

INFORMATION TECHNOLOGY

SEGi UNIVERSITY



SEGi
University

Towards

iR4.0

INTRODUCTION TO SEGi UNIVERSITY

SEGi was established in 1977 as Systematic College in the heart of Kuala Lumpur offering professional qualifications. Since its founding over four decades ago, SEGi has undergone significant growth, strengthening the quality of its wide range of programmes from foundation to doctorate level.

It is one of the most established private higher education institutions in Malaysia with its flagship campus located in Kota Damansara and four other campuses in Subang Jaya, Kuala Lumpur, Penang, and Kuching. Currently, SEGi has a population of 20,000 local and international students across its campuses.

SEGi is recognised as “The first Malaysian University that earned 5 Stars for Prioritising Society’s Needs in Malaysia” by QS Stars, an international evaluation system for universities based on auditing.



COLLABORATE WITH WORLD CLASS ICT COMPANIES

From desktops to laptops to PDAs, and mobile phones to satellite TVs and iPads, 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 have become common terms 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, grow businesses, and strengthen and expand social networks.

Technology has made an influential impact on the society today and is well paving the way for what is possible in the future.



CONTENTS

Introduction to SEGi University	2
At a Glance	4
SEGi Towards IR4.0	5
World Renowned University Partner	6
Learning & Teaching	7
Study Route	8
Programme Matrix	9
Programme Modules	10 - 13
Student Testimonials	14
Industry Liaison & Student Activities	15

AT A GLANCE

GLOBAL RECOGNITION

- Emerged in the top 45% of the 2021 QS World University Rankings: Asia
- Double Awards from Top 3.3% of Universities Worldwide (The Centre for World University Rankings 2017 (CWUR) University of Central Lancashire (UCLAN)
- MQA Fully-Accredited Programmes
- 2017 QS Overall 3-star rating with 5-star rating in teaching, facilities, social responsibility, and inclusiveness

SKILLS ENRICHMENT & SUPPORT

- More than 100 SEGi Enrichment Programmes in the areas of leadership, communication, and grooming skills (among others) to enhance students' learning experience
- Academic Skills Unit to assist students in academic writing and effective study, research techniques, time management, academic integrity, and exam preparation
- Mentor-Mentee system to provide guidance to students on academic matters and to foster a close and constructive professional relationship between students and lecturers

EXCELLENT TEACHING, LEARNING & RESEARCH

- SETARA 2018/2019 5-star rating for SEGi University in the Emerging Universities (Universities which have been established within the last 15 years) category
- QS 5 Stars Rated for Excellence in Teaching
- QS 5 Stars Rated for Facilities
- SETARA, 2017 scored above medium of 83 in the category of Teaching and Learning
- Independent students' 2017 evaluation rating: more than 95% of students rated our lecturers for excellence in teaching
- Student to academic staff ratio 21:1, based on SETARA (2017)
- Research-led environment

GLOBALLY RECOGNISED,
DISTINCTIVELY SEGi.

OUR 6 COMPETITIVE ADVANTAGES

SCHOLARSHIPS

- 1st Malaysian University that earned 5 Stars for Prioritising Society's Needs in Malaysia (by QS Stars)
- Over RM100 million worth of Group scholarships awarded in the past 40 over years
- QS 5 Stars rated for inclusiveness and social responsibility

STUDENT SATISFACTION

- 80% of students are willing to recommend their friends and family to study with us

INDUSTRY DRIVEN GRADUATES

- 2017 SETARA Graduate Employability 85%

Towards

iR4.0

IR4.0 IN A NUTSHELL

The IR4.0 has a big impact on the local economy and community as it changes the job market, which in turn, changes the human capital's qualification requirements. The new-age industries require human capital with relevant and adequate digital and data literacy.

Global data point towards major shifts in perceptions and hiring trends. A study by McKinsey Global Institute shows that one-fifth of the global workforce will be impacted by the adoption of AI and automation. Similarly, another study by Cisco and Oxford Economics found that emerging technologies have the capacity to change 28 million jobs in ASEAN alone.

SEGi's 4R APPROACH

SEGi has taken a calculated view of the new market and has set a strategic direction to achieve its goal of becoming a leading IR4.0 institution. Guided by the drive "Towards IR4.0", we have recognised four thrusts to drive the institution forward.

