota Damansara, Kuala Lumpur, Subang Jaya, Penang and Kuching. With programmes tailored to meet both industry and student needs, SEGi graduates have easily found employment and many have gone on to become leaders of their respective industries.



# COLLABORATE WITH WORLD CLASS ICT COMPANIES



The QS Stars™ rating system has been operated by the QS Intelligence Unit, the independent compiler of the QS World University Rankings® since 2004. The system evaluates universities across various important performance indicators as set against pre-established international standards. By covering a broader range of criteria than any world ranking exercise, QS Stars™ shines a light on both the excellence and the diversity of the rated institution.





**F**rom desktops to laptops to PDAs, and mobile phones to satellite TVs and iPods, computing is everywhere, all around us, and in every part of our work and play.

Technology and its uses are limited only by the extent of our imagination. The continuing growth of the industry is becoming more and more prominent; hence, the demand for industry players are ever growing. Facebook, Twitter, Instagram and Youtube has become a common term due to the result of rapid technology growth.

The systems, software and hardware all have to be created by experts with in-depth knowledge and skills to design, develop and deliver technology that can be used to improve our lives.

The Information Technology industry is reshaping many aspects of the world's economies and structures of governments and societies. In developing countries, governments, businesses and the public are harnessing the transformative power of technology to make public services more efficient, to grow businesses and to strengthen and expand social networks.

Technology has made an influential impact on the society today and is well paving the way for a future of possibilities.



Teaching



Internationalisation



Online Learning



Arts & Culture



Employability



Academic Development



Bachelor of Medicine and  
Bachelor of Surgery (MBBS)



Inclusiveness



### University of Greenwich (UoG), UK

Modestly founded in 1890 as Woolwich Polytechnic, the University of Greenwich (UoG) has risen in the ranks since it gained university status in 1992. A leader in the educational arena, the university has three campuses in South East London and Kent, and is a strong proponent of progressive learning, as is proven by its modern hi-tech facilities. Its 1,200 programmes include Law, Nursing, Business, and Engineering.

Acknowledged the world over as a leading provider of higher education according to the 2017 Teaching Excellence Framework (TEF), UoG is also the proud recipient of The Queen's Anniversary Prize for Higher and Further Education 2015, an award recognising the innovative research and development carried out by Greenwich's Natural Resources Institute within the Faculty of Engineering and Science.

- **QS World Ranking 701-750**
- **Times Higher Education World Ranking 601-800**
- **#1 Transnational University in UK** (Over 17,000 students in overseas campuses all around the world)
- Over 50% of Graduates received First Class Honours in the last 5 years
- Awarded **SILVER STATUS** by Teaching Excellence Framework (TEF)



### University of Sunderland (UoS), UK

Established in 1901 as Sunderland Technical College, the University of Sunderland (UoS) is greatly praised as a prescient and innovative University with exemplary standards of teaching, research and support. Located in Sunderland in the North East of England, it gained its university status in 1992 and has since gained a reputation as a research-active university.

The University of Sunderland prides itself on holistic academic programmes as integral to its commitment of excellence to its students and to producing well-rounded graduates. The Guardian ranks its Hospitality, Event Management and Tourism programme as the 4th best in the country, while Nursing is ranked 5th best. Other highly ranked majors in the Guardian league tables are Business, Management and Marketing, Accounting and Finance, Mechanical Engineering, and Fashion and Textiles. Also, it was named University of the Year for Social Inclusion by The Times and Sunday Times Good University Guide 2021.

- **QS 5 Stars (2019)** in Teaching, Employability, Internationalisation, Inclusiveness & Outstanding Facilities
- Awarded **SILVER STATUS** by Teaching Excellence Framework (TEF)
- Recognised by the UK Government and the British Council for **innovative international activity**
- **UK's top 5** providers of transnational education
- Shortlisted for the **Times Higher Education University of the Year Award**

### University of Hertfordshire **UH**

#### University of Hertfordshire (UH), UK

The University of Hertfordshire is a modern university based largely in Hatfield, in the county of Hertfordshire, about 35km north of London. Described as one of UK's leading university for IT and computing education, Hertfordshire has more than 25,000 students enrolled from nearly 90 different countries.

The University of Hertfordshire won the Guardian University Award for Student Experience in 2015, while 95.2% of University students are in work or further study six months after graduating.

The University has many close links with industry, and every British Formula One team has at least one Hertfordshire graduate. Degrees in healthcare science and the pioneering paramedic science BSc make Hertfordshire a preferred provider for the NHS in the east of England and the Universities Careers and Placements Service offers graduates lifelong support on employment and career development.

- **99th** in the Times University Guide 2021
- **103rd** in the Guardian University Guide 2021
- **Gold ranking** in the Government's Teaching Excellence Framework (TEF) 2018
- Ranks **601-800** among world universities in Times Higher Education World University Rankings in 2019
- **Top 50 "best UK universities chosen by major employers"** for producing ready-to-work graduates in Times Higher Education's 2015 ranking





# Bringing the world to you

# PARTNER

# UNIVERSITIES



## University of Central Lancashire (UCLan)

The University of Central Lancashire is one of the largest universities in the UK, hosting about 25,000 students. Located in Preston, a city in Lancashire, northern England, the public university was founded as the Institution for the Diffusion of Knowledge in 1828 and attained university status in 1992.

