ENGINEERING & THE BUILT ENVIRONMENT



Malaysian University
that earned 5¥ for Prioritizing
Society's Needs in Malaysia
- by QS Stars



SEGiUniversity















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.



DISCOVER THE ENGINEER IN YOU

The Faculty of Engineering & The Built Environment focuses on a student-centered environment, allowing student-teacher interaction from Malaysia and our partner universities worldwide. You have access to work in advanced laboratories and workshops with essential tools in the development of engineering skills. The programmes are delivered using applied methodologies and state-of-the-art engineering facilities.

We offer an impressive range of engineering disciplines from Foundation and Diploma through to Bachelor's, Master's, and PhD in various disciplines including civil engineering, chemical engineering, electronic & electrical engineering, automotive engineering, and mechanical engineering. Our engineering students have gone on to write many success stories and the Faculty is proud to host students who have obtained First Class Honours from top-notch universities worldwide.

The Built Environment covers a variety of disciplines such as architecture, construction management, quantity surveying, environmental design, and planning. You get to address professional, industrial, and consultancy activities while exploring relationship between the buildings/cities and individuals, communities and organisations that inhabit them, ensuring they develop a prosperous future in the growing job market.

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AT A GLANCE



GLOBAL RECOGNITION

- 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



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



EXCELLENT TEACHING, LEARNING & RESEARCH

- QS 5 Stars Rated for Excellence in
- 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.

6 COMPETITIVE ADVANTAGES















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 techniques, time management, academic



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%





OUR ACCOMPLISHMENTS AND ACCOLADES

SEGi University & Colleges is at the forefront of educational excellence to help our students realise their career aspirations. We are honoured to have received a string of prestigious awards. These recognitions reflect SEGi's continued commitment to highest-caliber educational experience for our students.



QS 5 STARS

in teaching, facilities, inclusiveness and social responsibility. Achieved a stunning 3 Stars overall.

The First Malaysian University that earned 5 Stars for Prioritising Society's Needs in Malaysia.





PUTRA BRAND AWARDS

Putra Brand Awards is a brand valuation award measured by consumer preferences. There are various categories ranging from automotive to property development, and education and learning, among others.



Education – Malaysia World Branding Award



Outstanding
Innovation Award 2014



Reader's Digest
Trusted Brand 2013 - 2015
(Services, Private University/College)

- Students Choice Awards 2015 (Top 10 Universities)
- The Edge Billion Ringgit Club 2013
 (Best Performing Stock Award Trading & Services)
- 3rd Global Leadership Award 2013 (Leadership in Educational & Training Excellence)
- Asia Pacific Entrepreneurship Awards 2012 (Most Promising Entrepreneur)
- 10th Asia Pacific International Honesty Enterprise Keris Award 2011
- The BrandLaureate Best Brand Award 2010 2011 (Education Tertiary Private)

WORLD RENOWNED UNIVERSITY PARTNER

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.

INTERNATIONAL RECOGNITION BY THE WASHINGTON ACCORD

The engineering degree programmes offered by SEGi University are fully accredited by the Board of Engineers Malaysia (BEM), which is a signatory to the Washington Accord. The BEM is the official regulatory body authorised to determine recognition of engineering degree programmes in Malaysia.

The Washington Accord is an international accreditation agreement for professional engineering academic degrees between the bodies responsible for accreditation in its signatory countries. Established in 1989, the full signatories as of 2017 are Australia, Canada, Taiwan, Pakistan, China, Hong Kong, India, Ireland, Japan, Korea, Malaysia, New Zealand, Russia, Singapore, South Africa, Sri Lanka, Turkey, the United Kingdom, the Philippines, and the United States.

As Malaysia is a signatory of the Washington Accord, it makes SEGi engineering graduates more employable as they can expand career opportunities in the countries under the signatories. Graduates can also become a professional or chartered engineer or further their studies.







WE PRIORITISE YOUR NEEDS

SEGI CONNECT!

(Located at 1st and 2nd Floor)

We ensure your first experience of stepping into the next chapter of your life is as smooth and memorable as possible! From the moment you come into SEGi for your registration, we will be there to guide you through the whole process. We are with you even before you enter your first class, and we will be in contact continually throughout your studies until we know you are fine on your own.



