ENGINEERING

ENGINEERING A BETTER FUTURE
ABOUT INTI
At INTI, our mission is to bridge the needs of tomorrow through the competencies our students gain today, empowering them to become the leaders, innovators and game changers of the future. We are committed towards ensuring our students gain the competencies needed for the workplace of the future, and to work alongside the digital transformations driving today’s global businesses in the Fourth Industrial Revolution.

Through our innovative teaching and learning and extensive industry partnerships, we empower our students with the ability to work with smart machines, to process and analyse data for better decision-making, to learn about technologies that impact businesses and manufacturing processes, and to develop professional skills such as adaptability, working with multidisciplinary teams, problem-solving, and a thirst for lifelong learning.

By inspiring our students to explore their passions and discover their true potential through the right skills, tools and experiences, we continue to be a force of change in revolutionising education. Our commitment is to ensure exceptional graduate outcomes, and to transform our students into the dynamic leaders of the future – ones who will lead us in the Fourth Industrial Revolution, and beyond.
COLLABORATION WITH INDUSTRY PARTNERS

Over the years, INTI has cultivated a strong engagement with multinational companies and large local organisations on diverse platforms to foster innovation curricula and develop future-ready graduates.

The platforms include:
- Industry Awards / Scholarships
- Employer Projects
- Boot Camps and Career Workshops
- INTI Leadership Series
- Faculty Industry Attachment
- Industry Advisory Boards
- Industry Skills Certifications
- Employer Centric Curricula
- Internships and Job Placements
- Coaching and Mentoring

and many more
We are INTERNATIONAL

Our internationally recognized education will enrich you with the right skills and attributes to excel at whatever you do and wherever you go.

INNOVATIVE Teaching & Learning

INTI integrates an array of proven approaches to teaching combined with revolutionary applications of technology in the classroom such as the innovative Blackboard Learning Management System.

World Renowned Collaborations with Prestigious Universities

INTI offers exclusive franchise degrees and dual award degree programmes in partnership with some of the world’s highest ranked universities. These partnerships help to enhance your academic credentials and offer you access to some of the most prestigious institutions of higher learning globally.

• BLUE MOUNTAINS INTERNATIONAL HOTEL MANAGEMENT SCHOOL AT TORRANS UNIVERSITY
  Australia
  Recognised as one of the world’s leading providers of Hotel Management programmes, Blue Mountains offers an internationally recognised curriculum based on the renowned Swiss hotel school model of teaching and learning. Blue Mountains was ranked the No.1 Hotel Management School in Australia (QS World University Rankings 2019).

• COVENTRY UNIVERSITY
  United Kingdom
  With roots dating as far back as 1843, Coventry University has a proud tradition of offering high quality education with an emphasis on applied research. Coventry University was ranked No.15 UK University by the Guardian University Guide 2020.

• SHEFFIELD HALLAM UNIVERSITY
  United Kingdom
  This modern university is an integral part of the UK’s largest practicing community of artists and designers outside of London. Sheffield was ranked 81% for international excellence in the national 2014 Research Excellence Framework and ranked second among the modern universities in the UK for art and design research.

• UNIVERSITY OF HERTFORDSHIRE
  United Kingdom
  Swiftly gaining recognition as the UK’s leading business-facing university, the University of Hertfordshire is an exemplar in the education sector and achieved the Top Gold ranking in the Government’s Teaching Excellence Framework (TEF) 2018.

• SOUTHERN NEW HAMPSHIRE UNIVERSITY
  United States
  Established in 1932, the university has been at the forefront of academic excellence with accreditation by the New England Association of Schools and Colleges. The university was named 2017 Most Innovative University in the North by US News & World Report.

GLOBAL RECOGNITION AND ACHIEVEMENT

Registered with INTI INTERNATIONAL UNIVERSITY & COLLEGES for:

• Professional Development (2019 & 2017)
• Leading Change (2018)

Supplementary Learning and Assessment Tools Used:

• Blackboard Learning Management System Using The Most Advanced Virtual Technology
• Video Management And Creation Tools
• Software To Support Feedback Processes Including Course And Lecturers’ Evaluations
• Studio
• Online Assessment Platform With Online Remote Proctoring
• Raptivity
• Interactivity Building Software Ranging From Quizzes, Simulations, Presentations And More
• Kaltura
• Software Ranging From Presentations And More
• 3D Studio Broadcasting System Using The Most Advanced Virtual Technology
• WebBlackboard, learning does not only happen in the classroom, it happens everywhere. It’s a holistic, integrated system to collaborate and interact with fellow students and lecturers. Students can offer and gain feedback from their peers on coursework and perform self-assessments while learning in a safe, nurturing and holistic environment.

INDIVIDUAL Development

INTI endeavours to include practical experiences in every programme it offers. From practical workshops taught by local and international guest lecturers and industry practitioners who share the ins and outs of the working world, to hands-on practical projects initiated by potential employers.
STRUCTURED INTERNSHIPS
As they will be a part of a highly practical discipline, engineers require extensive hands-on experience for their career advancement. INTI students from every engineering specialisation are given the opportunity to participate in highly structured internships and gain actual insights into the intensive work environment of engineers. INTI’s accredited industry partners include Motorola, Intel, Keysight, ASE, Inari, Venture, Lumileds, Knowles, Ceedec, Aemulus, B. Braun, SAM, Osram, Solarvest and more. Through these close collaborations with established employers, students gain invaluable work experiences even before they graduate and acquire the confidence and exposure they need to prepare them for working life.