Imbued with a celestial-sounding motto – “Ex solo ad solem”, which translates as “From the Earth to the Sun”, the university’s academic portfolio includes over 400 undergraduate programmes and 200 postgraduate courses.

Hailed for its high student satisfaction in the recent International Student Barometer survey, UCLan’s impressive reputation as a regional economy powerhouse testifies over 1,000 students and graduates who have started a business or embarked on self-employment.

- **Top 7% of universities worldwide** in the Centre for World University Rankings 2021-22.
- **Leading UK university for entrepreneurship** (based on the number of start-up businesses they have incubated that are still active after three years of trading) in the **HEBCIS 2016-17 survey**
- Top university in the North of England for producing start-up businesses; **ranked 5th** overall in the UK (Tide, 2021)
- Ranked **108th** in the Times University Guide 2022
- Ranked **104th** in the Guardian University Guide 2023



# WHY STUDY

## COMPUTING OR INFORMATION TECHNOLOGY?

**D**o you see yourself designing and creating software systems? Information Technology (IT) or computing might be the right course of study for you if you are thinking of becoming a manager or administrator to a technical enterprise, a degree in computer science or information technology and computer sciences could provide you with the background needed to achieve your goals. Here are 9 reasons why a computing or IT course is right for you!



### It is a fast-growing sector

According to OpenGovAsia.com, the Information and Communication Technology (ICT) market in Malaysia is set to grow at a compound annual growth rate of 8.9% between 2019 to 2023 (ie. US\$16.5 billion to US\$25.2 billion in 2023). The sector has also seen a steady increase in its contribution towards Malaysia's GDP from 18.1% (RM213 billion) in 2015 to 19.1% (RM289 billion) in 2019.



### The rise of Asia

China now hosts 26% of the world's unicorn startups, however, the country still relies heavily on imported core technologies from countries like Japan and South Korea. Meanwhile, Singapore intends to position itself as the "Silicon Valley of Asia" for IT and computing professionals seeking international career and entrepreneurial opportunities, which means there are opportunities virtually everywhere in Asia.



### Develop transferable skills

Critical thinking and problem-solving go hand in hand and will help you whether you work on debugging a programme. Analytical skills are especially useful for professionals who work with big data or algorithms and are looking for patterns or creating instructions. These soft skills are easily transferable and highly demanded in other sectors as well if you're looking for a career shift in the future!



### Raising need for cloud computing and outsourcing services

Mobility, cloud computing, data analytics, storage, and business process outsourcing have been forecasted to be the 5 leading IT solution areas in terms of growth rate. Accelerated by the Pandemic, the Asia Pacific region has become one of the fastest-growing regions in terms of cloud computing. Countries like Singapore, Australia, India, Japan, China, and South Korea are consistently recording higher growth rates in cloud computing.



### Asia towards Industrial Automation and AI

Deloitte consulting China believes that industrial automation and industrial AI are entering a fast development period in Asia. Companies have begun adopting AI and big data to generate fast, adaptive, and long-term strategies to maximise competitiveness.



### High paying career

IT managers are among the top-paying jobs in the world. Responsible for protecting and securing a company's IT infrastructure and networks, they're among the most in-demand talents in the world with an average salary of USD142,000 per year.



### Government propelled growth

The Malaysian Government's Industry4WRD national policy aims to transform and digitalise the manufacturing sector and related services between 2018 to 2025. The 2020 Malaysian Economic Stimulus Package also provides strong incentives in digital transformation, connectivity and digital infrastructures for buildings. These policies are expected to lead to a mature digitalisation of the Malaysian market - do you see the opportunities awaiting?



### High starting pay

Over the years, Malaysia has moved towards a highly sophisticated digital era where opportunities for online businesses that promise lucrative returns and career development have multiplied. No wonder the starting pay for Computer and Software Specialists averages between RM4,500 to RM6,000 per month, to put it into perspective, a fresh-grad doctor earns between RM3,000 to RM5,500!



### Change the world

IT and Computing drives innovation in the sciences (human genome project, AIDS vaccine research, environmental monitoring, and protection just to mention a few), and also in engineering, business, entertainment, and education. Who knows one day, you'll be a part of the team that changes the world.





# STUDY ROUTE



## Credit Transfer

Your previous studies and qualifications may earn you credits towards your diploma or degree. The award of credits is given on the basis of subject mapping and grades achieved. The maximum transferable credits you may earn for a previous academic qualification could be 50% of the total credits for the Bachelor's degree. Work experience, MOOCs and other training certifications may earn you credit transfers of up to 30%. All credit transfers are subject to approval by the Senate or Academic Board.

## <sup>MC</sup> Micro-credential

We break it down to build you up. SEGi's Micro-credentials are unbundled from accredited qualifications, offering the modern learners a tempting, tantalising buffet-style learning model. While traditional diplomas or degrees are well-structured and solid, SEGi's Micro-credentials offer learners the choice of ultimate flexibility and customisation, empowering learners to select only what they want to consume, experience and learn. Through our innovative curriculum framework, these unbundled courses delivered through micro-credentials can then be easily rebundled into accredited and recognised qualifications.