ACADEMIC LEARNING SUPPORT

(Located At 2nd Floor)

Our Academic Skills Unit (ASU) was established to provide learning support and academic enhancement services for students. Our services include:

- assignment-writing
- · thesis-construction
- · language proficiency
- research brain-storming studying skills



(By Student Affairs Department)

We provide pre-Internship and preemployment workshops to instil employment values as you venture from academic to work life.

Our in-house "soft skills" training will prepare you for internship placement and employment upon graduation.

During Your Studies



Before You Graduate



GLOBAL INDUSTRY EXPOSURE

(Your Faculty)

- We enrich your learning experience by exposing you to local and global industry practices.
- We strategically network with industry leaders to foster long-term, multi-dimensional relationships.
- We apply academic expertise to generate socially relevant and high impact research activities with industry and community stakeholders.

STRONG GLOBAL INDUSTRY LINKAGES

(Career Office at 2nd Floor)

- We offer you the opportunity to join more than 1000 companies worldwide.
- There are Career Fair within campus just for you.



MENTOR MENTEE SYSTEM

(Your Lecturers)

The learning culture in higher education is very different from high school. Mentor-Mentee programme at SEGi University is aimed at guiding you to be independent learners and help you fit into this new culture. It is also a system that helps those who may need more guidance academically.



SEGI ENRICHMENT PROGRAMME

(Every Wednesday Afternoon)

SEGi ENRICHMENT PROGRAMME aims to reduce unemployment issues and ensures our students are industry-ready by providing opportunities to hone their soft skills through more than 100 structured and specially designed seminars, workshops, conferences, symposiums and training sessions, developed based on industry and professional bodies' feedback.

LEARNING & TEACHING

MODERN CHEMICAL ENGINEERING LABS

The chemical engineering laboratories are fully equipped with instruments to aid in classroom experiment exercises.

ACCREDITED PROGRAMMES

Programmes accredited with MOHE, MQA, and related professional board e.g. BEM/EAC, BQSM, LAM, etc.

STUDENT-CENTERED LEARNING APPROACH

We place a strong emphasis on students' interests to foster the development of skills for problem solving, critical thinking, and communication as we try to shape students to become lifelong learners.

TOP-NOTCH RESOURCES

FOR A
QUALITY LEARNING
EXPERIENCE

INDUSTRIAL PARTNERSHIPS

Wide range of collaborations with industrial partnership e.g. Advancecon, CIDB, Daikin, Bauer, Top Glove, Bahru Stainless, etc.

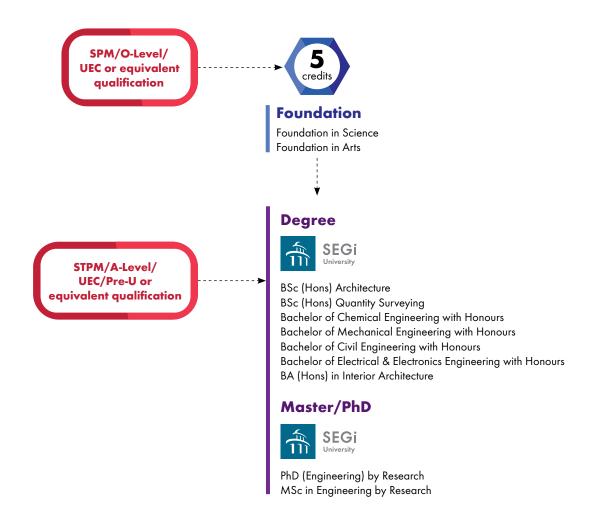
GLOBAL PARTNERSHIPS WITH WORLD-WIDE UNIVERSITIES

We work with some of the most prestigious universities from the United Kingdom to develop a knowledge-rich curriculum for our dual award and double degree programmes.

HIGH EMPLOYABILITY

Our faculty sees a consisten high rate of employability upon graduation.





