



**SEGi**  
University &  
Colleges

---

# ENGINEERING & THE BUILT ENVIRONMENT

/ˌen.dʒɪˈnɪər.ɪŋ/ /ænd/ /ˈdiː/ /bɪlt/ /ɪnˈvaɪ.rə.mənt/ **noun**

---

1. Recognised by Board of Engineers Malaysia
2. Research and innovation focused
3. Graduate with additional certificates and affiliations
4. Strong industrial collaboration

## Programme accreditations and recognitions



MINISTRY OF HIGHER EDUCATION



# ONE OF THE LARGEST & LEADING 47 YEARS AT

ONE OF THE ONLY 24 QS 5-Stars Rated University in the World



Teaching



Internationalisation



Online Learning



Arts & Culture



Employability



Academic Development



Bachelor of Medicine and  
Bachelor of Surgery (MBBS)



Inclusiveness





# NG HIGHER EDUCATION GROUP IN MALAYSIA T THE FOREFRONT OF EDUCATION

KOTA DAMANSARA | KUALA LUMPUR | SUBANG JAYA  
PENANG | KUCHING | IPOH | JOHOR BAHRU | SIBU

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



Partner Universities and Institutions

# YOUR GATEWAY TO LEADING GLOBAL INSTITUTIONS

Consortium of Global Research and Mobility Partners










# BRINGING THE WORLD TO YOU

## GLOBAL PARTNERING UNIVERSITIES



### University of Greenwich (UoG), UK






2024 - 2025

	<b>691 - 700<sup>th</sup></b>	WORLD UNIVERSITY RANKINGS		<b>97<sup>th</sup></b>	EUROPE UNIVERSITY RANKINGS NORTHERN EUROPE
	<b>501 - 600<sup>th</sup></b>	WORLD UNIVERSITY RANKINGS		<b>89<sup>th</sup></b>	IMPACT RANKINGS
	<b>301 - 400<sup>th</sup></b>	BUSINESS & ECONOMICS SUBJECT RANKING		<b>401 - 500<sup>th</sup></b>	SOCIAL SCIENCES SUBJECT RANKING
	<b>601 - 800<sup>th</sup></b>	COMPUTER SCIENCE SUBJECT RANKING		<b>97%</b>	INTERNATIONAL OUTLOOK SCORING
				<b>501 - 600<sup>th</sup></b>	EDUCATION SUBJECT RANKING



### University of Hertfordshire (UH), UK





2024 - 2025

	<b>851 - 900<sup>th</sup></b>	WORLD UNIVERSITY RANKINGS		<b>129<sup>th</sup></b>	EUROPE UNIVERSITY RANKINGS NORTHERN EUROPE
	<b>601 - 800<sup>th</sup></b>	WORLD UNIVERSITY RANKINGS		<b>201 - 250<sup>th</sup></b>	YOUNG UNIVERSITY RANKINGS
	<b>65<sup>th</sup></b>	COMPUTER SCIENCE LEAGUE TABLE		<b>92%</b>	INTERNATIONAL OUTLOOK SCORING



### University of Central Lancashire (UCLan), UK

2024 - 2025

	<b>951 - 1000<sup>th</sup></b>	WORLD UNIVERSITY RANKINGS		<b>135<sup>th</sup></b>	EUROPE UNIVERSITY RANKINGS NORTHERN EUROPE
	<b>201 - 300<sup>th</sup></b>	IMPACT RANKINGS		<b>251 - 300<sup>th</sup></b>	YOUNG UNIVERSITY RANKINGS
	<b>601 - 800<sup>th</sup></b>	BUSINESS & ECONOMICS SUBJECT RANKING		<b>82%</b>	INTERNATIONAL OUTLOOK SCORING

# LEARN UNDER THE BIGGEST & BRIGHTEST FROM THE INDUSTRY

To excel in your career from day one, you need cross-disciplinary skills, industry insights, and technical know-how. These are often not adequately provided by traditional education methods like written assignments, industry visits, or internships.

Our programmes integrate industry expertise directly into the classroom experience. Co-designed, co-delivered, and co-assessed by industry professionals, our programmes offer hands-on learning opportunities with over 300 partner brands. The aim is to ensure you have real-world experience and secure job or business opportunities before graduation.

Winner of the  
**Employers' Choice Award**  
by Talentbank for  
**TWO CONSECUTIVE YEARS**







# CONSORTIUM OF INDUSTRY PARTNERS





# YOUR WORK EXPERIENCE COUNTS!

SHORTEST & FASTEST PATHWAY FOR ADULT LEARNERS



## SKIP ENTRY REQUIREMENTS: DIRECT ENTRY PATHWAY

Can't meet the entry requirements?  
APEL.A is the preferred alternative pathway to qualify yourself for a programme.



## STUDY FIRST AND GET AUTOMATICALLY QUALIFIED LATER

Start studying first and you will automatically be qualified once you pass more than 50% of the subjects.



## SHORTEN YOUR STUDY DURATION

Cut your studying duration up to 50% using your experience from work & training!



## GET A QUALIFICATION WITHOUT STUDYING

Convert your work experience into a fully recognised qualification.

CANNOT COMMIT FOR A FULL-FLEDGED PROGRAMME?

# "ALA-CARTE" YOUR EDUCATION

## BUILD YOUR QUALIFICATION SUBJECT BY SUBJECT

Not ready to take on a full-fledged programme? Enrol in 1 subject as a micro-credential first. Accumulate the subjects over time and stack them up to become a full-fledged qualification.