REIMAGINE possibilities

Increasing the employability and marketability of graduates through the creation of new jobs and roles to meet tomorrow's industry needs.

RECOGNISE your potential

Unleashing the true nature of graduates and their ability to touch lives and make a significant impact on the community

REDEFINE your future

Imbibing the idea of change as the only constant and creating a sustainable future through qualifications that matter

REVOLUTIONISE the market

Introducing innovative programmes that are in tandem with the market's growth and direction

WORLD RENOWNED UNIVERSITY PARTNER



**University of
Central Lancashire**
UCLan

SEGi partners with international universities of great repute to offer a globalised learning experience for our students. Programmes offered by our university partners are regulated by them on a regular basis, thus ensuring the exact same quality of education that students will obtain at their home base.



UNITED KINGDOM

University of Central Lancashire

The University of Central Lancashire is one of the largest universities in the UK which hosts about 25,000 students. This public university, located in Preston, Lancashire, England was founded as the Institution for the Diffusion of Knowledge in 1828 and became a university in 1992. Imbued with a celestial-sounding motto, 'Ex solo ad solem', which translates 'From the Earth to the Sun', the vastness of the university's portfolio includes over 400 undergraduate programmes and 200 postgraduate courses. Hailed for its high student satisfaction in the recent international Student Barometer survey, its impressive reputation as a regional economy powerhouse testifies to over 1,000 students and graduates who have started a business or embarked on self-employment.





TOP-NOTCH RESOURCES

FOR A QUALITY LEARNING EXPERIENCE

INTERNATIONAL COLLABORATIONS

We work with some of the world's most prestigious universities from the United Kingdom and Australia to develop a knowledge-rich and industry-relevant curriculum.

PARTNERSHIPS WITH INDUSTRY

SEGi University establishes strong links with key industry players from a wide range of fields to provide access to internships and job opportunities for our students.

DOUBLE DEGREE PROGRAMMES

SEGi University's Information Technology programmes reflect international recognition. Students enrolled in the Double Degree award programme will graduate with 2 parchments – one from SEGi University and another from University of Central Lancashire, UK.

MORE THAN 95% EMPLOYABILITY

More than 95% of our Information Technology Graduates are employed within 3 months upon graduation.