# PROGRAMME MATRIX

Programme	Awarding Institution	Entry Requirements	Campus
Bachelor of Information Technology (Hons) Specialising in: • Computer Networks • Software Engineering • Business Systems Design <small>KD (R2/482/6/0195)(12/24)(MQA/A10376)</small>	SEGi University & University of Central Lancashire, UK  (Double Degree)	<ul style="list-style-type: none"> <li>• Matriculation or Foundation - with min. CGPA of 2.0 and credit in Mathematics for SPM</li> <li>• STPM - pass with 2 principals and credit in Mathematics for SPM</li> <li>• IT Diploma programmes - Computer Science, Information System, Information Technology, and Software Engineering with min. CGPA of 2.5 or equivalent qualification and a credit in Mathematics for SPM</li> <li>• Other relevant Diploma - with min. CGPA of 2.5 and a credit in Mathematics for SPM</li> <li>• A-Level – pass with 2 principals and credit in Mathematics for O-Level</li> <li>• UEC – pass with Grade B in 5 subjects (including Mathematics)</li> <li>• IELTS (5.0) OR its equivalent (International Students)</li> </ul>	Kota Damansara
Bachelor of Computer Science (Honours) specialising in: • Artificial Intelligence • Digital Transformation • Cybersecurity • Data Science <small>KD (N/481/6/0831)(0524)(MQA/PA11188)</small>	SEGi University	<ul style="list-style-type: none"> <li>• Matriculation/Foundation - with min. CGPA of 2.0 and credit in Add Maths for SPM</li> <li>• STPM - pass with 2 principals and credit in Add Maths for SPM</li> <li>• IT Diploma programmes - Computer Science, Information System, Information Technology, and Software Engineering with min. CGPA of 2.5 or equivalent qualification and credit in Add Maths for SPM</li> <li>• Diploma - pass with min. CGPA of 2.5 and credit in Add Maths for SPM</li> <li>• A-Level – pass with 2 principals and credit in Add Maths for O-Level</li> <li>• UEC - pass with Grade B in 5 subjects (including Add Maths)</li> <li>• IELTS (5.0) OR its equivalent (International Students)</li> </ul>	Kota Damansara
BSc in Computing (3+0) <small>SJ (R/481/6/0803) (06/23) (A9203)</small> <small>KL (R2/481/6/0500) (05/24) (A10000)</small> <small>PG (R/481/6/0696) (07/23) (MQA/FA6967)</small>	University of Greenwich, UK	<ul style="list-style-type: none"> <li>• UEC with 5 credits</li> <li>• STPM with Grade C in 2 subjects</li> <li>• A-Level with passes in 2 subjects</li> <li>• Matriculation / Foundation or equivalent with min. CGPA of 2.0</li> <li>• SAM / AUSMAT with min ATAR 60</li> <li>• Related SKM Level 5</li> <li>• Related Diploma</li> <li>• MQA-APEL T6</li> </ul> <p><b>Additional Requirements</b>            Credit in Maths at SPM / O-Level or equivalent and min. CGPA 2.50</p>	Subang Jaya Kuala Lumpur Penang
Bachelor of Science (Hons) Computer Science (Artificial Intelligence) (3+0) <small>SJ (N/0613/6/0013)(01/28)(MQA/PA16101)</small>	University of Hertfordshire, UK	<ul style="list-style-type: none"> <li>• A pass in Matriculation or Foundation Studies with minimum CGPA of 2.00 or Pass in STPM or equivalent with a minimum Grade C (GP 2.00) in any 2 subjects AND at SPM level, a credit for;                a. Additional Mathematic; OR                b. Mathematics and either one subject of Science, Technology or Engineering</li> <li>• Passed STPM in Science stream or equivalent, with a minimum of Grade C (NGMP 2.00) in one Mathematics subject and one Science / ICT subject;</li> <li>• Diploma in Computer Science OR Software Engineering OR Information Technology OR Information Systems or equivalent with a minimum CGPA of 2.5;</li> <li>• Any Diploma in science and technology with a minimum CGPA of 2.50.</li> </ul>	Subang Jaya
Bachelor of Science (Hons) Computer Science (Cyber Security & Networking) (3+0) <small>SJ (N/0613/6/0015)(02/28)(MQA/PA16103)</small>			