PROFESSIONAL PROGRAMMES

**4** MICRO-CREDENTIAL SUBJECTS

DEGREE/DIPLOMA

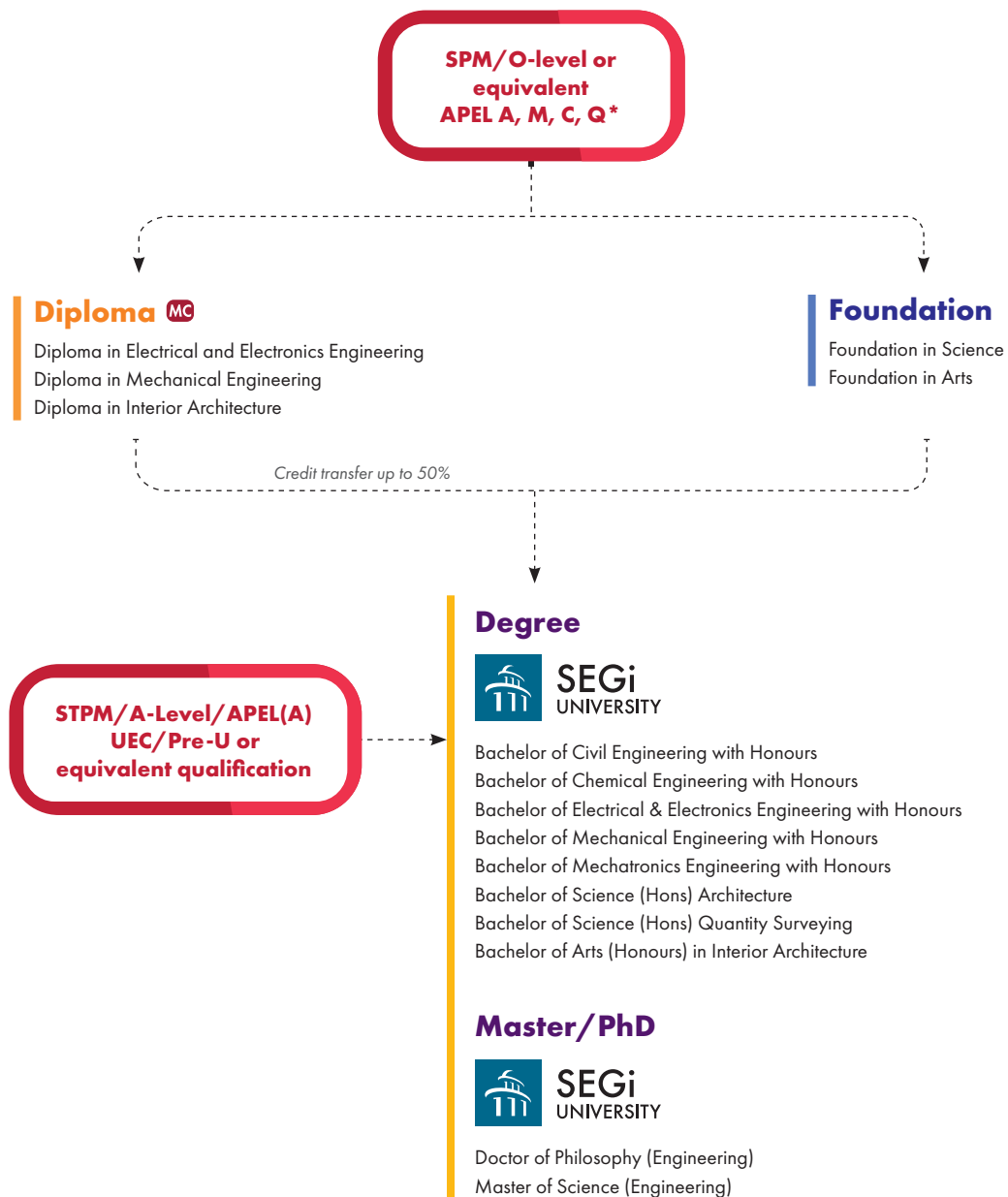
**6** PROFESSIONAL PROGRAMMES

# QUALITY EDUCATION WITHIN REACH

## PROGRAMMES THAT SUITS YOUR NEEDS

Mode of Study	Full time	Programme is offered in full time mode
	Weekend	The weekend programme is also designed to suit adult learners to complete within the shortest timeframe possible
	ODL	Open and Distance Learning (ODL) mode is a fully-online learning mode suited to students who wishes to study off-campus
	WBL	Work-Based Learning (WBL) is an innovative mode of delivery where SEGi partners with a renowned brand to deliver the programme. Students get the best of both worlds in their studies – theoretical know-how from SEGi and practical learning from the industry
Micro-credentials	MC	Micro-credentials are designed for students who wish to 'ala carte' their education. Subjects are offered on a singular basis and are stackable over time to convert into a full-fledged qualification
APEL	APEL A/M/C	Developed by the Malaysian Qualifications Agency (MQA), the Accreditation of Prior Experiential Learning (APEL) programme enables students to access multiple pathways into a recognised programme
	APEL Q	The APEL.Q programme enables students to convert work experience into a recognised qualification without going through the conventional teaching and learning of a programme
Mobility	Mobility	Students are eligible to study in another SEGi campus for 1 semester without additional cost to their tuition fee
	Global Mobility	Students are eligible to transfer to our partnering universities for mobility programmes
Funding	PTPTN Assistance	A dedicated PTPTN Assistance office to help students secure PTPTN fundings
	EPF-Claimable	Students/guardians can withdraw from the EPF to fund their/their children's studies
	PTPTNX'tra	PTPTNX'tra helps cover the remaining shortfall that is not covered by PTPTN. Students can effectively pay nothing until they graduate and enjoy an education loan with a minimal interest rate of 1%
	EduFlex	Designed for Adult Learners, students can leverage on our education loan with a minimal 4% interest
	0% Installment	We offer a 0% interest monthly instalment plan, so that you don't have to break the bank.
	HRDC-Claimable	All our programmes are claimable under HRD Corp