PROGRAMME MATRIX

Programme	Awarding Institution	Entry Requirements
Bachelor of Mechanical Engineering with Honours	SEGi University and University of Central Lancashire, UK Single Degree SEGi University Double Degree	 Diploma recognised by the Malaysian government A-Level (2 principal Passes in Mathmatics & Physics) STPM (2 principal Passes in Mathmatics & Physics) UEC/SM3 (including Mathmatics & Physics) SAM (65% including a Pass in Mathmatics & Physics) CPU (65% overall including Mathmatics & Physics) Foundation in Science/Engineering (CGPA 2.00 or pass overall including Mathmatics & Physics) Related certificate from IPT with approval from Sektor Pengurusan IPTS and MOHE (CGPA 2.00 or pass) Other equivalent qualification recognised by the Malaysian government (CGPA 2.00 or pass) Other equivalent foreign qualification (pre-university, Year 12) recognised by the Malaysian government (CGPA 2.00 or pass)
Bachelor of Civil Engineering with Honours	uclañ University of Certrel Lancabie	 STPM/A-Level with (2 principal passes including Mathmatics and one analytical science subject); OR UEC with 5 Bs (must include Mathmatics and one analytical science subject); OR Pass in relevant Pre-U/Foundation or other equivalent qualification

Awarding Institution	Entry Requirements
SEGi University and University of Central Lancashire, UK Single Degree SEGi University Double Degree SEGi University University	A-Level - 2 passes with Grade C and above (Mathematics & Physics); or STPM - 2 passes with Grade C and above (Mathematics & Physics); or STPM - 2 passes with Grade C and above (Mathematics & Physics); or UEC - 5Bs (include Mathematics & Physics); or Conadian Pre-U (CPU) - Passes with 60% and above (Mathematics & Physics); or Conadian Pre-U (CPU) - Passes with 60% and above (Mathematics & Physics); or Diploma from IHL recognised by Malaysian Government - CGPA2.00 or Pass; or Diploma from IHL recognised by Malaysian Government - CGPA2.00 or Pass; or New South Wales Higher School Cerificate - 2 passes with Band 3 and above (Mathematics & Physics); or South Australian Certificate of Education - 2 passes with Grade C and above (SACE) (Mathematics & Physics); or Ontorio Secondary School Diploma(OSSO) - Passes with 60% and above (Mathematics & Physics); or Ontorio Secondary School Diploma (OSSO) - Passes with adove; or Matriculation-Ministry of Education Malaysia - CGPA 2.00 or Pass; or Other equivalent qualification recognised by the Malaysia Government - CGPA 2.00 or Pass; or Other requivalent qualification recognised by the Malaysia Government Passed STPM in 3 subjects including Mathmatics & Physics or Chemistry or Biology; or Passed Diploma in Chemical Engineering or equivalent (Recognised by Malaysia Government) with CGPA 2.0; or Passed Poundation Studies in Sciences or Engineering with CGPA 2.0 and passed Mathmatics & Physics or Chemistry or Biology; or Passed South Australian Matriculation (SAM), (60% including Mathmatics & Physics or Chemistry or Biology; or Passed South Australian Matriculation (SAM), (60% including Mathmatics & Physics or Chemistry or Passed Northern Territory Certificate of Education (SACE) with Grade C including Mathmatics & Physics or Chemistry or Biology; or Passed Northern Territory Certificate of Education (MCEE) and Grade C including Mathmatics & Physics or Chemistry or Biology; or Passed Northern Territory Certificate of Education (MCEE) and Grade C including Mathmatics & Physics o
	• SPM - with a minimum of 3 credits including Mathematics; or • STPM - with a minimum of 3 principle passes; or
SEGi University	 Matriculation/Pre-University - to be completed with a minimum CGPA of 2.50; or Diploma from other institutions recognised by Malaysian government, with a minimum CGPA of 2.00 (Year 1 entry); or Diploma in Quantity Surveying from other institutions recognised by Malaysian government, with a minimum CGPA of 2.67 (Year 2 entry); or Foundation (Foundation in Arts or Foundation In Science) - with a minimum CGPA of 2.50; or A-Level - with a minimum of 3 principle passes; or Other equivalent foreign qualification (Pre-U/Year 12) recognised by Malaysian government
	SEGi University and University of Central Lancashire, UK Single Degree SEGi University Double Degree SEGi University University