Programme	Awarding Institution	Entry Requirements	Campus
Diploma in Information Technology KD (R2/481/4/0372)(04/24)(MQA/A10294) SJ (R3/481/4/0101) (04/27) (A 7756) PG (R2/481/4/0264) (10/23) (A9340) SWK (R2/481/4/0408) (01/24) (A9765)	SEGi College	<ul style="list-style-type: none"> <li>• SPM/O-Level with 3 credits (including Mathematics); OR</li> <li>• Any equivalent qualification with 3 credits (including Mathematics); OR</li> <li>• UEC with Grade B in subjects (including Mathematics)</li> <li>• Other equivalent qualifications that recognised by the Malaysian Government.</li> </ul> English Requirement for International Students <ul style="list-style-type: none"> <li>• IELTS (5.0) OR its equivalent</li> </ul>	Kota Damansara Subang Jaya Penang Sarawak
Diploma in Computer Science KD(N/481/4/0834)(11/28) (MQA/PA15040) KL (N/481/4/0808) (08/23) (PA9727)		<b>Additional Requirements</b> Credit in Maths at SPM / O-Level or equivalent	Kota Damansara Kuala Lumpur
Certificate in Information Technology SJ (R/481/3/0680) (02/26) (MQA/FA0295) KL (R2/481/3/0308) (01/24) (A9473)		<ul style="list-style-type: none"> <li>• SPM / O-Level or equivalent with 1 credit</li> <li>• UEC with 1 credit</li> <li>• SKM Level 2</li> <li>• MQA-APEL T3</li> </ul> <b>Additional Requirements</b> Pass in Maths at SPM / O-Level or equivalent	Subang Jaya Kuala Lumpur
Foundation in Science KD (R2/010/3/0356)(07/25)(MQA/A4432) SJ (R3/000/3/0021) (04/28) (A7755)	SEGi University / SEGi College	<ul style="list-style-type: none"> <li>• SPM/O-Level - min. 5 credits including Mathematics and 2 Science subjects</li> <li>• UEC – min. B in 3 subjects including Mathematics &amp; 2 Science subjects</li> </ul>	Kota Damansara Subang Jaya
Foundation in Information Technology KL (R3/0611/3/0219) (02/28) (A8609)		<ul style="list-style-type: none"> <li>• SPM/O-Level or equivalent – min 5 credits, including Mathematics</li> <li>• UEC – min 3 credits</li> </ul>	Kuala Lumpur
Foundation in Arts KD (R2/010/3/0406)(07/26)(MQA/FA0193) SJ (R2/010/3/0541) (07/26) (MQA/FA0452)		<ul style="list-style-type: none"> <li>• SPM/O-Level or equivalent – min. 5 credits</li> <li>• UEC – min. B in 3 subjects</li> </ul>	Kota Damansara Subang Jaya

## ENGLISH REQUIREMENTS\*

Types of Exam	Diploma	Degree	Master
IELTS	Band 5.5	Band 6.0	Band 6.5
TOEFL iBT	42	46	60
Cambridge English	154	160	169
Pearson Test	47	51	59
Linguaskill Cambridge	154 - 161	169 - 175	176 - 179
MUET	Band 2	Band 3	

*\*The English requirement serves as a guideline and it is subject to change. The weightage requirement may vary for different programmes.*

## ENTRY REQUIREMENTS FOR INTERNATIONAL STUDENTS



[bit.ly/isentry23](https://bit.ly/isentry23)

### A pathway for everyone

Your prior-qualifications were not mentioned?  
Did not meet the entry requirements?

When there is a will, there's always a way. Contact us and schedule a FREE one-on-one consultation session to plot out a customised pathway that will fit your needs.



# BACHELOR OF INFORMATION TECHNOLOGY (HONS)

KD[R2/482/6/0195](12/24)(MQA/A10376)

## Specialising in:

1. Business Systems Design
2. Computer Networks
3. Software Engineering

## Programme Modules

### Year 1

- Introduction to IT
- Database Systems
- Introductory Programming
- Discrete Mathematics
- Introduction to Networks
- Web Project
- Cyber Marketing
- Object-Oriented Programming
- Introduction to Operating Systems
- Systems Analysis and Design

### Year 2

- Windows Programming
- Mobile Application Development
- Data Science
- Data Mining
- Academic Research
- Entrepreneurship
- Environmental Management and Technology

### Year 3

- Final Year Project 1
- Final Year Project 2
- Advanced Database Systems
- Project Management
- Computer Architecture
- Human Computer Interaction
- Big Data Analysis
- Industrial Attachment

### MPU

- Falsafah dan Isu Semasa (for local & international students)
- Penghayatan Etika & Peradaban (for local students only)
- Bahasa Melayu Komunikasi 2 (for international students only)
- Bahasa Kebangsaan A (for local students without credit for BM in SPM) or Effective Listening
- Co-Curriculum: Sustainability Thinking (for local & international students)

## Specialisation

### 1. Business Systems Design

- Digital Transformation Strategy
- Object Oriented Analysis and Design
- Digital Business Consultancy
- Web Authoring
- Management Information Systems
- System Development Methods
- ICT Services Management

### 2. Computer Networks

- Advanced Programming
- Wireless Technology
- Networks and Communications
- Information and Cyber Security
- TCP/IP Networks Programming
- Introduction to Cloud Computing
- Networks and Systems Administration
- Advanced Networks

### 3. Software Engineering

- Advanced Programming
- Object Oriented Analysis and Design
- Programming for Mobile Devices
- Information and Cyber Security
- TCP/IP Networks Programming
- Introduction to Cloud Computing
- System Development Methods
- Artificial Intelligence

Double Degree



**SEGi**  
UNIVERSITY



**University of  
Central Lancashire**  
UCLan



**SUSTAINABLE  
DEVELOPMENT GOALS**

- 6. Clean Water And Sanitation
- 8. Decent Work And Economic Growth
- 9. Industry, Innovation And Infrastructure
- 11. Sustainable Cities And Communities

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- D. Industrial Internet of Things
- E. Cybersecurity
- F. Cloud
- I. Big Data Analytics

**ORACLE**



## Career Opportunities

As graduates from the Bachelor of Information Technology (Hons) programme, you will be able to identify and take advantage of business opportunities both locally and globally, demonstrating your conduct that's consistent with business ethics and local culture.