EMPLOYER PROJECTS
Throughout the course of their work, engineers often interact with professionals from other fields and across various disciplines, while working under challenging conditions. To prepare them for the working world, students from INTI are assigned employer projects that span a 3-month period and reflect actual engineering challenges encountered by today’s global companies.

HIGHLY QUALIFIED ACADEMIC STAFF
INTI’s faculty members, are all professionally qualified engineers with a majority possessing PhDs in various engineering disciplines. Collectively the faculty has published more than 15 academic papers, with numerous invited as keynote speakers for industry and academic talks, and having filed a number of patents. These achievements are also instrumental in their efforts to ensure the high standards of excellence that the programme is known for.

ENHANCEMENT PROGRAMMES
Employability in today’s challenging workplace not only requires academic excellence but also a strong acumen in soft skills. INTI provides enhancement programmes that include training in Microsoft Office tools and effective communication skills. These add to the skills and capabilities graduates take with them when they enter the workplace.

BUILD YOUR FUTURE
The impact of engineering on the advancement of civilisation is innumerable. From the processors that run our smartphones, to the power plants that keep our cities lit, to the skyscrapers that seem to touch the sky and planes that travel across continents daily, the mastery and application of engineering affects and improves every aspect of how we work, live, connect and travel.

As new technologies come into play so do new possibilities that arise for the next generation of engineers. By mastering the study and application of the art and science of engineering, you can improve every aspect of life itself while enjoying a successful career anywhere in the world. Secure the blueprint for your future and build your career with INTI.
CIVIL ENGINEERING
INTI’s undergraduate programmes for Civil Engineering empower you with the skills to design, develop, manufacture, construct and maintain civil engineering products, systems and services.

Professional Accreditation
INTI’s programmes are fully accredited by the Engineering Accreditation Council Malaysian (EAC), following the terms of the Washington Accord. They are also certified by the Chartered Association of Building Engineers UK (CABE) and by the Singapore Institute of Engineering Technologists (SIET). The Washington Accord entitles graduates to gain membership into the International Register of Engineers, while the CABE accreditation verifies that the programmes meet the regulated standards of Building Engineers. Recognition by SIET also means that the programme is of a high standard and quality which enables INTI graduates to seek employment anywhere in the world.

International Articulation
INTI maintains articulation agreements with the prestigious University of Leeds, UK and the University of Portsmouth, UK providing diploma students with the opportunity to join either university with a 1-year equivalent of credit exemptions when progressing to a degree.

MECHANICAL ENGINEERING
Almost every aspect of modern industry relies on mechanical engineering. Students pursuing this programme will master the skills needed to conceive and produce the moving parts, components and machinery required in every aspect of manufacturing, and will be exposed to the theoretical and practical aspects of this field.

Professional Accreditation
INTI’s Mechanical Engineering programmes have received full accreditation by the Engineering Accreditation Council (EAC) Malaysia under the Washington Accord. This attests to the reputation of the course contents and also confirms membership to qualifying members to join the International Register of Engineers. Membership to the Register allows members to gain global access and the ability to work anywhere in the world.

International Articulation
The Australian Group of Eight, which consists of Australia’s eight leading research universities and several notable UK universities, has formally recognised the course contents of INTI’s Mechanical Engineering programmes, providing students a beneficial articulation pathway to several of these leading universities. Qualified students from INTI’s Diploma in Mechanical Engineering programme can continue their degrees abroad with a maximum exemption of two years’ credit transfers.

QUALITY SURVEYING
The programme exposes students to cost planning, cost control, build development techniques, building research, measurement, software application and more, which enable them to manage the financial and procurement processes of construction projects. INTI is one of the first institutions of private learning to collaborate with Glodon, an internationally recognised industrial software system, to integrate its software into its curriculum.

Professional Accreditation
INTI’s Quantity Surveying programmes have been recognised and fully accredited by the Royal Institution of Chartered Surveyors (RICS), UK and the Board of Quantity Surveyors, Malaysia (BQSM). This attests to the international standards upheld by the programmes and enables graduates to work anywhere in the world with their degree.

International Articulation
Articulation agreements allow INTI students to continue their studies abroad at Queensland University of Technology (QUT), Australia, the University of West of England (UWE), and the University of Portsmouth in the UK. This enables students to enjoy a fresh perspective in the field of quantity surveying, and gain the opportunity to interact with fellow students in an exciting new environment.

SINGAPORE INSTITUTE OF ENGINEERING TECHNOLOGISTS (SIET, SINGAPORE)
INTI International University Engineering Degrees are recognized by the Singapore Institute of Engineering Technologists. A SIET certification will let employers know that the certification earner has mastered a significant body of knowledge in a specific field he / she is engaged in the industry and has met specified eligibility requirements. This knowledge will serve as the springboard for a certification earner’s continued professional development in his field in industry. As SIET certified professional you will broaden your knowledge base. You be able to stand out from the crowd and may improve your options for being hired, promoted, and / or tapped for working on certain types of projects.

GLODON
INTI is one of the first institutions of private learning to collaborate with Glodon, an internationally recognised industrial software system, to integrate its software into its curriculum. Glodon Building Information Modelling (BIM) software, Cubicon is a widely used BIM integrated solution for the construction industry players. Student will be exposed to the latest taking off method to meet market demands.