STUDY ROUTE & PROGRAMME MATRIX

Programme	Awarding Institution	Entry Requirements
BSc (Hons) Architecture	SEGi University	 A-Level (2 principal passes including English, Mathmatics, Science or Art) STPM (2 principal passes with Grade C/grade point of 2.0 with credit in Bahasa Malaysia & Mathematic in SPM UEC SM3 - 5Bs (including Mathmatics & English) South Australian Certificate of Education (SACE) 2 passes with Grade C (including Mathmatics) Canadian Pre-U - (including Mathmatics) International Baccalaureate (IB) - 24 points (including Mathmatics) Foundation in relevant field - CGPA 2.00 or pass Other equivalent qualification recognised by Malaysian Government - CGPA 2.00 or pass Other equivalent foreign qualification (Pre-U, Year 12) recognised by Malaysian Government
BA (Hons) in Interior Architecture		 Passed STPM or equivalent, minimum Grade C (2.00) in 2 subjects; or Passed A-Level in 2 subjects; or Passed Unified Examinations Certificate (UEC) at least B in 5 subjects; or Passed Foundation Studies in related field by Higher Institutions Provider recognised by Malaysian Government (at least CGPA 2.00); or Passed Diploma in related field by Higher Institutions Provider recognised by Malaysian Government (atleast CGPA 2.00); or Other Equivalent qualification recognised by Malaysian Government And 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
Foundation in Science	e SEGi University & SEGi College	Passed SPM/'O' Level or equivalent (Minimum 5 credits including Mathematics and TWO Science subjects)
Foundation in Arts		Passed SPM/'O' Level or equivalent (Minimum 5 credits)



DID YOU KNOW?

Most of our students undergo their industrial training programme at **MULTINATIONAL ORGANISATIONS** such as Gamuda MMC, Sunway Construction, WCT Construction, and Petronas.



BACHELOR OF

MECHANICAL ENGINEERING WITH HONOURS

SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

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

The Programme Educational Objectives (PEO) are to produce graduates who:

- · are employable in the global industry related to Mechanical Engineering discipline
- are in management/leadership role in the area of engineering
- pursue life-long learning via post graduate qualification and/or professional licensure



Year 2 students with CGPA 3.30 can be articulated into

Year 3 MEng Mechanical Engineering in University of Central Lancashire.

Double Degree





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

Year 2

- Engineering Statistics
- Electrical and Electronic Circuits and Applications
- Manufacturing Processing & Technology
- Fluids Mechanics
- Solid Mechanics
- Laboratory Investigations 3
- Computational and Numerical Analysis
- Measurement and Instrumentation
- Design of Machine Elements
- Heat Transfer
- Vibrations
- Laboratory Investigations 4

MPU

- Hubungan Etnik (Local students)
- Bahasa Melayu Komunikasi 2 (International students)
- Tamadun Islam & Tamadun Asia (Local students)
- 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 1
- Entrepreneurship DevelopmentEngineers and Society
- Advanced Thermodynamics
- Advanced Engineering Materials
- Electrical Machines
- Integrated Design Project 2
- Industrial Training

Year 4

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

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.

ELECTRICAL & ELECTRONICS ENGINEERING WITH HONOURS

SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

The Bachelor of Electrical & Electronics Engineering with Honours incorporates elements adopted from both academia and professional entities. The industry-driven programme delivers strong engineering fundamentals through technical involvement and soft skills development to empower students to produce contemporary and creative solutions to address complex engineering challenges.

Students will undertake an integrated Design Project before embarking the Final Year Project, a real-world industrial-based design project to enhance engineering design and resolving skills. Also, students are given options to select elective courses in Year 4, based on area of their interest.

Electrical & Electronic Engineering

Concerned mainly with the power generation, transmission, protection, distribution, and the design of electrical systems.

The learning of electronic design system that involves fields of communication, computer, signal processing, and other related electronic areas.

The Programme Educational Objectives (PEO) are:

- graduates are employed to engage in electrical & electronic engineering works
- graduates established a career progression in electrical & electronic or related industries
- graduates engaged in continuous personal development towards academic and Professional qualifications



Year 2 students with CGPA 3.30 can be articulated into

Year 3 MEng Electronic & Electrical Engineering in University of Central Lancashire.

