# ENGINEERING & THE BUILT ENVIRONMENT

EGIRC





# INTRODUCTION TO SEGIUNIVERSITY

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.









# DISCOVER THE ENGINEER IN YOU

The Faculty of Engineering & the Built Environment focuses on student-centered learning approach, allowing students to learn from our lecturers as well as our partner universities worldwide.

We offer an impressive range of Engineering programmes in the following discipline: Civil, Chemical, Mechanical and Electrical & Electronics Engineering. Students will have access to work in advanced laboratories and workshops with essential tools to develop their engineering skills. During the Final Year of study, students are required to undergo an independent research project that will fuel their innovative and critical thinking skills. Such exposures are acute towards discovering sustainable solutions for the engineering sector.

All the Engineering undergraduate degrees are fully accredited by the Board of Engineers Malaysia (BEM). As BEM is a signatory to the Washington Accord, i.e., an international accreditation agreement for professional engineering academic degrees, the recognition indicates that SEGi graduates meet the international academic standards to practice engineering at a global level. Besides the undergraduate degree, postgraduate Engineering degree (i.e., Master and PhD) is also offered at SEGi University.

The Built Environment covers a variety of disciplines, such as Quantity Surveying, Architecture and Interior Architecture. Our triple crown Quantity Surveying programme is fully accredited by the following professional bodies and thus boosted our graduate's employability prospects worldwide.

- Board of Quantity Surveyors Malaysia (BQSM)
- Royal Institute of Chartered Surveyors (RICS)
- Pacific Association of Quantity Surveyors (PAQS)

While the Interior Architecture programme has received full accreditation from the Board of Architects Malaysia (BAM), the Architecture programme is expected to receive its Full accreditation by 2021. In addition to the conducive learning environment, each cohort of these students will be given a dedicated Design Studio throughout their studies. These Design Studios are accessible even after office hour and weekend to ensure that the relevant technical skills are acquired by students during their study at SEGi University.



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# AT A GLANCE

### GLOBAL RECOGNITION

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- 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

- 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

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#### **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%



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 Al 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.



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

# **RECOGNISE** your potential

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

# **REDEFINE**

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

# **REVOLUTIONISE**

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

# WORLD RENOWNED UNIVERSITY PARTNER



uciai

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 INDUST

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 Engineering & The Built Environment 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 Engineering & The Built Environment 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 soughtafter by employers for their key management skills.

#### ESTEEMED INDUSTRY AD

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** 

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SPM/O-Level/ UEC or equivalent qualification

STPM/A-Level/ UEC/Pre-U or equivalent qualification



Bachelor of Civil Engineering with Honours Bachelor of Mechanical Engineering with Honours Bachelor of Electrical & Electronics Engineering with Honours Bachelor of Chemical Engineering with Honours Bachelor of Science (Hons) Quantity Surveying Bachelor of Science (Hons) Architecture Bachelor of Arts (Honours) in Interior Architecture

#### Master/PhD

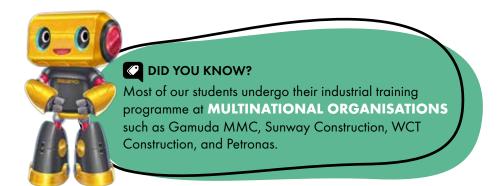
SEGi

University

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Master of Science in Engineering by Research Doctor of Philosophy (Engineering)





# PROGRAMME MATRIX

Programme	Awarding Institution	Entry Requirements
Bachelor of Civil Engineering with Honours		<ul> <li>STPM - 2 principal passes including Mathematics and Physical Science subject</li> <li>A-Level - 2 principal passes including Mathematics and Physical Science subject</li> <li>UEC - 5 Bs MUST include Mathematics and Physical Science subject</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 2.0 from higher education institute recognised by the Malaysian Government</li> <li>Other - Equivalent qualification recognised by Malaysia Government</li> </ul>
Bachelor of Mechanical Engineering with Honours	SEGi University and University of Central Lancashire, UK <b>Double Degree</b>	<ul> <li>STPM - 2 principal passes including Mathematics &amp; Physics subject</li> <li>A-Level - 2 principal passes including Mathematics &amp; Physics subject</li> <li>UEC - 5 Bs MUST include Mathematics &amp; Physics subject</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>
Bachelor of Electrical and Electronics Engineering with Honours	University of Central Lancashire ULLan	<ul> <li>STPM - 2 principal passes including Mathematics &amp; Physics subject</li> <li>A-Level - 2 principal passes including Mathematics &amp; Physics subject</li> <li>UEC - 5 Bs MUST include Mathematics &amp; Physics subject</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 2.0 from higher education institute recognised by the Malaysian Government</li> <li>Other - Equivalent qualification recognised by Malaysia Government</li> </ul>
Bachelor of Chemical Engineering with Honours		<ul> <li>STPM - 2 principal passes including Mathematics &amp; Physics or Chemistry subject</li> <li>A-Level - 2 principal passes including Mathematics &amp; Physics or Chemistry subject</li> <li>UEC - 5 Bs MUST include Mathematics &amp; Physics or Chemistry subject</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>