ELECTRICAL & ELECTRONIC ENGINEERING
The programme enables students to master a number of key competencies, including Electronic Circuit Analysis, Control Systems, Electric Machines & Electric Power Systems, Telecommunications as well as the application of ICT knowledge for engineering analysis, simulation and control in both public or private enterprise.

Strategic Partnership with Industry Partners
Over the last five years, INTI has received the Motorola Solutions Foundation grant, a cash award which has been offered as scholarships to students with excellent academic achievements and the potential to contribute towards the enhancement and innovation of Malaysia’s electrical and electronic sector.

Project Based Learning (PBL)
To familiarise students with current industry practices as well as to offer them invaluable exposure to the workplace, INTI organises Project Based Learning (PBL) programmes in Year 2. Students are assigned a group project in consultation with a reputable industry partner, and will have to complete a thesis to fulfill their academic requirements.

ENGINEERING ACCREDITATION COUNCIL (EAC)
INTI International University Engineering Degrees are fully accredited by the Engineering Accreditation Council and recognized by the Board of Engineers Malaysia (BEM) which is a signatory to the Washington Accord. Recognition under the Washington Accord allows for INTI graduate degrees to be recognized by countries such as Australia, Canada, Taiwan, Hong Kong, Ireland, Japan, South Korea, Malaysia, New Zealand, Singapore, South Africa, Turkey, Russia, the United Kingdom and the United States who are all signatories of the accord. This recognition is of paramount reputation to the engineering education in Malaysia as graduates from INTI International University under the Washington Accord signatory countries are considered as meeting the academic standard for practices in engineering at the international level. Please refer to eac.org.my/web/about_EAC.html
Pathway

Entry Requirements

Foundation in Science

Diploma in Civil Engineering

Diploma in Electrical & Electronic Engineering

Diploma in Mechanical Engineering

Diploma in Quantity Surveying

Bachelor of Engineering (Hons) in Civil Engineering

Bachelor of Engineering (Hons) in Mechanical Engineering

Bachelor of Science (Hons) in Quantity Surveying

3+0 Bachelor of Engineering (Hons) in Electrical & Electronic Engineering in collaboration with Coventry University, UK

American Degree Transfer Program (AUP)

Doctor of Philosophy (PhD) in Applied Physics

Employment

Credit transfer to over 300 universities in the US and Canada
2 Years

Credit transfer to universities in the UK and Australia
2 - 4 Years

INTI International University Degree (Civil, Mechanical) - 4 Years, Quantity Surveying - 3.5 Years
3+0 Bachelor of Engineering (Hons) in Electrical & Electronic Engineering, Coventry University, UK
3 Years

American Degree Transfer Program (AUP)
2 Years

Cambridge A-Level (CAL) / New South Wales Higher School Certificate (NSW HSC) / SACE International (formerly known as South Australian Matriculation - SAM) 1 to 1.5 Years
Foundation in Science 1 Year

INTI Diploma (Civil or Mechanical Engineering; Quantity Surveying; Electrical & Electronic Engineering) 2.5 Years

STPM / UEC or equivalent

SPM / O-Level or equivalent

* subject to meeting entry requirement
FOUNDATION IN SCIENCE

Students are prepared for admission into engineering-related degrees at INTI. They will be equipped with a solid fundamental knowledge of their fields of studies, which include Physics, Chemistry, Mathematics, English and Basic Computing.

ENTRY REQUIREMENTS

Diploma in Civil Engineering
Diploma in Mechanical Engineering
Diploma in Electrical & Electronic Engineering

SPM / O-Level:
3Cs including Mathematics and 1 Science / Technical / Vocational subject and a pass in English

IGCSE O-Level:
3Cs (including Mathematics and 1 Science subject, and pass in English)

IELTS:
5.0 or equivalent for International Students

UCEC:
3Bs (including Mathematics & Science, pass in English)

STPM/equivalent:
Pass in STPM or equivalent with a pass in SPM Mathematics, English and 1 Science/Technical/Vocational subject

IB:
Passed International Baccalaureate (IB) Middle Years Programme (MYP) Certificate including English with credit in Mathematics and 1 Science subject

Engineering / Technology Engineering Certificate:
Recognised certificate

Vocational / Technical / Skills Certificate:
Recognised certificate with 1 year of related working experience or 1 semester of bridging programme

Foundation / Pre-U / Matriculation:
Related foundation/Pre-U/Matriculation programme approved by Ministry of Higher Education with credit in SPM Mathematics and 1 Science/Technical/Vocational subject

Diploma in Quantity Surveying

SPM / O-Level:
3Cs (including Mathematics, and Bahasa Malaysia or English)

Bachelor of Science (Hons) Quantity Surveying

Foundation:
CGPA 2.50 and above

Diploma:
CGPA 2.67 and above

STPM:
2 grade C (NGMP 2.0) and above

SACE:
5 courses with TER 70

NSW-HSC:
10 courses withATAR 70 and above

TEE:
4 or 5 courses with TER 70 and above

ATAR:
Year 12 with 70 above

CPU:
6 courses with average score of 65 and above

UCEC:
5 courses with grade B and above

A-Level:
2 courses passed

Plus:
STPM with 3 credits including Mathematics and Bahasa Malaysia or English

English Language Requirements

• Credit in the English language subject at SPM/UEC level; or MUET Band 5; or a score of 196 (computer-based) / 525 (writing-based) / 69-70 (internet-based) in TOEFL; or Band 5.5 in IELTS.