Programme Modules

Year 1

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

Year 2

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

MPU

Double Degree

SEGi

University

- Tamadun Islam dan Tamadun Asia (Local students)/Malaysian Studies (International students)
- Hubungan Etnik (Local students)/B. Melayu Komunikasi 2 (International students)
- Effective Listening
- Pengurusan Ko-kurikulum
- Entrepreneurship Development
- Personal Health Management

Year 3

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

Year 4

- Final Year Project I & II
- Electrical Energy Utilisation
- Electronics Drives & Application
- High Voltage Engineering
- Electronics Systems Analysis and Design
- Safety & Risk Engineering
 - Elective I & Elective II:
 - Energy Conversion
 - Advanced Microprocessor
 - PLC & SCADA
 - Electrical Installation and Practices

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.

Double Degree

SEGi

University

BACHELOR OF

CIVIL ENGINEERING WITH HONOURS

SEGI UNIVERSITY & UNIVERSITY OF CENTRAL LANCASHIRE, UK

Discover Civil Engineering at SEGi and be involved in all stages of development of the physically and naturally built infrastructure in our modern world.

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.

The Bachelor of Civil Engineering with Honours is a broad industrial-driven degree programme, which equips you 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.

Our Programme Educational Objectives (PEO) aim to produce graduates who:

- are employable in the global construction industry and other related fields of the Built Environment
- pursues post-graduate qualifications to satisfy a passion for research and life-long learning
- · participates in continuous professional improvement leading to professional licensure



Year 2 students with CGPA 3.30 can be articulated into

Year 3 MEng Civil Engineering in University of Central Lancashire.

Programme Modules

Year 1

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

Year 2

- Construction Technology
- Engineering Statistics
- Structural Analysis I
- Hydraulics
- Soil Mechanics II
- Numerical Analysis
- Construction Project Management
- Hydrology
- Estimating & Costing of Buildings

MPU

- Tamadun Islam dan Tamadun Asia (Local students)/Malaysian Studies (International students)
- Hubungan Etnik (Local students)/B. Melayu Komunikasi 2 (International students)
- Effective Listening
- Pengurusan Ko-kurikulum
- Personal Health Management

Year 3

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

Year 4

- Environmental Management & Technology
- Entrepreneurship Development
- Foundation Design
- Integrated Project
- Project & Research Methods
- Traffic & Transportation Engineering
- Elective I & Elective II:
 - Hydraulic Structures OR
 - Design of Earth Retaining Structures OR
 - Advanced Reinforced Concrete Design OR
 - Concrete Technology OR
 - Design of Steel Structures 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

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, manufacturing and operations of industrial chemicals, 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 fields derived from chemical engineering include material science, polymer engineering, biomedical engineering, membrane technology, and water and wastewater treatment industry.

The programme objectives are to produce graduates who are able to:

- · practise as engineer in industries related to chemical engineering globally
- pursue postgraduate studies
- register with the Board of Engineers Malaysia and subsequently become professional engineer in chemical engineering

Double Degree





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
- Engineering Statistics
- Computer Aided Chemical Engineering
- Electrical Technology
- Chemical Engineering Laboratory III
- Chemical Engineering Thermodynamics
- Particle Technology
- Separation Processes II
- Chemical Engineering Laboratory IV
- Project Year II

MPU

- Tamadun Islam dan Tamadun Asia (Local students)/Malaysian Studies 3 (International students)
- Hubungan Etnik (Local students)/B. Melayu Komunikasi 2 (International students)
- Effective Listening
- Pengurusan Ko-kurikulum
- Personal Health Management

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
- Industrial Training
- Project Year III
- Engineers and Society

Year 4

- Safety and Risk Engineering
- Process and Plant Design
- Transport Phenomena
- Entrepreneurship Development
- Design Project I
- Research Methodology
- Fuel and Energy Utilisation
- Design Project II
- Bio-Separation: Recovery Processes (Biochemical Engineering)** OR
 Water and Wastewater Engineering (Environmental Engineering)**
- Bioreactor Engineering Design (Biochemical Engineering)** OR Solid Waste Engineering (Environmental Engineering)**

Career Opportunities

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.

BSC (HONS) **QUANTITY SURVEYING**

SEGI UNIVERSITY

The BSc (Hons) Quantity Surveying programme aims to empower you with academic and practical knowledge with relevant soft skills in Quantity Surveying, grooming you to respond to high demands for qualified and competent quantity surveyors in the local as well as international construction industry.