# 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 Civil Engineering with Honours <small>KD [R2/526/6/0070][06/26][MQA/FA9354]</small>	SEGi University	<ul style="list-style-type: none"> <li>• STPM - 2 principal passes including Mathematics and 1 relevant Natural Science subject</li> <li>• A-Level - 2 principal passes including Mathematics and 1 relevant Natural Science subject</li> <li>• UEC - 5 Bs MUST include Mathematics and 1 relevant Natural Science subject</li> <li>• Foundation Studies - CGPA of at least 2.00 in a relevant field from an institute of higher education recognised by the Malaysian Government</li> <li>• Diploma or other relevant fields with a minimum of CGPA 2.00 from a higher education institute recognised by the Malaysian Government</li> <li>• Other - Equivalent qualification recognised by Malaysian Government</li> </ul> <p>*Note: Natural Sciences subjects are Physics, Biology, Chemistry, etc.</p>	Kota Damansara
Bachelor of Mechanical Engineering with Honours <small>KD [R2/521/6/0146][10/27][MQA/FA12419]</small>			
Bachelor of Electrical and Electronics Engineering with Honours <small>KD [R2/523/6/0060][10/28][MQA/FA1882]</small>			
Bachelor of Chemical Engineering with Honours <small>KD [R2/524/6/0011][06/29][MQA/FA1275]</small>			
Bachelor of Mechatronics Engineering with Honours <small>KD [N/0788/6/0007][03/31][MQA/PA17306]</small>			
Bachelor of Science (Hons) Quantity Surveying <small>KD [R2/526/6/0028][03/30][MQA/FA1239]</small>		<ul style="list-style-type: none"> <li>• STPM - 3 principal passes including Mathematics subject</li> <li>• A-Level - 3 principal passes including Mathematics subject</li> <li>• UEC - 5 Bs MUST include Mathematics subject</li> <li>• Foundation Studies - CGPA at least 2.50 in relevant field</li> <li>• Diploma - min. CGPA 2.00 for first year entry</li> <li>• Accredited Diploma in QS must obtain min CGPA 2.67 for advance entry</li> <li>• Other - Equivalent qualification recognised by Malaysia Government</li> </ul> <p>Additional Requirements</p> <ul style="list-style-type: none"> <li>• Local students MUST also have Credit in Mathematics in SPM</li> </ul>	
Bachelor of Science (Hons) Architecture <small>KD [N/581/6/0092][05/23][MQA/PA8425]</small>		<ul style="list-style-type: none"> <li>• STPM - 2 principal passes AND Credit in Bahasa Malaysia &amp; Mathematics in SPM</li> <li>• A-Level - 2 principal passes AND Credit in Mathematics in SPM</li> <li>• UEC - 5 Bs MUST include Mathematics subject</li> <li>• Foundation Studies - min. CGPA 2.00 AND Credit in Mathematics in SPM or equivalent</li> <li>• Diploma or other relevant field with minimum of CGPA 2.00 from higher education institute recognised by the Malaysian Government</li> <li>• Other - Equivalent qualification recognised by Malaysia Government</li> </ul> <p>Additional Requirements</p> <ul style="list-style-type: none"> <li>• Passed in Art/ Technical Drawing subject in SPM or equivalent OR Passed portfolio assessment interview for those who failed or did not take Art subject</li> </ul>	
Bachelor of Arts (Honours) in Interior Architecture <small>KD [R/581/6/0027][05/25][MQA/FA1340]</small>		<ul style="list-style-type: none"> <li>• STPM - 2 principal passes</li> <li>• A-Level - 2 principal passes</li> <li>• UEC - 5 Bs</li> <li>• Foundation Studies - CGPA at least 2.00 in relevant field from institute of higher education recognised by the Malaysian Government</li> <li>• Diploma or other relevant field with minimum of CGPA 2.00 from higher education institute recognised by the Malaysian Government</li> <li>• Other - Equivalent qualification recognised by Malaysia Government</li> </ul> <p>Additional Requirements</p> <ul style="list-style-type: none"> <li>• Passed in Art/ Technical Drawing subject in SPM or equivalent OR Passed portfolio assessment interview for those who failed or did not take Art subject</li> </ul>	