• In the event that the English language requirements are not met, student may be required to undertake additional English module(s) prior to or concurrently with the undergraduate program, based on the University’s decision.

* International students holding equivalent academic qualifications not which are not conducted in English, are required to sit for the English Placement Test (EPT)

Learning approach

Students will be introduced to Problem-based Learning, group discussions and projects to help them develop study skills, presentation skills, research skills and time management. This will further enhance their critical and analytical skills and prepare them for the demands of tertiary studies and the working world.

Assessment

Assessment of individual courses in the Foundation Programme consists of two components:
• Continuous coursework (50%)
• Final examination (50%)

The continuous coursework component comprises different tasks such as projects, assignments, laboratory work, presentations and tests, and others assigned throughout each semester. The final examination is conducted at the end of each semester. The assessments are subject to quality assurance procedures to maintain high standards and ensure fair assessment.

Offered at

INTI International University
INTAKES: JAN, APR & AUG

INTI International College Penang
INTAKES: JAN, MAY & AUG

INTI International College Subang
INTAKES: JAN, MAY & AUG

Programme structure

• Chemistry 1
• Chemistry 2
• English Language Skills 1
• English Language Skills 2
• General Studies
• Mathematics 1
• Mathematics 2
• Self-Development Skills
• Skills for Creative Thinking

Elective papers for Biological Science Pathway
• Basic Computing
• Biology 1
• Biology 2
• Statistics

Elective papers for Pure Science Pathway
• Biology 1
• Physics 1
• Physics 2

Elective papers for Engineering Pathway
• Physics 1
• Physics 2
• Engineering Mechanics
• Basic Computing

Duration

1 Year
DIPLOMA IN CIVIL ENGINEERING

Students are provided with a solid foundation in computing, mathematical, drawing and communication skills and the basics of civil engineering disciplines. They will be equipped with skills to design, develop, manufacture, construct and maintain civil engineering products, systems and services.

We also help students develop multi-disciplinary teamwork and leadership skills, as well as proficiency in written and oral communication.

This programme covers a comprehensive range of courses, including soft skills training and internships with reputable civil engineering-based companies, and classroom learning with reference to industrial-related projects.

The programme meets the guidelines set by the Malaysian Qualifications Agency (MQA), and has been granted full accreditation by MQA since 2001.

Accredited by:

Duration
2.5 Years

Programme structure

Level 1
- Physics
- Structured Programming
- English Communication Skills
- Surveying 1 (Theory & Practice)
- Entrepreneurship
- Material for Civil Engineering
- Engineering Static
- Engineering Drawing
- Mathematics 1
- Mathematics 2

Level 2
- Civil Engineering Drawing
- Strength of Material
- Soil Mechanics
- Professional Development
- Structural Analysis
- Construction Technology and Practices
- Project-Civil Engineering
- Steel and Reinforced Concrete Design
- Fluid Mechanics

Internship

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Green Future Malaysia
- Malaysian Studies 2 (Local students) / Communication in Malay 1B (International Students)
- Media Literacy for Personal Branding

Career opportunities

Clerk-of-Work, Construction Project Coordinator, Engineering Design Assistant, Product Engineer, Site Engineer Assistant, Site Safety Officer, Technical Site Supervisor

Offered at
INTI International University

INTAKES: JAN, MAY & AUG

DIPLOMA IN ELECTRICAL & ELECTRONIC ENGINEERING

Students are introduced to basic electrical & electronic engineering principles with hands-on experiences to emphasise on the areas of electronic circuit analysis, control systems, electrical machines and electric power systems, as well as telecommunications. Students are also able to develop the ability to apply ICT knowledge in engineering analysis, simulation and control through various software such as C++ and MATLAB.

Duration
2.5 Years

Programme structure

Level 1
- Analogue Electronics
- Circuit Theory & Electronic Devices
- Engineering Drawing
- Engineering Mathematics 1
- Engineering Mathematics 2
- Physics
- Programming Fundamentals
- Materials Science
- Introduction to Programmable Logic Controller

Level 2
- Electric Power Systems & Machines
- Electromagnetic Field Theory
- Introduction to Digital Electronics
- Introduction to Embedded Systems
- Introduction to Power Electronics & Drives
- Modern Control Systems Engineering
- Object Oriented Programming
- Professional Development
- Project
- Telecommunication Systems

Internship

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Green Future Malaysia
- Malaysian Studies 2 (Local students) / Communication in Malay 1B (International Students)
- Media Literacy for Personal Branding

Career opportunities

Design, Research or Development Engineer Assistant, Production Engineer, Service Engineer, Technical Support Engineer

Offered at
INTI International College Penang

INTAKES: JAN, APR & AUG

*For Malaysian students who do not have a credit in SPM BM.*
DIPLOMA IN MECHANICAL ENGINEERING

Students are provided with foundation skills needed to conceive and produce the moving parts, components and machinery in every aspect of manufacturing. They will be equipped with broad-based mechanical engineering knowledge in both theoretical and practical aspects. This programme covers a comprehensive range of courses in mechanical engineering.