# BACHELOR OF SCIENCE (HONS) IN COMPUTING (3+0)

SJ (R/481/6/0803) [06/23] [A9203] • KL (R2/481/6/0500) [05/24] [A10000] • PG (R/481/6/0696) [07/23] [MQA/FA6967]

## Programme Modules

### Year 1

- System Development
- Computer Programming
- Communication Systems
- Logical Foundations
- Introduction to Internet Programming
- Design Thinking / Bahasa Kebangsaan A\*
- Penghayatan Etika dan Peradaban / Falsafah dan Isu Semasa (International students)
- Falsafah dan Isu Semasa (Local students)
- Bahasa Melayu Komunikasi 2 (International students)
- Penghayatan Etika dan Peradaban (Local students)
- Scholarly and Academic Practice
- Computer Programming
- Computer Systems and Internet Technologies
- Analytical Methods

### Year 2

- Professional Project Management
- Application Development
- Network and Operating System
- User Interface Design
- Malaysia Society 5.0
- Community Service
- Agile Development with Scrum
- Database Application Technologies
- Principles of Security
- Information Analysis

### Year 3

- Project (Part A)
- Requirements Management
- Research Methodology
- Human Computer Interaction and Design
- Internship
- Project (Part B)
- Enterprise Web Software Development
- Application Development for Mobile Devices
- Network Technology



## Career Opportunities

Start off a career in any of the chosen field: IT support and consultancy, System analyst, Computer programmer, E-commerce application, Software developer, Web designer, Independent Consultants for public and private sector / organisation.

\*For Malaysian students who do not have a credit in SPM BM

## THE MOST AGILE COMPUTING PROGRAMME IN THE MARKET

- *Strong partnerships with the industry*
- *Covers a wide range of computing subjects build for maximum agility*
- *Degree awarded by a UK University*



# BACHELOR OF COMPUTER SCIENCE (HONOURS)

KD[N/481/6/0831][05/24][MQA/PA11188]

## Specialising in:

1. Artificial Intelligence
2. Digital Transformation
3. Cybersecurity
4. Data Science

## Programme Modules

### Year 1

- Mathematics for Computing
- Discrete Mathematics
- Introductory Programming
- Computer Architecture & Organization
- Introduction to Computer Science
- Introduction to Operating Systems
- Introduction to Networks
- Data Structures and Algorithms
- Object-Oriented Programming
- Object-Oriented Analysis & Design
- Database System
- Digital Product Management

### Year 2

- Information System Security
- Artificial Intelligence
- Human Computer Interaction
- Project Management
- System Development Documentation
- Introduction to IOT
- IT Professional & Ethics
- Environmental Management and Technology

### Year 3

- Final Year Project 1
- Final Year Project 2
- Industrial Attachment

### MPU

- Falsafah dan Isu Semasa (for local & international students)
- Penghayatan Etika & Peradaban (for local students only)
- Bahasa Melayu Komunikasi 2 (for international students)
- Bahasa Kebangsaan A (for local students without credit for BM in SPM) or Effective Listening
- Co-Curriculum: Sustainability Thinking (for local & international students)

## Specialisation

### 1. Artificial Intelligence

- Introduction to Data Science
- Statistics in Computer Science
- Expert System
- Fundamentals of Data Engineering
- Data Mining
- Computational Intelligence
- Robotic Process Automation
- Natural Language Processing
- Machine Learning
- Deep Learning
- Cloud Computing
- Computer Vision and Pattern Recognition

### 2. Digital Transformation

- Introduction to Data Science
- Introduction to Digital Transformation
- Fundamentals of Data Engineering
- Emerging Technology
- Data Mining
- Digital Transformation Strategy
- Statistical Programming
- Digital Thinking and Innovation
- Machine Learning
- Innovative Product Development
- Business Intelligence
- Data Modelling
- Cloud Computing

### 3. Cybersecurity

- Introduction to Cybersecurity
- Introduction to Ethical Hacking and Systems Defence
- Introduction to Cryptography Applications
- Wireless Communication
- Computer Forensics
- System Connection Security
- Cloud Computing Security
- Networks and Systems Administration
- Cyber Law and Security Policy
- Software Security
- Network & Security

### 4. Data Science

- Introduction to Data Science
- Data Mining
- Digital Transformation Strategy
- Statistical Programming
- Digital Thinking and Innovation
- Machine Learning
- Innovative Product Development
- Business Intelligence
- Data Modelling
- Cloud Computing



**SEGi**  
UNIVERSITY



- 6. Clean Water And Sanitation
- 8. Decent Work And Economic Growth
- 9. Industry, Innovation And Infrastructure
- 11. Sustainable Cities And Communities

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- B. Simulation & Augmented Reality
- D. Industrial Internet of Things
- E. Cybersecurity
- F. Cloud
- G. Additive Manufacturing
- H. Supply Chain
- I. Big Data Analytics

## Career Opportunities

On completion of the programme, students will have the skills suitable for a wide range of careers concerned with IT and cybersecurity, in various sectors. Career opportunities includes; Network and Computer Systems Administrator, Computer System Analyst, Operations Research Analyst, Information Security Officer, Software Developer, Computer Forensic Engineer, Cryptographer, Penetration tester, Security Analyst, Security Software Developer, and Security Code Auditor.