Programme	Awarding Institution	Entry Requirements	Campus
<b>Diploma in Electrical and Electronics Engineering</b> SJ [R3/520/4/0091] (11/27) [MQA/FA 2829] PG [R2/523/4/0103] (01/28) [MQA/FA2301]	SEGi College	<ul style="list-style-type: none"> <li>• SPM/SPMV/O-level or equivalent: At least 3 credits, including Mathematics and a Science/Technical/Vocational subject, and passed English.</li> <li>• UEC/STPM/STAM or equivalent: Specific requirements include at least grade B in UEC subjects, a pass and credit in STPM subjects, or Pangkat Maqbul in STAM, with required passes in Mathematics, English, and a Science/Technical/Vocational subject.</li> <li>• Vocational/Technical Certificates: Sijil Kemahiran Malaysia (Tahap 3 KKM) or equivalent with relevant experience or bridging program completion.</li> <li>• International Students: TOEFL score of 500 or IELTS score of 5.0 or equivalent. If not met, an English course will be provided to ensure proficiency.</li> <li>• MQA APEL (Accreditation of Prior Experiential Learning): Admission to the Diploma programme based on APEL T-4 requirements.</li> </ul>	Subang Jaya Penang
<b>Diploma in Mechanical Engineering</b> SJ [R3/521/4/0014] (03/27) [A 7749]			Subang Jaya
<b>Diploma in Interior Architecture</b> SJ [R3-TVET/0212/4/0001] (11/27) [TVET/QF14618]		<ul style="list-style-type: none"> <li>• SPM / O-Level or equivalent with 3 credits</li> <li>• STPM with minimum Grade C (GP 2.00) in any subject</li> <li>• STAM with minimum grade of Maqbul in any subject</li> <li>• UEC with 3 credits</li> <li>• Related SKM Level 3 / SVM</li> <li>• Related Certificate Level 3 with minimum CGPA of 2.00 or equivalent</li> <li>• MQA-APEL T4</li> </ul> <p>Additional Requirements</p> <ul style="list-style-type: none"> <li>• Pass aptitude test or submission of portfolio</li> </ul>	
<b>Foundation in Science</b> KD [R2/010/3/0356] (07/25) [MQA/A4432] SJ [R3/000/3/0021] (04/28) [A7755]	SEGi	<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> <p>Additional Requirements</p> <p>Credit in Maths and 2 Sciences at SPM / O-Level or equivalent</p>	Kota Damansara Subang Jaya
<b>Foundation in Arts</b> SJ [R2/010/3/0541] (07/26) [MQA /FA 0452] KD [R2/010/3/0406] (07/26) [MQA/FA0193]		<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>	



## 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 ELECTRICAL & ELECTRONICS ENGINEERING WITH HONOURS

KD (R2/523/6/0060)(10/28)(MQA/FA1882)

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

## Programme Modules

### Year 1

- Engineering Mathematics I
- Circuits and Signals I
- Digital Electronics I
- Engineering Drawing
- Laboratory Investigations I
- Communication System
- Engineering Mathematics II
- Circuits and Signals II
- Analogue Electronics I
- Digital Electronics II
- Entrepreneurship Development
- Laboratory Investigations II

### Year 2

- Engineering Statistics
- Programming in C++
- Analogue Electronics II
- Electromagnetic Fields and Waves
- Measurement and Instrumentation
- Laboratory Investigations III
- Computational and Numerical Analysis
- Control Systems
- Power Electronics
- Microprocessor
- Environmental Management & Technology
- Laboratory Investigations IV

### Year 3

- Computer Architecture
- Engineers and Society
- Electrical Power Generation
- Digital Signal Processing
- Electrical Machines & Drives
- Integrated Design Project I
- Embedded System
- Power System Analysis
- Project Management, Planning and Control
- Design of Electrical and Protection System
- Integrated Design Project II
- Industrial Training (12 weeks)

### Year 4

- Electrical Energy Utilisation
- Electronic Drives & Application
- Safety & Risk Engineering
- Final Year Project
- High Voltage Engineering
- Electronics System Analysis and Design

### Elective

- Advanced Microprocessor
- Electrical Installation and Practices
- Energy Conversion
- PLC & SCADA

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*

\* Local Students

\*\* International Students

\*\*\* Local &amp; International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM



- Clean Water And Sanitation
- Affordable And Clean Energy
- Decent Work And Economic Growth
- Industry, Innovation And Infrastructure
- Sustainable Cities And Communities
- Responsible Consumption And Production
- Climate Action

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- Advanced Robotics
- Horizontal & Vertical Integration
- Industrial Internet of Things
- Additive Manufacturing
- Big Data Analytics

### Mode of Study

- Full time
- Weekend

### Career Opportunities

As graduates of the Bachelor of Electrical & Electronics Engineering with Honours programme, you will have a wide choice of careers in sectors including IoT, robotics & Automation, Control & Instrumentation, Electric Power utilities, and Renewable Energy industry.

# DEGREE WITH SPECIALISATION

## FOR EXPERTS OF THE FUTURE

■ 4 Electives to choose from for specialisation





# SUSTAINABLE INNOVATIONS FOR A BETTER TOMORROW THROUGH CHEMICAL ENGINEERING

- Incorporation of SDGs & ESG focused principles in chemical engineering syllabus, which includes SDG 6, 7, 8, 9, 11, 12 & 13.
- Comprehensive exposure to industrial and IR4.0 driven projects, guided by external industry professional engineers
- Programme fully accredited by BEM

## BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS

KD [R2/524/6/0011][06/29][MQA/FA1275]

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

### Programme Modules

#### Year 1

- Mass and Energy Balances
- Physical and Organic Chemistry
- Engineering Mathematics I
- Engineering Drawing
- Material Science
- Chemical Engineering Laboratory I
- Fluid Mechanics
- Thermodynamics
- Strength of Materials
- Engineering Mathematics II
- Project Year I
- Chemical Engineering Laboratory II

#### Year 2

- Heat and Mass Transfer
- Separation Processes I
- Computational and Numerical Analysis
- Computer Aided Chemical Engineering
- Electrical Technology
- Chemical Engineering Laboratory III
- Chemical Engineering Thermodynamics
- Particle Technology
- Separation Processes II
- Engineering Statistics
- Chemical Engineering Laboratory IV
- Project Year II