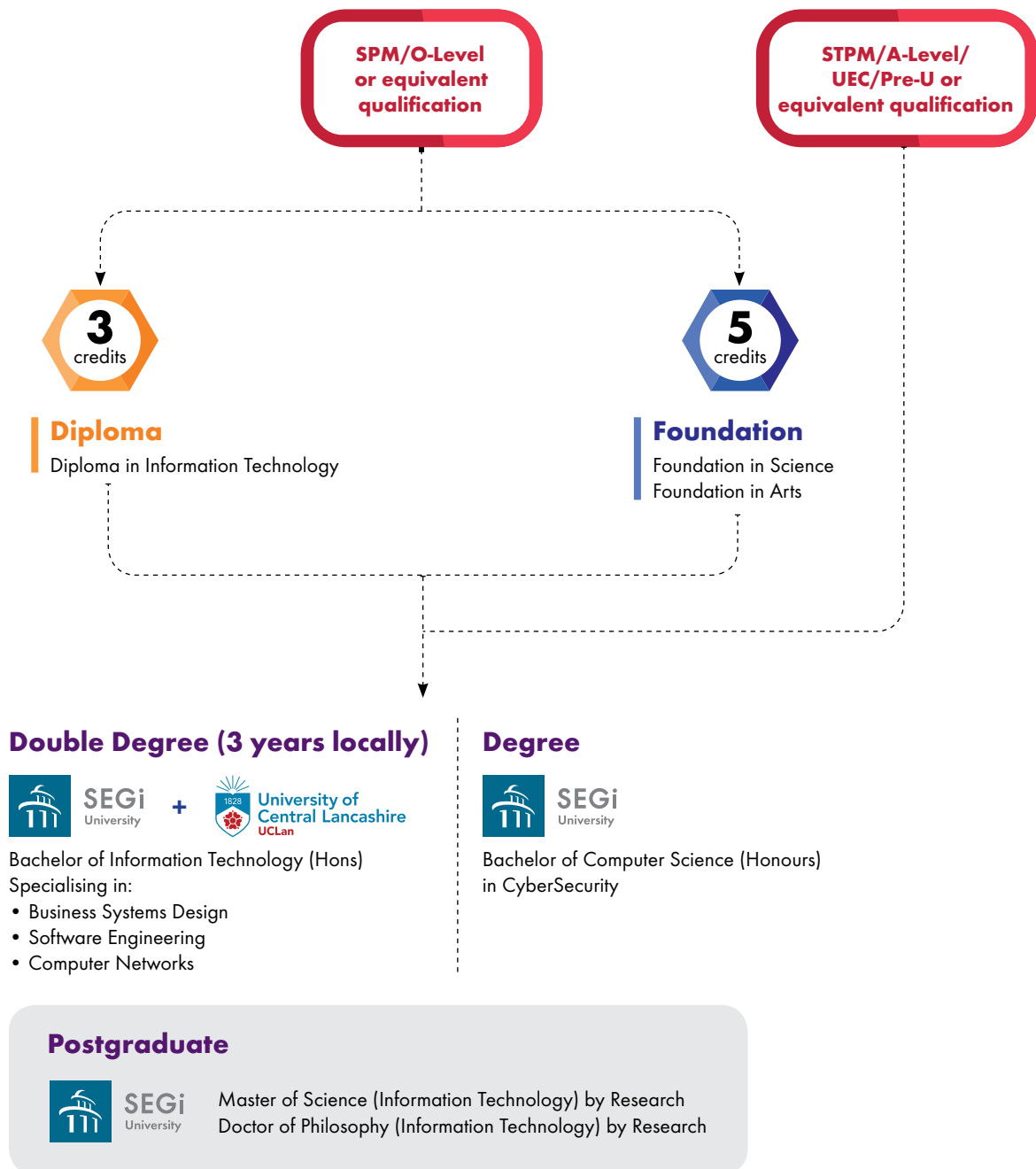
NURTURING INDUSTRY-READY GRADUATES

In the past 40 years, SEGi University has produced capable graduates who are highly sought-after by employers for their key management skills.

ESTEEMED INDUSTRY ADVISORS

In line with our brand promise to provide a complete learning experience, we work closely with reputable industry advisors to facilitate the transfer of knowledge and experience.






STUDY ROUTE



All diploma and degree programmes require students to take 4 compulsory general subjects, as required by the Ministry of Education Malaysia.

The above is an indication of current programme content. However, the rapidly changing nature of the subject area means that the courses offered and individual course content are continuously updated to meet industry needs. Also, please note that certain combinations of options may not be available.

PROGRAMME MATRIX

 Programme	 Awarding Institution	 Entry Requirements
Bachelor of Computer Science (Honours) in CyberSecurity	SEGi University	<ul style="list-style-type: none"> • Matriculation/Foundation - with min. CGPA of 2.0 and credit in Add Maths for SPM • STPM - pass with 2 principals and credit in Add Maths for SPM • 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 Add Maths for SPM • Diploma - pass with min. CGPA of 2.5 and credit in Add Maths for SPM • A-Level - pass with 2 principals and credit in Add Maths for O-Level • UEC - pass with Grade B in 5 subjects (including Add Maths) • IELTS (5.0) OR its equivalent (International Students)
Bachelor of Information Technology (Hons)	SEGi University and University of Central Lancashire, UK Double Degree   <ul style="list-style-type: none"> • Business Systems Design • Software Engineering • Computer Networks 	<ul style="list-style-type: none"> • Matriculation or Foundation - with min. CGPA of 2.0 and credit in Mathematics for SPM • STPM - pass with 2 principals and credit in Mathematics for SPM • 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 • Other relevant Diploma - with min. CGPA of 2.5 and a credit in Mathematics for SPM • A-Level - pass with 2 principals and credit in Mathematics for O-Level • UEC - pass with Grade B in 5 subjects (including Mathematics) • IELTS (5.0) OR its equivalent (International Students)
Diploma in Information Technology	SEGi College	<p>For international student: IELTS with minimum of score 4.0 or equivalent.</p> <ul style="list-style-type: none"> • A pass in SPM with at least credit in any 3 subjects inclusive of Mathematics or any equivalent qualification; OR • A pass in Sijil Tinggi Persekolahan Malaysia (STPM), with a minimum of Grade C (GP 2.0) in any subject or any equivalent qualification and a credit in Mathematics at SPM level or its equivalent; OR • A pass in Sijil Tinggi Agama Malaysia (STAM) with a minimum grade of Maqbul (pass) and a credit in Mathematics at SPM level or its equivalent; OR • A pass in SKM Level 3, and a credit in Mathematics at SPM level or its equivalent; OR • A pass in any qualifications equivalent to Certificate (Level 3, MQF) and a credit in Mathematics at SPM level or its equivalent. <p>* Candidates 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.</p>
Foundation in Science	SEGi University & SEGi College	<ul style="list-style-type: none"> • SPM/O-Level or equivalent - min. 5 credits including Mathematics & Science.
Foundation in Arts	SEGi University & SEGi College	<ul style="list-style-type: none"> • SPM/O' Level or equivalent - min. 5 credits including Mathematics.

