

**BE** FUTURE**MADE** 

# Built Environment at Heriot-Watt University Malaysia

- Heriot-Watt University Malaysia offers a wide range of programmes at the undergraduate and postgraduate level to provide opportunities designed to support and strengthen the unprecedented economic boom in the built environment that is expanding Malaysia. We have a national and international reputation as the leading research institute in Scotland, UK. Our programmes and disciplines are appropriate for professionals involved in the planning, design, construction, sale and development of the built environment and infrastructure. Our courses are taught in a highly flexible manner to complement our students' busy working lives, and all programmes offer entry into a range of vitally important professions that are both stimulating and offer ample opportunity for career development.
- Our programmes are designed to foster critical thinking, problemsolving, and creativity among students. They are exposed to the latest industry practices, technological advancements, and sustainability principles. Students also have access to state-of-the-art facilities and laboratories, enabling them to apply their knowledge in a practical setting.
- A significant characteristic of built environment programmes is the
  close linkage of subjects between our programmes, ensuring an
  inspired and an inter-disciplinary learning environment. Heriot-Watt
  University Malaysia has a strong emphasis on industry engagement,
  with close collaborations with local and international companies,
  government agencies, and professional bodies. This allows students to
  interact with industry professionals, undertake industry projects, and
  gain valuable practical experience through internships and placements.
- Furthermore, the university's global perspective ensures that students are equipped with a broad understanding of the built environment sector across different geographical contexts. They are encouraged to explore international opportunities, engage in exchange programs, and participate in research projects that address global challenges.

# **About Our Programmes**

# **BSc (HONS) QUANTITY SURVEYING**

KPT/JPS (R/526/6/0050) (FA4369) 06/24

#### Intake: September, January

Our Quantity Surveying discipline is internationally recognised for the quality of its research and teaching and is Scotland's top rated construction management department. Our degree programmes equip graduates with the knowledge and experience necessary to ensure that built environment projects are sustainable, cost efficient and constructed to the highest standards.

Quantity surveying is about providing clients of the construction industry with financial, contractual and technical advice, and ensuring they get value for money from the buildings they construct. The modern quantity surveyor is a construction professional who may be involved in all stages of the design and construction process, from providing business strategy advice, working with architects and design team consultants through to overseeing the onsite construction phase. The quantity surveyor has a sound understanding of construction technology, project cost planning and control and contractual issues.

This programme is accredited by the Royal Institution of Chartered Surveyors (RICS), Chartered Institution of Civil Engineering Surveyors (ICES) and Board of Quantity Surveyors Malaysia (BQSM), as well as the Malaysian Qualifications Agency (MQA).







### YEAR 1

- · Construction Technology 2
- · Commercial Law
- · Surveying and Monitoring in the Built and Natural Environment
- · Cost Modelling and Measurement
- eConstruction
- · Building Services Technology
- · Principles of Property Valuation
- · The Economy

#### YEAR 2

- · Safety Management and Site Establishment
- · Construction Technology 3
- · Procurement and Contract
- Design Cost Planning and Control
- · Measurement and Cost Evaluation
- Design Issues
- · Design for Construction
- · Business Management in the Built Environment

#### YEAR 3

- · Cost and Value Management
- · QS Practice
- · Design Project
- Dissertation
- · Construction Information Management
- · Innovation in Construction Practice

Students take a total of eight courses per year including core, optional and elective courses/projects

## MEng CIVIL ENGINEERING

MEng: KPT/JPS (R/526/6/0108) (FA6195) 08/27

#### **Intake: September**

The programme covers the main civil engineering disciplines of structures, geotechnics, water, environmental, highway and project management that equips students with the key skills and knowledge required to become chartered civil or structural engineers.

The core curriculum begins with fundamentals in all main subject areas, concentrating on analysis and materials behaviour followed by increasing focus on design and management in the specialisation years. Throughout, there is also an emphasis on the personal development of students within the professional environment. The career prospects for our graduates includes these high demand sectors for civil engineers namely the construction, utilities, energy and transportation sectors...

This programme is internationally accredited by the Joint Board of Moderators consisting of the Institution of Civil Engineers (ICE), Institution of Structural Engineers (IStructE), Chartered Institution of Highways and Transportation (CIHT) and Institute of Highway Engineers (IHE) on behalf of the Engineering Council UK. Our MEng qualification is designed to satisfy the academic requirements set by the Engineering Council UK for registration as a Chartered Engineer (CEng) status. Our MEng programme is also recognised by the Board of Engineers Malaysia (BEM) and fully accredited by the Malaysian Engineering Accreditation Council (EAC).