#### Year 3

- Process Control and Instrumentation
- Separation Processes III
- Chemical Reaction Engineering
- Environmental Management and Technology
- Chemical Engineering Laboratory V
- Biochemical Engineering Principles
- Chemical Process Safety
- Project Management and Economics
- Transport Phenomena
- Engineers and Society
- Project Year III
- Industrial Training (12 weeks)

#### Year 4

- Process and Plant Design
- Design Project I
- Research Methodology
- Entrepreneurship
- Fuel and Energy Utilization
- Safety & Risk Engineering
- Research Project
- Design Project II

#### Elective

- Water and Wastewater Engineering
- Bio-separation: Recovery Processes
- Solid Waste Engineering
- Bioreactor Engineering Design

#### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



6. Clean Water And Sanitation
7. Affordable And Clean Energy
8. Decent Work And Economic Growth
9. Industry, Innovation And Infrastructure
11. Sustainable Cities And Communities
12. Responsible Consumption And Production
13. Climate Action

#### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- C. Horizontal & Vertical Integration
- D. Industrial Internet of Things
- G. Additive Manufacturing
- I. Big Data Analytics

### Mode of Study

- Full time
- Weekend

### Career Opportunities

Chemical engineering offers a broad range of career opportunities in a variety of sectors: Oil & Gas, Chemical Industries, Food & Beverages, Environmental & Sustainable Development, Energy Management, Manufacturing, Pharmaceutical/healthcare and Semiconductor industries.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM

# DESIGNED & DELIVERED BY ENGINEERS FOR ENGINEERS

- Taught by professional engineers registered with BEM
- Lecturers with consultancy & research experience



## BACHELOR OF CIVIL ENGINEERING WITH HONOURS

KD (R2/526/6/0070)(06/26)(MQA/FA9354)

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

### Programme Modules

#### Year 1

- Engineering Mathematics I
- Statics and Dynamics
- Construction Materials
- Engineering Drawing
- Soil Mechanics I
- Programme Methodology & Problem Solving
- Engineering Mathematics II
- Fluid Mechanics
- Mechanics of Materials
- Engineering Surveying

#### Year 2

- Construction Technology
- Engineering Statistics
- Structural Analysis I
- Hydraulics
- Soil Mechanics II
- Computational and Numerical Analysis
- Construction Project Management
- Hydrology
- Estimating & Costing of Buildings
- Building Information Modelling (BIM)
- Entrepreneurship

#### Year 3

- Design of Reinforced Concrete Structures I
- Highway Engineering
- Structural Analysis II
- Geotechnics
- Design of Steel and Timber Structures
- Design of Reinforced Concrete Structures II
- Water Resources & Supply Engineering
- Engineering Applications and Analysis
- Engineers & Society
- Conceptual Design
- Industrial Training (12 weeks)

#### Year 4

- Environmental Management & Technology
- Safety & Risk Engineering
- Foundation Design
- Integrated Project
- Project and Research Methods
- Traffic and Transportation Engineering

#### Elective

- Hydraulic Structures
- Design of Earth Retaining Structures
- Advanced Reinforced Concrete Design
- Concrete Technology
- Design of Steel Structures II

#### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



- 6. Clean Water And Sanitation
- 8. Decent Work And Economic Growth
- 9. Industry, Innovation And Infrastructure
- 11. Sustainable Cities And Communities
- 12. Responsible Consumption And Production
- 13. Climate Action

#### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- C. Horizontal & Vertical Integration
- D. Industrial Internet of Things
- H. Supply Chain

### Mode of Study

- Full time
- Weekend

### Career Opportunities

As civil engineers, your career opportunities are vast and varied, depending on your area of specialisation and interest. Your potential employers include local and international consulting firms, construction companies and research institutions, as well as all levels in government.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM



# BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS

KD [R2/521/6/0146][10/27][MQA/FA12419]

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

## Programme Modules

### Year 1

- Engineering Mathematics 1
- Fundamental Engineering Mechanics
- Engineering Drawing
- Engineering Materials
- Electrical and Electronic Circuits and Applications
- Engineering Mathematics 2
- Programming in C++
- Advanced Engineering Drawing
- Engineering Mechanics
- Thermodynamics

### Year 2

- Engineering Statistics
- Manufacturing Processing & Technology
- Fluid Mechanics
- Solid Mechanics
- 3D Engineering Design and Modelling
- Computational and Numerical Analysis
- Measurement and Instrumentation
- Design of Machine Elements
- Heat Transfer
- 3D Engineering Design Analysis

### Year 3

- Manufacturing Systems Design
- Advanced Fluid Mechanics
- Advanced Solid Mechanics
- Integrated Design Project I
- Vibrations
- Engineers and Society
- Advanced Thermodynamics
- Advanced Engineering Materials
- Electrical Machines
- Integrated Design Project II
- Entrepreneurship
- Industrial Training (12 weeks)

### Year 4

- Final Year Project
- Project Management, Planning and Control
- Safety and Risk Engineering
- Finite Element Analysis
- Control and System Engineering
- Environmental Management and Technology

### Elective

- 3D Printing Technology
- Thermal Management in Product Design
- Computational Fluid Dynamics
- PLC & SCADA
- Heat, Ventilation & Air Conditioning (HVAC)
- Advanced Manufacturing Technology

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



- Clean Water And Sanitation
- Affordable And Clean Energy
- Decent Work And Economic Growth
- Industry, Innovation And Infrastructure
- Sustainable Cities And Communities
- Responsible Consumption And Production
- Climate Action

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- Advanced Robotics
- Simulation & Augmented Reality
- Horizontal & Vertical Integration
- Industrial Internet of Things
- Additive Manufacturing
- Big Data Analytics