BACHELOR OF INFORMATION TECHNOLOGY (HONS)

SEGi UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

Specialising in:

- **Business Systems Design**

Double Degree Award in collaboration with University of Central Lancashire, UK.

- **Software Engineering**

Double Degree Award in collaboration with University of Central Lancashire, UK.

- **Computer Networks**

Double Degree Award in collaboration with University of Central Lancashire, UK.

Double Degree



Information Technology is the study or use of systems (especially computers and telecommunications) for storing, retrieving, and sending information. The degree enables students to develop higher level of entrepreneurial and cognitive skills beyond knowledge and understanding, where focus is given to the competency of analysis, synthesis, creativity, and evaluation whilst developing other transferable skills such as problem solving, communication, and interaction.

Students will be well prepared with a range of practical, business, and personal skills for many specialist roles within the ICT and business sectors. Students will also have the opportunity to gain professional certifications, including Java, Oracle, and EC council.



Programme Modules

Year 1	Year 2	Year 3
<ul style="list-style-type: none"> ■ Discrete Mathematics ■ Introductory Programming ■ Systems Analysis and Design ■ Database Systems ■ Introduction to Networks ■ Object-Oriented Programming ■ Introduction to Operating Systems ■ Introduction to IoT ■ Web Project ■ Cyber Marketing ■ Environmental Management and Technology 	<ul style="list-style-type: none"> ■ Academic Research ■ Digital Business Consultancy ● ■ Management Information Systems ● ■ Programming for Mobile Devices ● ■ Networks and Communications ● ■ Wireless Technology ● ■ Digital Transformation Strategy ● ■ Information and Cyber Security ●● ■ Web Authoring ●● ■ Object Oriented Analysis and Design ●● ■ Advanced Programming ●● ■ Windows Programming ■ Personal Health Management ■ Wireless Technology ■ Object Oriented Analysis and Design ■ Mobile Application Development ■ Data Science ■ Effective Listening ■ Data Mining ■ TCP/IP Networks Programming ●● ■ Introduction to Cloud Computing ●● 	<ul style="list-style-type: none"> ■ Final Year Project 1 ■ Final Year Project 2 ■ Project Management ■ Human Computer Interaction ■ Industrial Attachment ■ Networks and Systems Administration ● ■ Artificial Intelligence ● ■ ICT Service Management ● ■ Advanced Networks ● ■ System Development Methods ●● ■ Advanced Database Systems ■ Computer Architecture ■ Advanced Database Systems ■ Big Data Analysis ■ Entrepreneurship
<p>MPU</p> <ul style="list-style-type: none"> ■ TITAS (Local Student) ■ Hubungan Etnik (Local Student) ■ Malaysian Studies 3 (International Student) ■ Bahasa Melayu Komunikasi 2 (International Student) ■ Pengurusan Ko-kurikulum 	<p>Note: Compulsory for specialisation</p> <ul style="list-style-type: none"> ● denotes Business Systems Design ● denotes Computer Networks ● denotes Software Engineering 	<p>Career Opportunities</p> <p>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.</p>

BACHELOR OF COMPUTER SCIENCE (HONOURS) IN CYBERSECURITY

SEGI UNIVERSITY

The Bachelor of Computer Science (Hons) in Cybersecurity incorporates elements that enables students to develop skills and knowledge in Cybersecurity. Cybersecurity is the practice of protecting systems, networks, and programs from digital attacks or Cyberattacks.