As graduates of this programme, you'll be empowered to:

- demonstrate accurate techniques and skills of measurement, quantification, and cost estimation in construction projects
- apply knowledge of economics, building constructions, maintenance, and services related to quantity surveying areas
- understand and apply the relevant laws, procedures, procurements, and dispute resolutions when handling projects
- demonstrate good knowledge and analytical skills, problem-solving, and communication with relevant soft skills
- participate in project management, financial management, entrepreneurship, and current construction issues in the area of quantity surveying
- practice professional and ethical responsibilities in quantity surveying, as well as conduct further research and development activities to retain a professional membership status in quantity surveying (Sr) or related disciplines.
- demonstrate good knowledge in Building Information Modelling application.

The Programme Educational Objectives (PEO) are to produce graduates who are able to:

- respond to the high demands of qualified and competent Quantity Surveyor in the global construction industry
- assist students to mature into dynamic individuals who strive to become Professional Registered Quantity Surveyors
- develop research and critical thinking skills of students in pursuing life-long learning

Programme Modules

Year 1

- Construction Materials
- **Building Construction I**
- **Building Services 1**
- Basic Drawing and AutoCAD
- Management for Built Environment
- Basic Architectural and Engineering Design
- Introduction to Measurement of Building Works
- **Building Construction II**
- **Building Services II**
- Construction Law
- Principle of Economics
- Geomatic Engineering

Year 2

- Measurement of Building Works 1
- Tendering and Estimating
- Quantity Surveying Practice 1
- Construction Contract Law
- Construction Economics 1
- Business and Professional ethics Environmental Management & Technology
- Entrepreneurship
- Measurement of Building Works II
- Quantity Surveying Practice II
- Information Communication Technology (ICT)
- Civil and Infrastructures Construction Works
- Academic Research

MPU

- Tamadun Islam dan Tamadun Asia (Local students)/Malaysian Studies 3 (International students)
- Hubungan Etnik (Local students)/B. Melayu Komunikasi 2 (International students)
- Effective Listening
- Pengurusan Ko-kurikulum
- Personal Health Management

Year 3

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

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.

BSC (HONS)

ARCHITECTURE

SEGI UNIVERSITY

The BSc (Hons) Architecture emphasises on design spaces where they are known as more than just well-built structures with architectural design elements. They encompass not only the involvement of space, but also the strong influence of innovation and technology. Students will explore inventions and designs through industrial revolution that consists of all areas in design, construction, practise, and awareness of the built environment towards sustainability.

The BSc (Hons) Architecture intends to discover the best approach that suits the future architectural graduates, where problems are to be solved the unconventional way. This programme will encourage students to enthusiastically discuss ideas and express them in different styles of design, hence equipping them with solid design and technical skills for their future career in the local and global architectural industry.

Programme Modules

Year 1

- Design Studio 1
- Architectural Comm Graphics
- Building Materials
- Architecture History 1
- Environmental Science 1
- Design Studio 2
- Basic CAD
- Architecture History 2
- Building Construction 1
- Structure 1

Year 2

- Design Studio 3
- Building Construction 2
- Architecture Theory Philosophy
- Building Services 1
- Environmental Science 2
- Design Studio 4
- Advanced CAD
- Asian Architecture
- Structure 2
- Working Drawing

Year 3

- Design Studio 5
- Building Services 2
- Sustainable Building Design
- Measured Drawing
- Industrial Training
- Design Studio 6
- Professional StudiesConstruction Project Management

MPU

- Tamadun Islam & Tamadun Asia (Local students)
- Malaysian Studies 3 (International students)
- Hubungan Etnik (Local students)
- Bahasa Melayu Komunikasi 2 (International students)
- Environmental Management & Technology
- Business + Professional Ethics
- Effective Listening
- Pengurusan Ko-kurikulum

Career Opportunities

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

BA (HONS) IN INTERIOR ARCHITECTURE

SEGi UNIVERSITY

Interest in interior architecture has grown rapidly in recent years. New materials, technologies, and techniques are giving interior architects exciting new ways to explore the way spaces can be reformed or re-imagined for new of different forms of inhabitation.

Interior architecture combines the study and practice of interior design with architecture. It explores how the interiors of buildings such as office blocks, houses, hospitals, and galleries are inhabited, used and experienced. Furthermore, it also explores how interiors of buildings can be changed to meet different needs and to express different functions, for example from a station multi-storey car park to a modern office block. The course will equip students with core interior architecture & design skills, knowledge, and attributes to succeed in the industry.