Programme	Awarding Institution	Entry Requirements
Bachelor of Science (Hons) Quantity Surveying	SEGi University	<ul> <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 and 2.67 for second year direct entry</li> <li>Other - Equivalent qualification recognised by Malaysia Government</li> <li>Additional Requirement:</li> <li>Local students MUST also have Credit in Mathematics in SPM</li> </ul>
Bachelor of Science (Hons) Architecture		<ul> <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> <li>Additional Requirements</li> <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		<ul> <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> <li>Additional Requirements</li> <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>
Foundation in Science	SEGi University & SEGi College	<ul> <li>SPM / O-Level or equivalent - Min 5 credits including Mathematics and 2 Science subjects</li> </ul>
Foundation in Arts		• SPM / O-Level or equivalent - Min 5 credits

## **BACHELOR OF CIVIL ENGINEERING WITH HONOURS**

#### **SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK**

The expertise in planning, design, construction and maintenance of civil engineering projects are highly demanded of civil engineers. This sets us to design intensive civil engineering classes and shape graduates to be highly skilled professionals that possess technical, managerial, organisational, financial, communication, research and critical analysis skills.

Discover the Civil Engineering programme at SEGi and be involved in all stages of development of the physically and naturally built infrastructure in our modern world. Civil Engineeing programme is a broad industrial-driven degree, which equips students with the fundamentals of engineering and science with the technical skills and knowledge required - shaping you to be literate, highly numerate and competent in all aspects of civil engineering.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in relevant Engineering field.
- PEO 2: Graduates to have sustainable career progression in relevant Engineering field.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.

Students who have successfully completed the study will be awarded B.Eng certificate from SEGi and M.Eng certificate from UĆLan.



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#### **Programme Modules**

#### Year 1

- **Engineering Mathematics 1**
- Static and Dynamics
- **Construction Materials**
- Engineering Drawing
- Soil Mechanics 1
- Engineering Mathematics II
- Programming Methodology and Problem Solving
- Fluid Mechanics
- Mechanics of Materials
- Engineering Surveying

#### Year 3

- Design of Reinforced Concrete Structures 1
- Highway Engineering
- Structural Analysis II
- Water Resources and Supply Engineering
- Design of Steel and Timber Structures
- Design of Reinforced Concrete Structures II
- **Engineering Application & Analysis**
- Engineers & Society
- Geotechnics
- Conceptual Design
- Industrial Training (12 weeks)

#### Year 2

- **Construction Technology**
- **Engineering Statistics**
- Structural Analysis 1
- Hydraulics
- Soil Mechanics 2
- Construction Project Management
- Numerical Analysis
- Hydrology
- Estimating & Costing of Buildings

#### MPU

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)
- Bahasa Melayu Komunikasi 2 (International student)
- Effective Listening
- Personal Health Management
- Co-curricular

#### Year 4

- Integrated Project
- Entrepreneurship
- Environmental Management & Technology
- Foundation Design
- Traffic and Transportation Engineering
- Safety & Risk Engineering
- Foundation Design
- Project & Research Methods
- Design of Steel Structures II
- ELECTIVE I
- ELECTIVE II

#### **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.



### BACHELOR OF MECHANICAL ENGINEERING WITH HONOURS

#### SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

The Mechanical Engineering programme at SEGi University is a broad industrial-driven degree programme, which equips students with the fundamentals of engineering and the technical skills required. The programme is designed to produce graduates who are able to address both technological and societal challenges in the field of mechanical engineering.