# DIPLOMA IN COMPUTER SCIENCE

KD(N/481/4/0834)(11/28)(MQA/PA15040) • KL(N/481/4/10834)(11/28)(MQA/PA9727)

## Programme Modules

### Year 1

- Calculus & Algebra
- Computer Architecture and Organization
- Database System
- Introductory Programming
- Introduction to Computer Science
- Introduction to Networks
- Data Structure & Algorithm
- Discrete Mathematics
- Introduction to Operating System
- Object Oriented Programming
- Introduction to CyberSecurity

### Year 2

- Statistics in Computer Science
- Web Project
- Systems Analysis and Design
- Introduction to Data Science
- Data Visualization & Analytics
- Integrated Systems Projects
- Introduction to Artificial Intelligence
- Mobile Application
- Data Mining
- Business Innovation 4.0
- Industrial Training

### MPU

- Industry Revolution 4.0 in Malaysia (for local & international students)
- Penghayatan Etika dan Peradaban (for local students)
- Bahasa Melayu Komunikasi 1 (for local & international students)
- Bahasa Kebangsaan A (for local students without credit for BM in SPM) or Growth Mindset
- Co-curriculum: Sustainability Thinking (for local & international students)



**SEGi**  
COLLEGE

in collaboration with



### Career Opportunities

Your chosen career path may be Network Administrator, Software Developer, Network Maintenance Assistant, Information System Assistant, Database Administrator, Information Systems Analyst, Helpdesk Support Manager.

# EMPOWERING PROGRAMMERS & COMPUTING ENGINEERS OF THE FUTURE

- Learn practical skills from the industry
- Strong emphasis on programming
- Guaranteed\* to Year 2 entry (for Degree Programmes)

\* Terms & Conditions apply



# BE AN AGILE TECHNICAL PROFESSIONAL

- Learn practical skills from the industry
- IR4.0 enhanced syllabus
- Guaranteed\* to Year 2 entry  
(for Degree Programmes)

\* Terms & Conditions apply

## DIPLOMA IN INFORMATION TECHNOLOGY

KD(R2/481/4/0372)(04/24)(MQA/A10294) • SJ (R3/481/4/0101) (04/27) (A7756) • PG (R2/481/4/0264) (10/23) (A9340) • SWK (R2/481/4/0408) (01/24) (A9765)

### Programme Modules

#### Year 1

- Discrete Mathematics
- Introduction to Operating Systems
- Information Technology
- Programming Methodology
- Database Management Systems
- Computer Organisation
- Systems Analysis and Design
- Object Oriented Development
- Web Designing
- Applied Digital Skills
- Academic English

#### MPU

- Industry Revolution 4.0 in Malaysia  
(for local & international students)
- Penghayatan Etika dan Peradaban  
(for local students)
- Bahasa Melayu Komunikasi 1  
(for local & international students)
- Bahasa Kebangsaan A  
(for local students without credit for BM in  
SPM) or Growth Mindset
- Co-curriculum: Sustainability Thinking  
(for local & international students)

#### Year 2

- Windows Programming
- Introduction to Internet Programming
- Multimedia Studies
- Introduction to Mobile Applications
- Data Communication and Networking
- Software Engineering
- Integrated Systems Project
- Project Management
- User Experience (UX) Design
- General Language Training
- Industrial Attachment

#### Concentration (choose 2 only)

- Big Data Technology
- Introduction to Artificial Intelligence
- Cybersecurity
- Introduction to Python Programming
- Introduction to Machine Learning
- Ethical Hacking



**SEGi**  
COLLEGE

### Career Opportunities

Your chosen career path may be Network Administrator, Software Developer, Network Maintenance Assistant, Information System Assistant, Database Administrator, Information Systems Analyst, Helpdesk Support Manager.

# CERTIFICATE IN INFORMATION TECHNOLOGY

SJ (R/481/3/0680) [02/26] (MQA/FA0295) • KL (R2/481/3/0308) [01/24] (A9473)

## Programme Modules

### Year 1

- Introduction to Information Technology
- General Language Training
- Basic Computing for Mathematics
- Introduction to Programming
- Applied Digital Skills
- Academic English
- Fundamentals of Operating Systems
- Web Designing
- Basic Networking and Concepts
- Introduction to Database
- Fundamentals of Computer Architecture

### Year 2

- Introduction to Java
- Fundamentals of Graphics Design
- Electronic Publishing
- PC Maintenance
- System Development
- Introduction to Animation and Multimedia

### MPU

- Falsafah dan Isu Semasa or  
Penghayatan Etika dan Peradaban  
(Local students) / Malaysian Studies 1
- Bahasa Melayu Komunikasi 1  
(International students)
- Public Speaking Skill /  
Bahasa Kebangsaan A\*
- Family Issues

\* For Malaysian students who do not have credit in SPM BM



**SEGi**  
COLLEGE

## Career Opportunities

Upon completion of the Certificate in Information Technology, you may further your studies in Diploma or Degree or gain experience through careers such as customer support representative, client support officer, technician and many more.