### Mode of Study

- Full time
- Weekend

### Career Opportunities

As graduates of the Mechanical Engineering, you will have the necessary knowledge and skills to play a major role in design, consultancy, management, and manufacturing in developing sustainable energy solutions and fighting climate change. Mechanical engineers are highly demanded in industries such as aerospace, automotive, renewable energy, and more.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM

# BE AT THE FOREFRONT OF IR4.0 AND BEYOND

- Lecturers with consultancy & research experience
- World-class facilities





# AI & IoT:

## ENGINEERING A CONNECTED FUTURE

- Real-World Application
- Career Versatility & Global Opportunities
- Cutting-Edge Research

## BACHELOR OF MECHATRONICS ENGINEERING WITH HONOURS

[N/0788/6/0007][03/31][MQA/PA17306]

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

### Programme Modules

#### Year 1

- Engineering Mathematics 1
- Engineering Drawing
- Electrical and Electronic Circuits and Applications
- Digital Electronics I
- Fundamental Engineering Mechanics
- Engineering Mathematics 2
- Advanced Engineering Drawing
- Programming in C++
- Analogue Electronics I
- Manufacturing Processing & Technology

#### Year 2

- Engineering Statistics
- 3D Engineering Design and Modelling
- Measurement and Instrumentation
- Engineering Mechanics
- Engineering Materials
- Computational and Numerical Analysis
- 3D Engineering Design Analysis
- Design of Machine Elements
- Power Electronics
- Thermodynamics

#### Year 3

- Integrated Design Project I
- Engineers and Society
- Control Systems
- Microprocessor
- Solid Mechanics
- Integrated Design Project II
- Safety and Risk Engineering
- Electrical Machines & Drives
- Vibration
- Fluid Mechanics
- Industrial Training (12 weeks)

#### Year 4

- Final Year Project 1
- Project Management, Planning and Control
- Embedded System
- Manufacturing Systems Design
- Final Year Project 2
- Environmental Management and Technology
- Electronic Drives & Application

#### Elective

- Artificial Intelligence
- Finite Element Analysis
- Introduction to IoT
- Machine Vision and Image Processing
- PLC & SCADA
- Robotic and Automation

#### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



1. No Poverty
4. Quality Education
6. Clean Water And Sanitation
7. Affordable And Clean Energy
8. Decent Work And Economic Growth
9. Industry, Innovation And Infrastructure
10. Reduced Inequalities
11. Sustainable Cities And Communities
12. Responsible Consumption And Production
13. Climate Action
14. Life Below Water
15. Life On Land
16. Peace, Justice And Strong Institutions
17. Partnerships For The Goals

#### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- B. Simulation & Augmented Reality
- C. Horizontal & Vertical Integration
- F. Cloud
- H. Supply Chain
- I. Big Data Analytics

#### Mode of Study

- Full time
- Weekend

#### Career Opportunities

SEGi's Mechatronics Engineering graduates are prepared for diverse careers like Mechatronics Engineer, Automation Engineer, Robotics Engineer, IoT Systems Engineer, Automotive Engineer, Aerospace Engineer, Consumer Electronics Engineer, Research Engineer, Academic/Lecturer, Entrepreneur/Startup Founder, and Sustainability/Environmental Engineer. With expertise in IoT, AI, and digital technologies, they can take on leadership roles, drive innovation, pursue design, development, research, establish startups, and contribute to sustainable solutions.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM

# BACHELOR OF SCIENCE (HONS) QUANTITY SURVEYING

KD [R2/526/6/0028](03/30)(MQA/FA1239)



FULLY ACCREDITED MICRO-CREDENTIALS APEL A/M/C MOBILITY

## Programme Modules

### Year 1

- Construction Materials
- Building Construction I
- Building Services I
- Basic Drawing And Autocad
- Principle of Economics
- Basic Architectural and Engineering Design
- Introduction to Measurement of Buildings Works
- Quantity Surveying Practice I
- Building Construction II
- Construction Economics I
- Geomatic Engineering

### Year 2

- Measurement of Building Works I
- Tendering and Estimating
- Building Services II
- Quantity Surveying Practice II
- Legal Studies I
- Measurement of Building Works II
- Civil and Infrastructures Construction Works
- Information Communication Technology (ICT)
- Legal Studies II
- Construction and Project Management
- Business and Professional Ethics

### Year 3

- Measurement of Civil Engineering Works
- Construction Economics II
- Quantity Surveying Practice III
- Data Analysis and Statistic
- Quantification and Computerisation
- Dissertation I
- Legal Studies III
- Value Engineering and Management
- Integrated Project
- Dissertation II
- Financial Commercial Management
- Industrial Training

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



1. No Poverty
4. Quality Education
6. Clean Water And Sanitation
7. Affordable And Clean Energy
8. Decent Work And Economic Growth
9. Industry, Innovation And Infrastructure
10. Reduced Inequalities
11. Sustainable Cities And Communities
12. Responsible Consumption And Production
13. Climate Action
14. Life Below Water
15. Life On Land
16. Peace, Justice And Strong Institutions
17. Partnerships For The Goals

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- A. Advanced Robotics
- B. Simulation & Augmented Reality
- C. Horizontal & Vertical Integration
- F. Cloud
- H. Supply Chain
- I. Big Data Analytics

## Mode of Study

- Full time
- Weekend

## Career Opportunities

Quantity Surveyor, Contract and Cost Administrator, Property and Commercial Executive, Procurement Advisor & Contract Executive/Project Executive are some of the possible employment prospects for QS graduates.