The integration of mathematic and engineering learning will allow students to develop advanced knowledge of physics and materials science to mechanical design and manufacturing processes.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in relevant Engineering field.
- PEO 2: Graduates to have sustainable career progression in relevant Engineering field.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.

Students who have successfully completed the study will be awarded B.Eng certificate from SEGi and M.Eng certificate from UCLan.





#### **Programme Modules**

- Year 1
- Engineering Mathematics 1
- Fundamental Engineering Mechanics
   Design I Basic Skills
- Engineering Materials
- Laboratory Investigations 1
- Engineering Mathematics 2
- Programming in C++
- Design II Advanced Drawing Techniques
- Engineering Mechanics
- Thermodynamics
- Laboratory Investigations 2
- Measurement and InstrumentationDesign of Machine Elements
- 2 Heat Transfer
  - Vibrations
    - Laboratory Investigations 4

Laboratory Investigations 3

**Engineering Statistics** 

Applications

Fluid Mechanics

Solid Mechanics

- Hubungan Etnik (Local students)
- Bahasa Melayu Komunikasi 2 (International students)
- Tamadun Islam & Tamadun Asia (Local students)

MPU

- Pengajian Malaysia 3 (International students)
- Effective Listening
- Bahasa Malaysia A
- (Local students without credit in BM in SPM)
- Personal Health Management
- Co-curricular

#### Year 3

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

#### Year 4

Year 2

Electrical and Electronic Circuits and

Manufacturing Processing & Technology

Computational and Numerical Analysis

- Final Year Project 1
- Project Management, Planning and Control
- Safety and Risk Engineering
- Finite Element Analysis
- Thermal Management in Product Design (Elective)
- Computational Fluid Dynamics (Elective)
- Final Year Project 2
- Control and System Engineering
- Environmental Management and Technology
- Heat, Ventilation & Air Conditioning (HVAC) (Elective)
- Advanced Manufacturing Technology (Elective)

#### **Career Opportunities**

As graduates of the Mechanical Engineering, you will have the necessary skills and knowledge to play a major role in design, management, and manufacturing in a wide range of industries.

## BACHELOR OF ELECTRICAL & ELECTRONICS ENGINEERING WITH HONOURS

#### SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

The Electrical and Electronics Engineering programme at SEGi University allows students to focus on one of the following majors during their Final Year of study:

#### **Electrical Engineering**

Concerned mainly with designing, installation, manufacturing and control of electrical energy. Students will undertake an integrated design project in Year 3 before embarking in the final year on an extensive design project of their own choosing. Students will be given options to select elective courses in Year 4 to specialise in their own area of interest.

#### **Electronics Engineering**

Concerned primarily with solid state devices and integrated circuits to design systems that contribute to fields of communication, electronics, computers, VLSI, signal processing and other related areas.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in relevant Engineering field.
- PEO 2: Graduates to have sustainable career progression in relevant Engineering field.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.

Students who have successfully completed the study will be awarded B.Eng certificate from SEGi and M.Eng certificate from UCLan.



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#### **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 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 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 4

- Electrical Energy Utilisation
- Electronic Drives & Application
- Safety & Risk Engineering
- Energy Conversion (Elective)
- Advanced Microprocessor (Elective)
- Final Year Project
- High Voltage Engineering
- Electronics System Analysis and Design
- PLC & SCADA (Elective)
- Electrical Installation and Practices (Elective)

#### **Career Opportunities**

As graduates of the Bachelor of Electrical & Electronics Engineering with Honours programme, you will have a wide choice of career in sectors including robotics & Automation, Control & Instrumentation, Power Generation and Communications, and Renewable Energy.

#### MPU

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)
- Bahasa Melayu Komunikasi 2 (International student)
- Effective Listening
- Personal Health Management
- Co-curricular

### **BACHELOR OF CHEMICAL ENGINEERING WITH HONOURS**

#### **SEGi UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK**

Chemical engineering works principally in the chemical industry to convert basic raw materials into a variety of products, and deals with the design and operation of chemical plant and Equipment.

The principle knowledge in chemical engineering includes design, manufacture and operation of industrial chemicals and related, development of new chemicals or adapted substances and processes for products ranging from foods and beverages to cosmetics, cleaners and pharmaceutical ingredients, also development of new technologies such as fuel cells, hydrogen power and nanotechnology.