Accredited by:

- Accredited by the Engineering Technology Accreditation Council (ETAC)**, a delegated body by the Board of Engineers Malaysia established in ensuring Malaysia’s ETAC accredited engineering diploma programmes are substantially equivalent to the engineering degrees of the signatories of the Sydney Accord and Dublin Accord.
- Recognised by Singapore Institute of Engineering Technologist, Singapore**
- Well recognised by UK and Australian Universities.
- Soft skills and internships provide students with transferable skills and working experience.

Career opportunities
Mechanical Engineer Assistant, Automotive Engineer Assistant, Application Engineer Assistant, Sales Engineer Assistant, Mould Design Assistant, Process Technician, Maintenance Technician, QA/ QC Assistant.

Duration
2.5 Years

Offered at
INTI International University
INTI International College Subang
INTI International College Penang
INTAKES: JAN, MAY & AUG

DIPLOMA IN QUANTITY SURVEYING

Programme accredited by Royal Institution of Surveyors Malaysia

Students are provided with a foundation in the quantity surveying practice. Quantity surveying is developed progressively from the elementary concepts underlying planning, estimates and measurement of building materials as per the Standard Method of Measurement, preparation of tender documents, cost control, cost analysis, contract administration and management of building production in the construction industry. They are prepared with the skills to undertake a wider role in multi-disciplinary teams and a leading role in providing appropriate professional services that maximise value and minimise risk.

Career opportunities
Assistant Quantity Surveyor, Contract Executive.

Offered at
INTI International University
INTI International College Subang
INTI International College Penang
INTAKES: JAN, MAY & AUG

Programme structure

Level 1
- Business Entrepreneurship
- Engineering Drawing
- Engineering Statics
- English Communication Skills
- Mathematics 1
- Mathematics 2
- Physics
- Structured Programming
- Structures & Properties of Materials
- Workshop 1

Level 2
- Engineering Dynamics
- Engineering Drawing 2
- Fluid Mechanics
- Mechanics of Engineering Material
- Circuit Theory
- Mechanics of Machines
- Professional Development
- Project – Mechanical Engineering
- Thermodynamics
- Thermo-fluid Lab
- Workshop 2

Internship

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Green Future Malaysia
- Malaysian Studies 2 (Local students) / Communication in Malay 1B (International Students)
- Media Literacy for Personal Branding

Level 1
- Recognised by Singapore Institute of Engineering Technologists, Singapore**
- Well received by the UK and Australian universities
- Provides the latest teaching methods to meet market demands
- Receives full accreditation from MQA (Malaysian Qualifications Agency), RISM (Royal Institution of Surveyors Malaysia) and BQSM (Board of Quantity Surveyors, Malaysia)**

Career opportunities
Assistant Quantity Surveyor, Contract Executive.

Offered at
INTI International University
INTI International College Subang
INTI International College Penang
INTAKES: JAN, APR & AUG

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Green Future Malaysia
- Malaysian Studies 2 (Local students) / Communication in Malay 1B (International Students)
- Media Literacy for Personal Branding

Programme structure

Level 1
- Building Services
- Construction Contracts & Law
- Construction Materials
- Construction Technology 1
- English Communication Skills
- Financial Management for Construction
- Introduction to Quantity Surveying
- Measurement 1
- Principles of Economics
- Principles of Information Technology
- Quantitative Methods
- Technical Drawing

Level 2
- Building Structures
- Construction Technology 2
- Estimating
- Measurement 2
- Planning Practice & Law
- Professional Quantity Surveying Practice
- Project – Quantity Surveying & Construction
- Property & Building Economics
- Surveying 1**
- Land Surveying***
- Project Management for Construction

Internship

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Green Future Malaysia
- Malaysian Studies 2 (Local students) / Communication in Malay 1B (International Students)
- Media Literacy for Personal Branding

*For Malaysian students who do not have a credit in SPM BM
**Only available at Nilai and Subang campuses.
***Only available at Subang and Penang campus.
BACHELOR OF ENGINEERING (HONS) IN CIVIL ENGINEERING

Students will gain knowledge of various civil engineering fields, such as structural analysis and design, material engineering, geotechnical and soil mechanics, hydraulics and hydrology in water engineering, highway and traffic engineering, as well as exposure to construction project management, contracts and estimating of costs.

We also provide soft skills training as well as internships at reputable civil engineering-based companies, and classroom learning with reference to industrial-related projects.

The programme has been granted accreditation by the Engineering Accreditation Council (EAC) since 2012.

Programme structure

Year 1
- Civil Engineering Fundamentals
- Civil Engineering Materials
- Engineering Geology
- Electrical Circuits
- Engineering Drawing
- Engineering Mathematics 1
- Engineering Mathematics 2
- Engineering Statics
- Introduction to Programming
- University English

Year 2
- Soil Mechanics & Geotechnical Engineering
- Engineering Hydrology
- Analytical Methods
- Civil Engineering Drawing
- Engineering Dynamics
- Fluids Mechanics
- Mechanics of Materials
- Structural Analysis 1
- Surveying

Year 3
- Structural Analysis II
- Engineering Perspectives
- Construction Technology
- Environmental Engineering
- Design of Structural Steelwork
- Estimating & Contract
- Foundation in Engineering
- Highway & Traffic Engineering
- Industrial Training
- Open Channel Hydraulics
- Reinforced Concrete Design

Year 4
- Integrated Engineering Design Project
- Elective I
- Elective II
- Final Year Project I
- Final Year Project II
- Reinforced & Pre-stressed Concrete Design
- Project Management for Civil Engineering

General Elective* I
- Advanced Highway Engineering
- Advanced Steel Design
- Water and Waste Water Systems

General Elective* II
- Water Engineering

Highlights
- The programme receives full accreditation by the Engineering Accreditation Council (EAC) Malaysia under the Washington Accord.
- The programme has been granted accreditation by the Engineering Accreditation Council (EAC) since 2012.