# EXCELLENCE & QUALITY RECOGNISED BY THE INDUSTRY

- Fully accredited by the Board of Quantity Surveyors Malaysia (BQSM), Royal Institution of Chartered Surveyors UK (RICS) & Pacific Association of Quantity Surveyors (PAQS)
- Focused on critical analytical skills & value engineering
- Taught by lecturers with industry experience





# BACHELOR OF ARTS (HONOURS) IN INTERIOR ARCHITECTURE

KD [R/581/6/0027][05/25][MQA/FA1340]

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

## Programme Modules

### Year 1

- Fundamental of Interior Architecture
- Architecture Principles and Communication
- Building Construction 1
- Building Services 1
- Software Application for Design
- Residential Design
- Architecture History 1
- Architecture Graphic
- Building Services 2
- Interior Material and Furnishing
- Building Construction 2

### Year 2

- Commercial Design
- Architecture History 2
- AutoCAD in Interior Design
- Environmental Psychology
- Furniture Design Workshop
- Advanced Interior Design 1
- Lighting Design
- Construction Contract Law
- Specifications and Contract Documentation
- Advanced Computer Modelling

### Year 3 (18 months)

- Advanced Interior Design 2
- Project and Construction Management
- Professional Practice for Interior Design
- Research Methods
- Business Ethic
- Design Project
- Thesis
- Industrial Training  
(6 months - to be completed before the Final semester)

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*

\* Local Students

\*\* International Students

\*\*\* Local &amp; International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM



3. Good Health And Well-Being
4. Quality Education
5. Gender Equality
7. Affordable And Clean Energy
9. Industry, Innovation And Infrastructure
11. Sustainable Cities And Communities
12. Responsible Consumption And Production

### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- B. Simulation & Augmented Reality

### Mode of Study

- Full time
- Weekend

### Career Opportunities

A degree in interior architecture and design will equip you with the specific creative and technical skills you'll need to succeed in the field. Career opportunities are vast and varies from Technical Assistant, Junior Designer, Interior Designer, Interior Architect, Interior and Spatial Designer, Furniture Designer, Set & Exhibition Designer to Lighting and Colour Consultant and Project Manager.

# INTERIOR ARCHITECTURE

## DEGREE FOR A SUSTAINABLE FUTURE

- Taught by lecturers with industry experience
- Recognised by Board of Architects, Malaysia
- Subjects for the future: Sustainability & Green Technology



# HIGHLY FOCUSED ON PRACTICAL & SUSTAINABLE ARCHITECTURE

- Recognised by Board of Architects, Malaysia
- Taught by lecturers with industry experience
- Subjects for the future: Sustainability & Green Technology



## BACHELOR OF SCIENCE (HONS) ARCHITECTURE

KD [R/ 581 / 6 / 0092] (11 / 26) (MQA / FAB425)

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

### Programme Modules

#### Year 1

- Design Studio 1
- Architectural Graphics
- Building Materials
- Architecture History 1
- Environmental Science 1
- Design Studio 2
- Architectural Communication
- Architecture History 2
- Building Construction 1
- Environmental Science 2

#### Year 2

- Design Studio 3
- Building Construction 2
- Basic CAD
- Building Services 1
- Structure 1
- Advanced CAD
- Design Studio 4
- Asian Architecture
- Structure 2
- Working Drawing

#### Year 3

- Design Studio 5
- Building Services 2
- Building Information Modelling
- Measured Drawing
- Industrial Training
- Design Studio 6
- Professional Studies
- Construction Project Management
- Sustainable Building Design

#### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*



- 3. Good Health And Well-Being
- 7. Affordable And Clean Energy
- 9. Industry, Innovation And Infrastructure
- 11. Sustainable Cities And Communities
- 13. Climate Action
- 14. Life Below Water
- 15. Life On Land

#### 9 PILLARS OF TECHNOLOGICAL ADVANCEMENT

- B. Simulation & Augmented Reality
- C. Horizontal & Vertical Integration

### Mode of Study

- Full time
- Weekend

### Career Opportunities

Assistant Architect, Technical Assistant, CAD Operator, Construction Supervisor, 3D Visualizer, Graphic Artist, Creative Designer, BIM Coordinator.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM



# DIPLOMA IN MECHANICAL ENGINEERING

SJ (R3/521/4/0014) (03/27) (A.7749)

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

## Programme Modules

### Year 1

- Engineering Mathematics 1
- Foundation Physics
- Engineering Drawing
- Principles of Electronics and Electrical Engineering
- Applied Digital Skills
- Academic English
- Programming Methodology and Problem Solving
- Engineering Mathematics 2
- Engineering Statics
- Material Engineering
- Thermodynamics
- Fluid Mechanics

### Year 2

- Mechanics of Material 1
- Manufacturing Technology
- Applied Thermodynamics
- Applied Fluid Mechanics
- Elective
- Industry Revolution 4.0 in Malaysia
- Final Year Project 1
- Mechanics of Material 2
- Engineering Dynamics
- Heat Transfer
- Industrial Management
- Machine Design
- Final Year Project 2
- 3D Design Process

### Year 3

- Internship

### Elective

- Digital Marketing
- Technopreneurship

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*

\* Local Students

\*\* International Students

\*\*\* Local &amp; International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM

### Mode of Study

- Full time
- Weekend

### Career Opportunities

Possible job titles relevant to this qualification include: CAD Application Engineer, Trainee Engineer, Trainee Design Engineer, Mechanical Engineer, Design Engineer, Draughts Person and Structural Engineer.