Programme Modules

Year 1

- Design Studio 1
- Architectural Graphic 1
- **Building Construction 1**
- **Building Services 1**
- Software Application for Design
- Design Studio 2
- Architecture History 1
- Architectural Graphic 2
- **Building Services 2**
- Interior Material and Furnishing 1
- **Building Construction 2**

Year 2

- Design Studio 3
- Architecture History 2
- AutoCAD in Interior Design
- Environmental Psychology
- Furniture Design 1
- **Environmental Management & Technology**
- Advance Interior Design 1
- Lighting Design
- Construction Contract Law
- Specification and Contract Documentation
- Advance Computer 3D Modeling
- Interior Material and Furnishing 2

MPU

- Project and Construction Management
- - - Personal Health Management
 - Pengurusan Ko Kurikulum

Year 3 (18 months)

Advance Interior Design 2

- Professional Practice for Interior Designer
- Research Methods
- **Business Ethic**
- Internship
- Design Project
- Dissertation
- Furniture Design 2

- Hubungan Etnik (Local students)
- Bahasa Melayu Komunikasi 2 (International students)
- Tamadun Islam & Tamadun Asia (Local students)
- Pengajian Malaysia 3 (International students)
- Effective Listening



96% OF OUR GRADUATES

get employed within a span of 6 months upon graduation



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.

FOUNDATION IN SCIENCE

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

Semester 1 Semester 3 Chemistry 3 Chemistry 1 Mathematics 1 Mathematics 3 Elective 1* Academic English Elective 2* Computer Application Elective 5* Semester 2 Chemistry 2 Mathematics 2 Elective 3* Elective 4*

General	Health Sciences
ology 1	■ Biology 1
ysics 1	Public Speaking
iology 2	■ Biology 2
hysics 2	Information Technology
hysics 3	Introduction to Patient Care
Engineering	
ysics 1	
lic Speaking	
ysics 2	
ormation Technology	
hysics 3	

- 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.

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.

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

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

Architecture / Interior Architecture

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

- Quantity Survey
- Information TechnologyInterpersonal Communication
- Fundamental of Management
- Introduction to Marketing
- Intercultural Communication

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

^{*} Electives are subjected to change without prior notice.

STUDENT TESTIMONIALS



"I chose SEGi University because I liked the approach this university takes for my course. Also, I was looking for a university that can provide me with good lecturers and a great social life. Therefore, SEGi University became my top choice because I found both here."

Lee Pei Shan
Bachelor of Engineering (Hons) Electrical and Electronic Engineering



"I chose SEGi because of its reputation in the education industry. I remember talking to a friend who was studying the exact same course and he highly encouraged me to pursue my tertiary studies here. On top of that, SEGi also offered me a full academic scholarship which helped me ease my financial burden."

Ivan Lim Huan-Wen
Bachelors of Engineering (Hons) Civil Engineering

FACULTY EVENTS



Gold Medal Award by The Institution of Engineers, Malaysia IEM 59th Awards Night 2018

Congratulations to Lubna Mohamed, BEng (Hons) Civil Engineering for winning the Gold Medal Award at the IEM Awards Night on 21 April 2018. The Gold Medal Award is for the **Best Final Year Engineering Student** in SEGi University. The Institution of Engineers, Malaysia (IEM) was established in 1959, one of the largest professional organization in the country and its primary function is to promote and advance the science and profession of engineering in any or all of its disciplines and to facilitate the exchange of information and ideas related to engineering.



Passions to design for the future, talent shines like a diamond

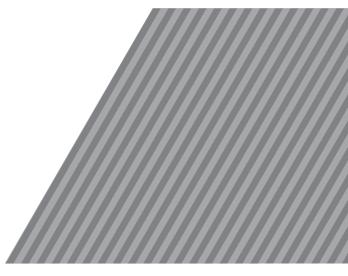
Two teams of Bachelor of Electronic & Electrical Engineering Students from Faculty of Engineering and the Built Environment, SEGi University, Kota Damansara, recently won Diamond, Gold and Silver awards (Young Inventors, undergraduate & staff categories) at the International Exhibition and Competition (IIDEX) organised by UiTM 2017 on 25-29 Sept 2017. The team (Sheikh Shamir, Ehsan Siddique, Ooi Yong Zhen, Dilshani Mallikarachchi, Dr. Nurulazlina Ramli) who came up with "Design of Low Cost Document Scanner" amazed the judges and received the Gold Medal and Special Diamond Award with RM1,000 Cash prize, while the other team (Khalid Waleed Said Al-Kharusi, Ahmad Azlan Abd Aziz, Mohd Tarmizi Ali, Muhammad Iqbal Khan, Dr Nurulazlina Ramli) and their "Design of High Gain Microstrip Antenna for 2.4 GHz Access Point IoT Application" was given a Silver Award Medal for brilliant design.