The working in fields derived from chemical engineering includes material science, polymer engineering, and biomedical engineering, membrane technology, water and wastewater treatment industry.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in relevant Engineering field.
- PEO 2: Graduates to have sustainable career progression in relevant Engineering field.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.

Students who have successfully completed the study will be awarded B.Eng certificate from SEGi and M.Eng certificate from UCLan.





#### **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 3

- Process Control and Instrumentation
- Separation Processes III
- Chemical Reaction Engineering
- Environmental Management and Technology
- Chemical Engineering Laboratory V
- Biochemical Engineering Principle
- Chemical Process Safety
- Project Management and Economics
- Computational and Numerical Analysis
- Project Year III
- Industrial Training (12 weeks)

#### 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
- Engineers and Society
- Chemical Engineering Laboratory IV
- Project Year II

#### Year 4

- Process and Plant Design
- Transport Phenomena
- Design Project I
- **Research Methodology**
- Entrepreneurship
- Fuel and Energy Utilization
- **Research Project**
- Design Project II
- Safety and Risk Analysis
- Water and Wastewater Engineering (Elective)
- Bio-separation: Recovery Processes (Elective)
- Solid Waste Engineering (Elective)
- **Bioreactor Engineering Design (Elective)**

As Chemical Engineers, career opportunities in includes: Process engineer, Chemical and allied products, environmental engineering, contracting, oil and gas, consultancy, energy, water, materials, and design.

MPU

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)
- Bahasa Melayu Komunikasi 2 (International student)
- Effective Listening
- Personal Health Management
- Co-curricular

## BACHELOR OF SCIENCE (HONS) QUANTITY SURVEYING

#### SEGi UNIVERSITY

The Quantity Surveying programme at SEGi University is fully accredited by the Board of Quantity Surveyors Malaysia (BQSM), Royal Institution of Chartered Surveyors (RICS) and Pacific Association of Quantity Surveyors (PAQS). With both the local and international recognition, graduates are able to pursue the Chartered Quantity Surveyor (professional title) globally.

Besides the relevant knowledge on building construction, the degree aims to equip graduates with analytical, measurement, cost estimation, project management, problem-solving, communication skill and etc. In view of its potential career prospects, the degree has attracted students from both the Art and Science streams, and are well received by both genders.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in Quantity Surveying field.
- PEO 2: Graduates to have sustainable career progression in Quantity Surveying field.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.



#### **Programme Modules**

#### Year 1

- Building Construction I
- Construction Materials
- Management of Built Environment
- Basic Architectural and Engineering Design
- Building Services I
- Basic Drawing and AutoCAD
- Building Services II
- Introduction to Measurement of Building Works
- Construction Law
- Geomatic Engineering
- Principle of Economics
- Building Construction II

#### Year 3

- Measurement of Civil Engineering Works
- Construction and Project Management
- Data Analysis and Statistic
- Quantity Surveying Practice III
- Integrated Project
- Construction Economics II
- Value Engineering and Management
- Dissertation
- Financial Commercial Management
- Quantification & Computerisation
- Industrial Training
   (6 months to be completed before the Final semester)

#### Year 2

- Quantity Surveying Practice I
- Measurement of Building Works I
- Construction Contract Law
- Tendering and Estimating
- Measurement of Building Works II
- Quantity Surveying Practice II
- Construction Economics I
- Civil and Infrastructures Construction Works
- Business Ethics
- Academic Research
- Information Computer Technology (ICT)

#### MPU

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)
- Bahasa Melayu Komunikasi 2 (International student)
- Effective Listening
- Personal Health Management
- Co-curricular

#### **Career Opportunities**

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

### **BACHELOR OF SCIENCE (HONS)** ARCHITECTURE

#### **SEGi UNIVERSITY**

An all-inclusive 3-year programme which equips students with the right knowledge to explore their creative side. The Architecture programme at SEGi University provides students with new materials, technologies and techniques to prepare them as knowledgeable architects. Through the curriculum, students find exciting avenues to explore the way spaces can be reformed or reimagined for new different forms of inhabitation.

This programme combines the study and practice of interior design with architecture. The course equips students with core architecture skills, knowledge and attributes essential to succeed in the industry.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in Architecture related industry.
- PEO 2: Graduates to have sustainable career progression in Architecture related industry.
- PEO 3: Graduates to engage in lifelong learning via continuous personal development.