For offering of electives, please consult the Head of the Programme.

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

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

*For elective subjects, please consult the Head of Programme.

INTAKES: JAN, MAY & AUG

Duration
4 Years

MPU subjects
- Bahasa Kebangsaan A* (2 credits)
- Community Service & Co-curriculum
- Entrepreneurship
- Ethics Relations (Local students) / Malay Communication 2 (International students)
- Islamic & Asian Civilisation (Local students) / Malay Studies (International students)
- Presentation Skills

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

*For offering of electives, please consult the Head of Programme.
BACHELOR OF SCIENCE (HONS) QUANTITY SURVEYING

Programme accredited by the Royal Institution of Chartered Surveyors, UK and Lembaga Jurukur Bahan Malaysia

Students will be prepared to manage the financial and procurement processes of construction projects. This may include tasks such as preparing cost plans and estimates, bills of quantities, tender appraisals, valuations of interim payments, project audits and life cycle costing. Studies include cost planning, cost control, building development techniques, building research, measurement software application, measurement of quantities of building and infrastructure work and handling of construction legal issues.

Industrial-related projects are blended into the courses to provide direct industrial experience, aside from industrial visits and internships.

Highlights
- Recognised by Singapore Institute of Engineering Technologists, Singapore
- Programme meets the requirements established by professional bodies such as the Board of Quantity Surveyors Malaysia and Malaysian Qualifications Agency (MQA)
- The programme receives full accreditation by the Board of Quantity Surveyors Malaysia and also from Royal Institution of Chartered Surveyors (RICS), UK
- Students will be exposed to the latest taking off methods, such as Building Information Modelling (BIM) approach, in order to analyze and simulate construction cost more effectively and efficiently
- Graduates will receive a competency certification by Glodon (Cabinest Level D) upon passing the competency assessment

Career opportunities
Consultant Quantity Surveyor, Resident Quantity Surveyor, Contractors' Quantity Surveyor

Offered at
INTI International University

INTAKES: JAN, MAY & AUG

Duration
3.5 Years

Programme Structure
Year 1
- Introduction to Quantity Surveying
- Technical English
- Technical Drawing
- Principles of Building Construction
- Quantitative Methods
- Construction Materials
- Building Structures
- Legal Studies for Quantity Surveyors
- Advanced Building Construction
- Building Environments and Services
- Measurement for Building Works
- Surveying

Year 2
- Measurement for Advanced Building Works
- Principles of Estimating for Building Works
- Pre-Contract Administration
- Principles of Construction for Infrastructure and Civil Engineering Works
- Advanced Building Environments and Services
- Land Law
- Post-Contract Administration
- Measurement for Building Services
- Cost Studies
- Construction Contract Administration
- Systems of Construction Procurement
- Construction Economics

Year 3
- Measurement for Infrastructure and Civil Engineering Works
- Principles of Estimating for Building and Services Works
- Development Economics
- BIM Project
- Risk, Value and Facilities Management
- Research Methods
- Professional Ethics and Code of Conduct

Year 4
- Project Quantity Surveying
- Project Management
- Advanced Construction Contract Administration

Internship / Industrial Training

MPU subjects
- Bahasa Kebangsaan A*
- Co-curriculum
- Corporate Social Responsibility
- Design Thinking
- Ethnic Relations (Local students) / Malay Communication 2 (International students)
- Islamic & Asian Civilisation (Local students) / Malaysian Studies (International students)

3+0 BACHELOR OF ENGINEERING (HONS) IN ELECTRICAL AND ELECTRONIC ENGINEERING

This three-year engineering course allows students to access to the latest technologies in the fields of electrical and electronic engineering. From the outset the emphasis is placed on innovation, design and development which will enrich students’ technical and transferable skills.

In collaboration with Coventry University, UK

Technical Support Engineer, Design / Research and Development Engineer, Production Engineer or Service Engineer, Test Development Engineer, Software Engineer

Offered at
INTI International College Penang

INTAKES: JAN, APR & AUG

Duration
3 Years

Programme Structure
Year 1
- Analogue and Digital Electronics 1
- Electrical Engineering 1
- Engineering Mathematics 1
- Introduction to Computer Engineering
- Introduction to Project Management
- Professional Skills
- Systems Project

Year 2
- Academic Writing 2: Developing Skill in Academic Writing
- Analogue and Digital Electronics 2
- Communication Systems 1 (Elective)
- Control and Instrumentation 1 (Elective)
- Electrical Engineering 2
- Embedded Microprocessors Group Project
- Engineering Mathematics 2

Internship
Year 3
- Advanced Digital Systems
- Advanced Electronics
- Communication Systems 2 (Elective)
- Control and Instrumentation 2 (Elective)
- Electrical Power Systems
- Global Leadership
- Individual Project Preparation
- Individual Project Realisation

MPU Subjects
- Community Service & Co-curriculum 3
- Ethnic Relations (Local students) / Communicating in Malay 2 (International students)
- Islamic & Asian Civilisation (Local students) / Malaysian Studies 3 (International students)
- Bahasa Kebangsaan A*
- Corporate Social Responsibility
- Design Thinking

Note: Programme structure is subject to change.
*For Malaysian students who do not have a credit in SPM BM.