INDUSTRY PARTNERS

These are the active industry partners who have received our students as interns. We want to thank all our industry partners for their generous partnership with SEGi.

- 1 UMW Oil & Gas
- 2 Mercedes-Benz.
- 3 PETRONAS GTS/PD&T
- 4 Bumi Armada
- 5 BMW Ingress Auto Damansara
- 6 Yokogawa Industrial Safety Systems
- 7 SCHNEIDER ELECTRIC INDUSTRIES (M) SDN BHD
- 8 Tan Chong Motor Assemblies Sdn. Bhd.
- 9 Top Glove Sdn. Bhd.
- 10 Dunham Bush Industries Sdn Bhd
- 11 B. Braun
- 12 DAIKIN Research & Development Malaysia Sdn Bhd
- 13 DIGI Telecommunications Sdn. Bhd.
- 14 Sony EMCS (Malaysia) Sdn Bhd
- 15 Panasonic Malaysia Sdn. Bhd.
- 16 Tenaga Switchgear Sdn Bhd
- 17 Toshiba Transmission Distribution PJ
- 18 Infineon Technologies
- 19 Carlsberg Malaysia
- 20 Ranhill Worley Parsons Sdn. Bhd.
- 21 Dutch Lady Milk Industries Berhad
- 22 Shell Malaysia Trading Sdn. Bhd.
- 23 Colgate Palmolive (M) Sdn. Bhd.
- 24 Petronas Carigali Sdn. Bhd.
- 25 Top Glove Sdn. Bhd.
- 26 F&N Beverages Manufacturing Sdn. Bhd.
- 27 Gardenia Bakeries (KL) Sdn. Bhd.
- 28 Ranhill Worley Parson Sdn. Bhd.
- 29 Putra Perdana Construction Sdn Bhd
- 30 Gamuda Land
- 31 YLD PROFESSIONAL SDN BHD.
- 32 i-City Properties Sdn. Bhd

- 33 Gruppe Consultant
- 34 Hap Seng Properties Development
- 35 Bayu Megah Engineering Sdn. Bhd.
- 36 Brunsfield
- 37 BAUER
- 38 ECOWORLD
- 39 CHINA STATE CONSTRUCTION
- 40 Veritas
- 41 REKHA DESIGN SDN BHD
- 42 SACHI INTERIOR DESIGN SDN BHD
- 43 Daikin R&D
- 44 Bromma (Malaysia) Sdn Bhd
- 45 Bahru Stainless
- 46 Indah Water Konsortium Sdn Bhd
- 47 Allied Group
- 48 Bandar Utama City Centre Sdn Bhd
- 49 Brandt International Sdn Bhd
- 50 Flexiroam Sdn Bhd
- 51 Fraser & Neaves Holdings Bhd
- 52 Fuji Xerox Printers Distributor
- 53 George Kent (Malaysia) Berhad
- 54 Island & Peninsular Bhd
- 55 Malaysia Airlines
- 56 Melium Sdn Bhd
- 57 MMC Corporation Berhad
- 58 OSK Holdings Berhad
- 59 Pembinaan Mitrajaya Sdn Bhd
- 60 Sarawak Energy Berhad
- 61 Subang SkyPark Sdn. Bhd.
- 62 Syarikat Pembenaan Yeoh Tiong Lay Sdn Bhd
- 63 Tan Chong Group





SEGi University Kota Damansara (100589-U)

No. 9, Jalan Teknologi, Taman Sains Selangor, Kota Damansara, PJU 5, 47810 Petaling Jaya, Selangor Darul Ehsan.

♦ 603 6145 1777 **№** 011 1210 6389

The best in you, made

POSSIBLE

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