The degree is designed to assist students to develop strong technical, critical thinking, and problem-solving skills. Students will learn to prevent data breaches, address vulnerabilities, and improve security for networks and systems. The degree also provides students with the opportunity to gain professional certifications, including EC Council and Huawei.



Programme Modules

Year 1

- Discrete mathematics
- Database Systems
- Introductory Programming
- Computer Architecture
- Introduction to Networks
- Systems Analysis and Design
- Object-Oriented Programming
- Human-Computer Interaction
- Computing Mathematics
- Academic English
- Elective Module 1

Year 2

- Data Structures and Algorithms
- Introduction to Operating Systems
- Web Project
- Introductory Software Engineering
- Artificial Intelligence
- Networks and Communications
- Software Security
- Wireless Communication
- Languages & Compilers
- Entrepreneurship
- Environmental Management and Technology
- Academic Research
- Elective Module 2

Year 3

- Information Systems Security
- Networks and Systems Administration
- Advanced Database Systems
- Internet of Things
- Business Ethics
- Ethical Hacking and Systems Defence
- Computer Forensic
- Final Year Project 1
- Final Year Project 2
- Industrial Attachment
- Elective Module 3

Elective Modules

- Web Authoring
- Biometric Technology
- Cyber Warfare
- Security Strategies
- Programming for Mobile Devices
- Client-Focused Business Solution

MPU

- Effective Listening
- Personal Health Management
- Malaysian Studies (International)
- Bahasa Melayu Komunikasi 3 (International)
- Tamadun Islam & Tamadun Asia Tenggara (Local)
- Hubungan Etnik (Local)
- Pengurusan Ko-Kurikulum"

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 opportunity includes; Network and Computer Systems Administrators, Computer Systems Analysts, Operations Research Analysts, Information Security Officer, Software Developers, Computer Forensic Engineer, Cryptographer, Penetration tester, Security Analyst, Security Software Developer, and Security Code Auditor.

Diploma in Information Technology equips students with the fundamentals of Information technology and technical skills required. The programme is designed to produce graduates who can perform different duties range from Information management, computer networking, database management, software development and the management of the entire computer system.

The programme designed to prepare students who wish to pursue information communication technology with the essential knowledge, skills and attitude to explore technology-based ventures. Students who completed the Diploma Programme are eligible to obtain maximum 50% of vertical credit transfer to Bachelor's Degree Programme.

Programme Modules

Year 1

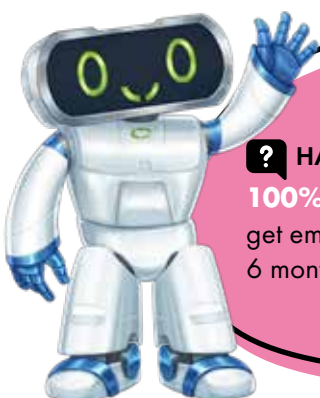
- Basic Mathematics for Computing
- Commercial Application and IT
- Database Management Systems
- Programming Methodology
- Digital Content Development
- Introduction to Operating System
- Introduction to Programming Languages
- Computer Organisation
- Management Information System
- System Analysis and Design
- General Language Training
- Integrated Systems Project
- Industrial Attachment

Year 2

- Introduction to Software Engineering
- Data Communications and Networking
- Data Structures and Algorithms
- Principles of E-Commerce
- Windows Programming
- Object Oriented Development
- Systems Development
- Web Designing
- Project Management
- Conceptual Design & Creativity
- Academic English

MPU

- Malaysian Studies (Local Students)/
Bahasa Melayu Komunikasi 2
(International Students)
- Pengurusan Ko-Kurikulum
- Moral Studies (Non-Muslim)/
Islamic Studies (Muslim)
- Presentation Skills



? HAVE YOU HEARD?
100% OF OUR GRADUATES
get employed within a span of
6 months upon graduation.

Career Opportunities

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

FOUNDATION IN SCIENCE

SEGi UNIVERSITY

The foundation programme is designed to equip you with the knowledge, skills, and practice needed to bridge you from secondary studies to tertiary level.