*For Malaysian students who do not have a credit in SPM BM. Note: This programme does not lead to the recognition from the Board of Engineers Malaysia.
Having pioneered the introduction of American education more than 30 years ago, INTI has the most established American Degree Transfer Program (AUP) in Malaysia.

Students can choose from more than 300 US and Canadian universities. INTI students have been accepted into Ivy League and Ivy League Standard universities like the University of Pennsylvania, Brown University, University of Michigan, University of California, University of Wisconsin, Purdue University and more.

**DOCTOR OF PHILOSOPHY (PHD) IN APPLIED PHYSICS**

The programme enables students to undertake specialised and applied in-depth research work in various branches of applied physics, including and not limited to plasma physics, pulse power technology and material science. These areas can enhance and contribute to the body of knowledge in science and technology.

**Characteristics**
- Students will achieve high levels of competency in advanced scientific knowledge and skills in a specialised and advanced field of science and technology with emerging importance.
- Graduates will be able to contribute professionally as leaders in the area of science and technology in academic and research institutions and organisations.
- Leading research in areas of plasma physics and pulse power technology, an emerging field in energy and green technology.
- This programme provides a thorough grounding in the scientific principles governing the physical, chemical, and mechanical properties of solid materials, and the opportunity to specialise in the research of a particular material (superconductors, semiconductors) through a choice of options.

**Research Areas**
- Plasma physics
- Pulse power technology
- Condensed matter physics
- Superconducting materials

**Entry Requirements**
- A recognised Master’s degree in the relevant field; AND
- Meet any of these English language requirements:
  i. Master’s degree conducted in English*; OR
  ii. Credit 6 in MCE / SPM / GCE level; OR
  iii. MUET Band 5 or 6 / TOEFL score of 550 / IELTS score of 6.0; OR
  iv. Equivalent score from any of the above obtained at undergraduate level at a recognised university*

  *A copy of the document from the university is required during submission as proof of English proficiency

Any other qualification with relevant working experience will be subject to approval by the Senate.

**Popular universities for business**

**US universities**
- Binghamton University
- Indiana University of Pennsylvania
- Michigan State University
- Ohio State University
- Purdue University
- Southern New Hampshire University
- University of Iowa
- University of Missouri
- University of Nebraska, Lincoln
- University of Oklahoma, Norman
- University of Wisconsin, Madison
- Winona State University

**Canadian universities**
- Acadia University
- Memorial University of Newfoundland
- Trent University
- University of Brunswick
- University of Lethbridge
- University of Manitoba
- University of Saskatchewan
- University of Winnipeg

**Popular majors (partial list) pursued by AUP students are:**
- Accounting
- Actuarial Science
- Digital Marketing
- Entrepreneurship Studies
- Fashion Marketing
- Finance
- Human Resource Management
- International Business
- Management Information System (MIS)
- Supply Chain Management
- Civil Engineering
- Electrical and Electronic Engineering
- Computer Science

**Further Information**
- For more information, please refer to the American Degree Transfer Program (AUP) brochure.

**Offered at**
- INTI International University
- INTI International College Subang
- INTI International College Penang

**INTAKES: JAN, MAY & AUG**

**Duration**
- 2 Years

**Program structure**
- This program enables students to complete up to 2 years of the degree studies at INTI before transferring to the US to complete their studies.

**Note:** *Business Programs are offered in Subang.

For more information, please refer to the American Degree Transfer Program (AUP) brochure.
HEAR WHAT OUR ALUMNI SAY

“INTI is a well-recognised degree by employers. Since I got my job soon after graduation I knew it was the right decision! Doing my engineering degree at INTI taught me not only technical knowledge but also life skills. I learnt effective time management through juggling my classes and assignments and project management when handling my college projects. I also learnt to value integrity, commitment and an ethical mindset – traits that are instrumental in helping me excel in my current position.”

ALBERT WOON
Recipient of the National Transport Gold Award for Leadership 2015

“AMeer AzHAR FADILAN
Product Engineer, Msi Sotia Oil & Gas Sdn Bhd
B.Eng. (Hons) in Electrical and Electronic Engineering, University of Bradford, UK

“... would never have found the right career if not for the field trips organised by the INTI School of Engineering. I joined every field trip and am now enjoying the challenge of working in the highly demanding field of oil and gas. The various extra-curricular activities at INTI provided ample opportunities to sharpen my soft skills, helping me to build a strong professional network and impress top management with results that have surpassed my KPIs.”

FARHAA Bibi NaHEEDA SuDDoo
Recipient of the National Transport Gold Award for Leadership 2015
Bachelor (Hons) in Civil and Structural Engineering, Dual Award with University of Bradford, UK

“... was attracted to the INTI engineering program due to its dual award partnership with the University of Bradford, UK. It was a well-executed program with a rigorous curriculum while the campus was equipped with fantastic facilities that provided a conducive study environment. The lecturers were dedicated and exposed us to many different facets of engineering which helped me graduate with first class honours. I aim to always better myself so that I can benefit others around me.”