**BUILDING A STRONG  
FOUNDATION  
FOR INFORMATION TECHNOLOGY**

- *Pathway to an IT-related Diploma*
- *Flexible payment scheme for Cert-Diploma Pathway*



# FOUNDATION IN INFORMATION TECHNOLOGY

KL (R3/0611/3/0219) (02/28) (A8609)

## Programme Modules

### Year 1

- Basic Mathematics
- Information Technology
- Computer Application
- Personal and Professional Development
- Programming Methodology
- Statistics
- Introduction to Programming Languages
- Introduction to Animation and Multimedia
- Web Designing
- General English Training
- Principles of Management
- Academic English
- Database Management System
- Introduction to Object-Oriented Development



**SEGi**  
COLLEGE

### Why study this programme?

This qualification is specially designed for students with SPM, O-Level or equivalent qualifications and who have decided to pursue a career in computing or information technology. Upon successful completion of the SEGi Foundation in Information Technology, students can venture into a range of computing and information technology degree programmes.

# FASTEST PATHWAY TO AN IT RELATED DEGREE

- *Fastest pathway into a wide variety of Degree Programmes*
- *Build a strong foundation in Information Technology*







# DISCOVER YOUR PASSION IN INFORMATION TECHNOLOGY WHILE KEEPING YOUR OPTIONS OPEN

- Fastest pathway into a wide variety of Degree Programmes
- Build a strong foundation in Science

## FOUNDATION IN SCIENCE

KD [R2/010/3/0356][07/25][MQA/A4432]; MQA/PA14176 N-DL/010/3/0024

### Programme Modules

#### Semester 1

- Chemistry 1
- Mathematics 1
- Elective 1 \*
- Elective 2 \*

#### Semester 2

- Chemistry 2
- Mathematics 2
- Elective 3 \*
- Elective 4 \*

#### Semester 3

- Chemistry 3
- Mathematics 3
- Academic English
- Computer Application
- Elective 5 \*

### Elective (by Specialisation) \*

#### General

- Biology 1
- Physics 1
- Biology 2
- Physics 2
- Physics 3

#### Health Sciences

- Biology 1
- Public Speaking
- Biology 2
- Information Technology
- Introduction to Patient Care

#### Engineering

- Physics 1
- Public Speaking
- Physics 2
- Information Technology
- Physics 3

\* Electives are subject to change without prior notice.

\* Students intending to articulate into the Health Sciences degree programmes will have a choice to take either General or Health Sciences Pathway.

\* Students intending to articulate into Engineering degree programmes will have a choice to take either General or Engineering Pathway.

## FOUNDATION IN SCIENCE

SJ [R3/000/3/0021] [04/28] [A7755]

### Programme Modules

- Chemistry I
- Mathematics I
- Physics I
- Biology I
- English I
- Chemistry II

- Mathematics II
- Physics II
- Basic Information and Communication Technologies (ICT)
- English II
- Chemistry III

- Engineering Mathematics
- Physics III
- Biology II
- Biochemistry
- Thinking Skills

### Why study this programme?

This qualification is specially designed for students with SPM, O-Level or equivalent qualifications. Upon successful completion of this programme, students may enrol in a range of health sciences or degree programmes engineering.

# FOUNDATION IN ARTS

KD [R2/010/3/0406][07/26][MQA/FA0193]; MQA/PA4175 N-DL/010/3/0025

## Programme Modules

### Semester 1

- General Language Training
- Computer Application
- Introduction to Business
- Mathematics
- Statistics\*

### Semester 2

- Academic English
- Elective 1
- Elective 2
- Elective 3
- Elective 4

### Semester 3

- Public Speaking
- Critical Thinking Skills
- Principles of Economics
- Elective 5

## Electives

### Business & Accounting

- Introduction to Financial Accounting
- Fundamental of Management
- Intercultural Communication
- Information Technology
- Introduction to Marketing

### Communication Studies/English & PR

- Interpersonal Communication
- Intercultural Communication
- Fundamental Photography
- Information Technology
- Introduction to Marketing

### Information Technology

- Programming Methodology
- Interpersonal Communication
- Fundamental of Management
- Intercultural Communication
- Information Technology

### Quantity Survey/Hospitality/ Education/Psychology

- Information Technology
- Interpersonal Communication
- Fundamentals of Management
- Introduction to Marketing
- Intercultural Communication

### Creative Design/ Architecture/Interior Architecture

- Colour & Form
- Drawing Fundamentals
- Fundamental Photography
- Intercultural Communication
- Interpersonal Communication

\*ODL Mode

# FOUNDATION IN ARTS

SJ [R2/010/3/0541] [07/26] [MQA/FA0452]