We cover the subject of applied sciences, providing a strong foundation for those intending to pursue programmes in Health Sciences, Engineering, and Computing. The foundation will guarantee your entry into above par degree programmes with SEGi as well as UK universities in collaboration with SEGi. The foundation programme enables you to gain direct entry into respective degree programmes.

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

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 science or engineering programmes.

R2/010/3/0356(7/25) KD CAMPUS

FOUNDATION IN ARTS

SEGi UNIVERSITY

The foundation year is an introductory programme that will equip students with the skills and knowledge to further their studies locally or internationally. Students are exposed to modules which will allow them to become creative thinkers and problem solvers and produce practical ideas. This programme also enables students to develop a range of practical skills and solid knowledge, preparing them for a smooth progress into a degree of their choice.

Programme Modules

Semester 1

- General Language Training
- Computer Application
- Introduction to Business
- Statistics

Semester 3

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

Semester 2

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

Electives (Information Technology)

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

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 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.

R2/010/3/0406(7/26) KD CAMPUS

* Students will have to choose the electives according to the discipline of undergraduate studies they intend to pursue.



STUDENT TESTIMONIALS



"As a recent graduate of SEGi University's Bachelor of Information Technology (Hons) programme, I feel that I have attained a strong foundation in Computer Science which has equipped me with the skills to learn any emerging technology. The Head of School (HoS), lecturers and the faculty staff are very caring and interested in students' well-being. They make sure that every class is fun, educational and interactive, while encouraging students to perform their best. With proper guidance from them as well as the support of my family, I was able to score a 4.0 CGPA and become the highest achiever for the 2015-2018 batch. I wouldn't have been able to achieve this success without that caring environment. As each day passes, I feel that I am one step closer to becoming a successful software engineer that SEGi has equipped me to be."

Unagollage Binod Charukshi Wijesinghe

Bachelor of Information Technology (Hons) - Software Engineering



"There were a lot of strategies and tips that I've learnt while doing this programme. No doubt BIT can be challenging, as it is very technical to an extent. However, I'm glad that I've chosen SEGi as my starting point. My lecturers are great and the tutorials provided in SEGi has guided me a lot during my learning process here. It is important to maintain a positive mental attitude and believe in your capacity to succeed!"

Cheong Chee Yen

1st Class Honours



"My campus life at SEGi has been wonderful, and with such helpful lecturers, I'm looking forward to finishing my programme and experiencing a wholesome environment."

Adam Mohammad Low Bin Johan Thomas Low



"The lecturers at SEGi are relentless at guiding students to achieve excellence throughout the programme. The knowledge and skills taught has helped me obtain the right opportunities to embark on my career journey."

Mohd Syazwan Bin Mohd Hanafie



INDUSTRY PARTNERS

These are the active industry partners who have been working with us. We want to thank all these industry partners for their generous partnership with SEGi.

- 1 99 Speed Mart Sdn Bhd
- 2 AEGIS BPO Malaysia Sdn Bhd
- 3 Ageless Brands Sdn Bhd
- 4 Avon Cosmetic (M) Sdn Bhd
- 5 Bandar Utama City Centre Sdn Bhd
- 6 Brandt International Sdn Bhd
- 7 Catch That Bus Sdn Bhd
- 8 Convergys Malaysia Sdn Bhd
- 9 CTOS DATA SYSTEMS SDN BHD
- 10 Flexiroam Sdn Bhd
- 11 Flykidz Gymnastics Sdn Bhd
- 12 Fuji Xerox Printers Distributor
- 13 Global Business Center Sdn Bhd (DELL)
- 14 Golden Hope Plantation Berhad
- 15 Hartamas Real Estate (Malaysia) Sdn Bhd
- 16 Island & Peninsular Bhd
- 17 Lumen Properties Sdn Bhd
- 18 Malaysia Airlines
- 19 Nikon (Malaysia) Sdn Bhd
- 20 OSK Holdings Berhad
- 21 OXIM Sdn Bhd (OXCEL Sdn Bhd)
- 22 Pembinaan Mitrajaya Sdn Bhd
- 23 Planetpop Marketing Sdn Bhd

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The best in you, made
POSSIBLE

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SCAN HERE