FARMAH BIBI NAHEEDA SUDDOO
Civil and Structural Engineer
Bachelors (Hons) in Civil and Structural Engineering, Dual Award with University of Bradford, UK

“... I chose the INTI Quantity Surveying program because the syllabus extends beyond the construction industry, offers insights into real-life project management and discusses the corresponding economic impact. There were ample seminars and workshops that helped me build a strong industry network through which I found my first job. Participating in university activities helped improve my soft skills, while learning to work with team members prepared me to overcome work and life challenges.”

YAMAKAVISHNUN JADDoo
Mauritian Tourism Authority
BSc (Hons) Quantity Surveying

EMPLOYER TESTIMONIALS

FLEX

“Both Hng Lip Phong and Lim Jia Xin from INTI’s Bachelor of Electrical and Electronic Engineering have done INTI proud by successfully completing the “Development of a Programmable Audio Digital Signal Processors (DSP) Module with PC Interface and Control – Hardware” and “Development of a Programmable Audio DSP Module with PC Interface and Control – Software” under the Employer Project programme with flying colours. It is great to see the guidance and knowledge sharing that INTI’s faculty staff freely imparts to its students, and I am excited to be involved in more Employer Projects with INTI’s students who are always so enthusiastic and eager to learn.”

Kevin Tan | Director of Product Development

KOLLECT SYSTEMS SDN BHD

“Our internship experience with INTI students have shown the students to be capable and able to do complex IT work and data analytics. Partnership with INTI provides us with access to a good talent pool and at the same time, we are able to share our experience and the industry trends. I find INTI students to be hardworking and knowledgeable, making them highly employable.”

KeshMahinder Singh | CEO

SAMSUNG MALAYSIA

“INTI’s structured and committed engagement with the industry has closed the gap between the classroom and the realities of the workplace. This is critical to the development of INTI’s graduates as the curriculum is now more practical rather than academic. This makes a difference when employers like Samsung selects who their future talents should be. We no longer look at academic excellence alone, we look at how knowledge can be practically deployed. And in this regard, INTI has done a remarkable job preparing its students to succeed through close collaboration with the industry, tweaking both delivery and content which make sense to employers.”

Chee Fong Toan | HR & General Affairs Director

EMPLOYER PROJECTS

INTI has established close ties with leading companies in the industry to develop employer projects to enable students to gain real, hands-on work experience while studying. Through these projects, students are presented with immediate challenges faced by businesses, and are required to work together in teams to develop and present their proposals. Projects are based on real-life business issues that will help students to develop their knowledge and apply their soft skills in actual business scenarios.

Some employer projects undertaken by our students:

- **REDESIGNING SHELL STATIONS USING GREEN TECHNOLOGY**
  
  Polymer Composite Asia Shell Malaysia teamed up with our students on the redesigning of Shell petrol station using Green Technology. The students’ presentation was able to captivate the Shell clients with innovative ideas in their “Fuel and Go Green” challenge.

- **DRONE FOR THE FUTURE**
  
  Festival. FourFang teamed up with our students to develop a state-of-the-art drone called Luna-X. Luna-X is an unmanned air vehicle (UAV) which is able to perform autonomous security surveillance and high altitude inspection without requiring any manual control require.

- **AUTOMATIC FACE RECOGNITION ARTIFICIAL INTELLIGENCE (AI)**
  
  IMC Solutions Students came up with an automatic face recognition AI Project to help manufacturers especially in the high mix low volume industries to better manage their production shop floor.

- **FIRE RETARDANT PRODUCT DESIGN**
  
  Asian Resistant Fire Students took on the challenge of determining alternative material that could be researched to improve the capabilities of the current felt material to improve the heat and acoustic insulation for automobiles.

- **HYDROPHONIC FARMING**
  
  Urban Farm Agritech Students were tasked to build prototypes demonstrating the use of mechanical tools to replace human effort. The objective of the project is to semi-automate the hydroponics farming process to reduce dependency on manual labour.
INTI NETWORK

INTI INTERNATIONAL UNIVERSITY (DU022(N))
06-798 2000 | Persiaran Perdana BBN, 71800 Putra Nilai

INTI INTERNATIONAL COLLEGE SUBANG (DK249-01(B))
03-5623 2800 | No. 3, Jalan SS15/8, 47500 Subang Jaya

INTI INTERNATIONAL COLLEGE KUALA LUMPUR (DK073(B))
03-2052 2888 | Menara KH, Jalan Sultan Ismail, 50250 Kuala Lumpur

INTI INTERNATIONAL COLLEGE PENANG (DK249-02(P))
04-631 0138 | No. 1-Z, Lebuh Bukit Jambul, 11900 Penang

INTI COLLEGE NILAI (DK249(N))
06-798 2133 | Persiaran Perdana BBN, 71800 Putra Nilai

INTI COLLEGE SABAH (DK249-02(S))
088-765 701 | Lot. 17-20, Phase 1B, Taman Putatan Baru, 88200 Kota Kinabalu

INTI EDUCATION COUNSELLING CENTRES (266729-P)

IPOH 05-241 1933 | No. 258, Jalan Sultan Iskandar, 30000 Ipoh

JOHOR BAHRU 07-364 7537 | No. 20, 25-01, Jalan Austin Heights B/1, Taman Austin Heights, 81100 Johor Bahru

KUANTAN 09-560 4657 | B16, Jalan Seri Kuantan 81, Kuantan Star City II, 25300 Kuantan

Get Connected with INTI!!

[INTI Network Website] [Facebook] [Twitter] [Instagram]

All information provided in this guide is correct at the time of printing, and subject to change from time to time. Published: NOV2019