#### **Programme Modules**

Architectural Communication & Graphics

Year 1

Year 3

- Architecture History 1
- **Building Materials**
- Design Studio 1
- **Environmental Science 1**
- Architecture History 2
- Basic CAD
- **Building Construction 1**
- Design Studio 2
- Structure 1

Architecture Theory Philosophy

Year 2

- **Building Construction 2**
- **Building Services 1**
- Design Studio 3
- **Environmental Science 2**
- Advanced CAD
- Asian Architecture
- Design Studio 4

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)

MPU

- Bahasa Melayu Komunikasi 2
- (International student)
- Effective Listening
- Personal Health Management
- Co-curricular



#### **Career Opportunities**

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

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- - Working Drawing
  - Structure 2
  - **Business Ethics**
  - Environmental Management Technology

**Building Services 2** Design Studio 5

Measured Drawing

Industrial Training

Design Studio 6

**Professional Studies** Industrial Training (12 weeks)

Sustainable Building Design

Construction Project Management

## BACHELOR OF ARTS (HONOURS) IN INTERIOR ARCHITECTURE

#### SEGi UNIVERSITY

Interior Achitecture emphasizes on producing creative, sensitive and self-reliant graduates through knowledge of interior design, building technology and environment, cultural context, visual/design communication, management practice and law; to pursue studies and career in interior architecture or associated profession both locally or abroad.

The degree ensures that all graduates will have the knowledge and ability in interior design, including technical aspects and requirements as well as consideration for health, safety and ecological balance; that they understand the cultural, intellectual, historical, social, economic and environment context for interior design, and that they comprehend thoroughly the interior designers' roles and responsibilities in society, which depend on a cultivated, analytical and creative mind.

Here are the Programme Educational Objectives (PEO):

- PEO 1: Graduates to be employed in Interior Architecture related industry.
- PEO 2: Graduates to have sustainable career progression in Interior Architecture related
  - industry.

PEO 3: Graduates to engage in lifelong learning via continuous personal development.

#### **Programme Modules**

#### Year 1

- Theory Practice and Design
- Architecture Principle 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 3 (18 months)

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

#### Year 2

- Commercial Design
- Architecture History 2
- AutoCAD in Interior Design
- Environmental Psychology
- Furniture Design Workshop
- Environmental Management & Technology
- Advance Interior Design 1
- Lighting Design
- Construction Contract Law
- Specification and Contract Documentation
- Advance Computer Modelling

#### MPU

- Tamadun Islam dan Tamadun Asia (Local student)
- Hubungan Etnik (Local student)
- Pengajian Malaysia 3 (International student)
- Bahasa Melayu Komunikasi 2
- (International student)
- Effective Listening
- Personal Health Management
- Co-curricular

#### **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.

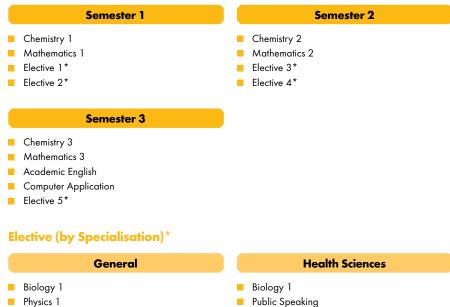


#### SEGi UNIVERSITY

The foundation programme is shaped 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**



- .
  - Information Technology

Biology 2

- Introduction to Patient Care
- Engineering
- Physics 1

Biology 2

Physics 2

Physics 3

- 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.

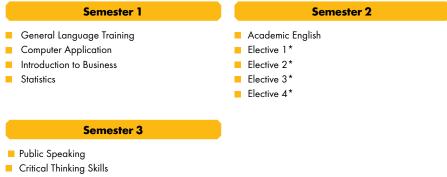
- \* Electives are subjected to change without prior notice.
- \* Students intending to articulate into the Health Science degree programmes will have a choice to take either General or Health Sciences Pathway.
- \* Students intending to articulate into Engineering degree programmes will have a choice to take either General or Engineering Pathway.

## FOUNDATION IN 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. 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**



- Principles of Economics
- Elective 5\*

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

#### \* Electives

#### Architecture / Interior Architecture

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

#### **Quantity Survey**

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

# 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. 19

\* Electives are subjected to change without prior notice.

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The best in you, made **POSS BLE** 

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