## Programme Modules

### Year 1

- Thinking Skills
- English I
- Mathematics
- Basic Information and Communication Technologies (ICT)
- Introduction to Psychology
- Essentials of Economics
- English II
- Introduction to Law
- Introduction to Sociology
- Co-curriculum
- Introduction to Management
- Writing and Research Skills
- Electives (Choose any two):
  - Introduction to Finance
  - Introduction to Visual Arts
  - Introduction to Mass Media and Communication
  - Introduction to Legal Skills

### Why study this programme?

This qualification is specially designed for students with SPM, O-Level or equivalent qualifications and who would like to pursue a bachelor's degree at the university. Upon successful completion of the Foundation in Arts programme, students may further their studies in a wide range of degree programmes depending on units completed during their studies. Students may be eligible to apply for advanced standing.

# A FOUNDATION WITH THE WIDEST PATHWAYS

- Fastest pathway into a wide variety of Degree Programmes
- 4 electives to choose from



# ELECTIVE COURSES

## DIPLOMA LEVEL

No	Scholarship Name	School	Credit Value	No	Scholarship Name	School	Credit Value
1	Business and Company Law	Business and Accounting	3	28	CyberPsychology	Psychology	3
2	Business Communication		3	29	Positive Psychology		3
3	Business Management		3	30	Social Psychology		3
4	Cost Accounting		3	31	Understanding the Child's Growth and Development	Early Childhood Education	3
5	Data Analysis		3	32	Play & Learning for Young Children		3
6	Financial Accounting 1		3	33	Physical Education & Health Care for Young Children		3
7	Introduction to Business		3	34	Safety & Well-being of Young Children		3
8	Introduction to Finance		3	35	Global Citizenship for Young Children		3
9	Introduction to Management Accounting		3	36	An Introduction to Montessori Pedagogy		3
10	Introduction to Marketing		3	37	Music for Children	Music	3
11	Principles of Management		3	38	Music Appreciation 1: Aesthetic & Style		3
12	Social Media Marketing		3	39	Music Appreciation 5: World Music		3
13	Technopreneurship		3	40	Music Fundamentals 1: Fundamental Theory	Hospitality & Tourism / Creative Arts & Design	3
14	Consumer Behaviour		4	41	Print Production		3
15	Corporate Audit		4	42	Advertising Creativity	Hospitality & Tourism	3
16	Digital and Service Marketing		4	43	Wedding Planning and Management		3
17	Digital Marketing		4	44	Wine Management		3
18	Finance		4	45	Introductory to French		3
19	Human Resource Management		4	46	Food & Its Culture	Engineering	3
20	Integrated Marketing Communication		4	47	Principles of Electronics & Electrical Engineering		3
21	International Business		4	48	Engineering Drawing	Creative Arts & Design	3
22	Marketing Management		4	49	Fundamental of Photography		3
23	Operations Management		4	50	Digital Graphics		3
24	Organisational Behaviour		4	51	Introduction to Multimedia & Animation		4
25	Personal Selling		4	52	Interactive Web Design		4
26	Industrial and Organisational Psychology	Psychology	3	53	Videography		4
27	General Psychology		3	54	Presentation Skills		3



# SEGi UNIVERSITY & COLLEGES'

## IT & ENGINEERING PROGRAMMES ARE ALIGNED WITH THE 9 PILLARS OF INDUSTRIAL REVOLUTION 4.0



## 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT



### Cybersecurity

Operation in networks and open systems

High level of networking between intelligent machines, products and systems



### Autonomous Robot

Autonomous, cooperating industrial robots

Numerous integrated sensors and standardised interfaces



### Additive Manufacturing

3D printing, particularly for spare parts and prototypes

Decentralised 3D facilities to reduce transport distances and inventory



### Industrial Internet of Things

Network of machines and products

Multidirectional communication between networked objects



### Cloud

Management of huge data volumes in open systems

Real-time communication for production systems



### Horizontal Vertical Integration

Cross-company data integration based on data transfer standards

Precondition for a fully automated value chain (from supplier to customer, from management to shop floor)



### Simulation & Augmented Reality

Augmented reality for maintenance, logistics and all kinds of SOP Simulation of value networks and Optimisation based on real-time data from intelligent systems



### Big Data Analytics

Full evaluation of available data (e.g. from ERP, SCM, MES, CRM, and machine data)

Real-time decision-making support and optimisation



### Supply Chain

The use of advanced robotics, and the application of advanced analytics of big data in supply chain management

Place sensors in everything, create networks everywhere, analyse everything to significantly improve performance and customer satisfaction



**SEGi University** (100589-U)

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**SEGi College Kuala Lumpur** (42114-V)

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**SEGi College Subang Jaya** (284515-V)

☎ 603 8600 1777 ☎ 010 313 0303

**SEGi College Penang** (187620-W)

☎ 604 263 3888 ☎ 013 629 4880

**SEGi College Sarawak** (172726-T)

☎ 6082 252 566 ☎ 017 859 2566 ☎ 1300 88 7344

**Regional Centre:**

**SEGi University Regional Centre, Johor Bahru**

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The best in you, made

**POSSIBLE**

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