## BUILDING A STRONG FOUNDATION TO A MECHANICAL ENGINEERING DEGREE

- Taught by lecturers with industry experience
- World-class facilities





# BUILDING A STRONG FOUNDATION TO AN E&E DEGREE

- Taught by lecturers with industry experience
- E&E labs and simulation equipment

## DIPLOMA IN ELECTRICAL AND ELECTRONIC ENGINEERING

SJ (R3/520/4/0091) [11/27] (MQA/FA 2829) • PG (R2/523/4/0103) [01/28] (MQA/FA2301)

FULLY ACCREDITED MICRO-CREDENTIALS APEL A/M/C MOBILITY

### Programme Modules

#### Year 1

- Engineering Mathematics 1
- Foundation Physics
- Engineering Drawing
- Principles of Electronics and Electrical Engineering
- Applied Digital Skills
- Academic English
- Programming Methodology and Problem Solving
- Engineering Mathematics 2
- Digital Electronics
- Circuit Theory and Electro-Magnetic Field
- Analogue Electronics
- Instrumentation and Measurement
- Microprocessors and Microcontrollers

#### Year 2

- Applied Mathematics
- Control System
- Introduction to Robotics and Industrial Simulation
- Electrical Machines
- Microelectronics
- Final Year Project 1
- Communication System
- Power System
- Industrial Management
- Final Year Project 2

#### Year 3

- Internship

#### Elective

- Digital Marketing
- Technopreneurship

#### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*

### Mode of Study

- Full time
- Weekend

### Career Opportunities

As graduates of the Diploma in Electrical and Electronic Engineering, you are able to pursue a variety of job roles. Possible job titles relevant to this qualification include: Electrical Engineering Technical Officer, Technologist, Design Specialist, Assistant Engineer.

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM



# DIPLOMA IN INTERIOR ARCHITECTURE

SJ (R3-TVET/0212/4/0001) (11/27) (A7946)

FULLY ACCREDITED

MICRO-CREDENTIALS

APEL A/M/C

MOBILITY

## Programme Modules

### Year 1

- 2 & 3 Dimensional Design
- Colour Studies
- Fundamental Photography
- Architectural Drafting
- Interior Architecture 1
- Material & Finishes
- Digital Graphic
- General Language Training
- Interior Architecture 2
- AutoCAD Studies
- Building Construction
- Workshop Practice

### Year 2

- Computer 3D Modelling
- History of Architecture
- Lighting Design
- Academic English
- Interior Architecture 3
- Furniture Design
- Design Methods
- Portfolio Preparation
- Industrial Training

### Year 3

- Interior Architecture 4

### MPU

- Penghayatan Etika dan Peradaban \*
- Bahasa Melayu Komunikasi 2 \*\*
- Philosophy and Current Issues \*\*\*
- Co-Curriculum: Sustainability Thinking \*\*\*
- Integrity and Anti-Corruption \*\*\*
- Bahasa Kebangsaan A \*\*\*\*

\* Local Students

\*\* International Students

\*\*\* Local & International Students

\*\*\*\* Local Students without SPM BM credit/without SPM BM

in collaboration with



## Mode of Study

- Full time
- Weekend

## Career Opportunities

Interior architect, interior designer, interior consultant, retail & commercial designer, residential designer, lighting & furniture designer.

# DESIGNED FOR VERSATILE SPACE DESIGNERS OF THE FUTURE

- Strong industry partnerships & linkages
- Award winning alumni & lecturers
- Practical & hands-on learning





# 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][MGA/A4432]; MGA/PA14176 N-DL/010/3/0024

### Programme Modules

#### Year 1

- Chemistry 1
- Mathematics 1
- Chemistry 3
- Mathematics 3
- Academic English
- Computer Application
- Chemistry 2
- Mathematics 2
- Elective 1 \*
- Elective 2 \*
- Elective 3 \*
- Elective 4 \*
- 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

- |   |   |   |
|---|---|---|
| <ul style="list-style-type: none"> <li>• Chemistry I</li> <li>• Mathematics I</li> <li>• Physics I</li> <li>• Biology I</li> <li>• English I</li> <li>• Chemistry II</li> </ul> | <ul style="list-style-type: none"> <li>• Mathematics II</li> <li>• Physics II</li> <li>• Basic Information and Communication Technologies (ICT)</li> <li>• English II</li> <li>• Chemistry III</li> </ul> | <ul style="list-style-type: none"> <li>• Engineering Mathematics</li> <li>• Physics III</li> <li>• Biology II</li> <li>• Biochemistry</li> <li>• Thinking Skills</li> </ul> |
|---|---|---|

### 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

#### Year 1

- General Language Training
- Computer Application
- Introduction to Business
- Mathematics
- Statistics
- Academic English
- Public Speaking
- Critical Thinking Skills
- Principles of Economics
- Elective 1
- Elective 2
- Elective 3
- Elective 4
- 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

## 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





# 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)

☎ 603 6145 1777 ☎ 011 1501 8838

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

☎ 603 2070 2078 ☎ 012 988 7482 ☎ 1800 88 8028

**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

**SEGi University Regional Centre, Johor Bahru**

☎ 607 235 9188 ☎ 010 313 0303

**SEGi Admissions and Support Centre, Ipoh**

☎ 016 212 9736

The best in you, made

**POSSIBLE**

The information in this brochure is correct at the time of printing (Aug 2024).  
Changes may be made without prior notice. Copyright 2024. All rights reserved.

**segi.edu.my**

Chat with us today!  
**SCAN HERE**