#### YEAR 1

- · Analysis of Determinate Structures
- · Hydraulics and Hydrology A
- Surveying and GIS
- · Mathematics for Engineers and Scientists 3
- · Civil Engineering Materials
- · Stress Analysis and Element Strength
- · Design Studies A Problem Solving
- · Statistics for Science

### YEAR 2

- · Indeterminate Structures
- · Geology and Soil Properties
- · Design of Steel Elements
- · Transport Design, Infrastructure and Society
- · Hydraulics and Hydrology B
- · Geotechnics A Intro to Soil Mechanics
- · Design of Concrete Elements
- · Environmental Technology and Management

#### VFAD 3

- · Geotechnics B Soil Strength
- · Civil Engineering Design Project
- $\cdot$  Foundation Engineering
- · Industrial Training

Plus 5 optional courses related to structural engineering, transportation engineering and water engineering.

#### YEAR 4

- · Civil Engineering Professional Design Project
- · Dissertation 1 Civil Engineering Discipline
- · Dissertation 2 Civil Engineering Discipline

Plus 4 optional courses related to structural engineering, water engineering and project management.

# MSc CONSTRUCTION PROJECT MANAGEMENT

KPT/JPS (R2/526/7/0026) (MQA/FA2926) 02/28

#### Intake: September, January

From the construction and property industries to information technology and heavy industry, there is growing recognition of the benefits strategic project management can bring.

This programme equips graduates with the knowledge and skills to develop successful careers as professional project managers in the construction industry and beyond.

It offers a breadth of management, procurement and technology related subjects. It is focused on industrial relevance, ensuring that graduates are quickly able to make a positive and effective contribution to the success of their working environment, and the development of their own professional careers.

This programme is accredited by the Royal Institution of Chartered Surveyors (RICS) and the Chartered Institute of Building (CIOB).



- · Project Management: Theory and Practice
- Project Management: Strategic Issues
- · Value and Risk Management
- · Construction Financial Management
- · Contracts and Procurement
- · Construction Practice and Information Technology
- · People and Organisation Management in the Built Environment
- · Research Dissertation

#### **Optional courses**

- · Construction Technology 3
- Urban Economy and Property Markets Sustainable Design and Development

## MSc COMMERCIAL MANAGEMENT AND QUANTITY SURVEYING

KPT/JPS (R2/0734/7/0032) (MQA/FA3475) 06/28

#### Intake: September

The need for quantity surveyors is vital for the efficient financial management of construction projects. As a partner university of the Royal Institution of Chartered Surveyors (RICS), the School is instrumental in meeting the educational needs of quantity surveying graduates by building on their previous education and experience to prepare them for the demands of this profession.

There is consistent competition amongst those wishing to enter and develop a career in quantity surveying in order to gain an internationally recognised postgraduate qualification, such as the MSc from Heriot-Watt University. Successful completion of the programme develops the necessary skills to provide a quality benchmark recognised by prospective employers to enhance an individual's career progression.

This programme is accredited by the Royal Institution of Chartered Surveyors (RICS) and Chartered Institution of Civil Engineering Surveyors (ICES)



#### Core courses

- $\,\cdot\,\,$  People and Organisational Management in the Built Environment
- · Contracts and Procurement
- · Value and Risk Management
- · Quantity Surveying Financial Management
- · Construction Financial Management
- · Construction Technology 3
- · Research Dissertation
- · Construction Practice and Information Technology

#### **Optional courses**

- · Urban Economy and Property Markets
- · Sustainable Design and Development

# **Proud HWUMANS**



# Komalah Selva

BSc (Hons) Quantity Surveying (Class of 2021), Account Manager at Hummingsoft Sdn Bhd, Malaysia

The four years I spent at Heriot-Watt University Malaysia gave me a headstart in my career path. The freedom of thought, easy and friendly access to top management, and links to industry stakeholders provided both, academic and soft skills to me.



# **Valentina Nicson**

MEng (Hons) Civil Engineering (Class of 2022), JOE Green Pte Ltd, Singapore

At Heriot-Watt University Malaysia, what stood out to me the most was the amicability and willingness of the lecturers to help, as they were always available for tutorials and provided ample advice and guidance, which enabled us to gain a better insight into the subject matter.



# **Yam Ming Liang**

BSc (Hons) Quantity Surveying (Class of 2022), Quantity Surveyor at China Communications Construction (ECRL) SDN. BHD.

Heriot-Watt University Malaysia is a distinctive institution that has expanded my professional network and helped me develop valuable career skills. The university's emphasis on soft skills, acquired through projects and club participation, has greatly assisted me in engaging with clients and other stakeholders in the construction industry

# Go Global





Heriot-Watt University Malaysia accepts applications all year round.

# APPLY ONLINE

You can apply online for our programmes at https://bit.ly/HWApply You must create an in one session; you can save the information you have already entered and return to complete it at a later date. There is a help facility on each page of the online form

### SUPPORTING DOCUMENTS

Please remember to upload supporting documents so that we can make a decision on your application. This includes proof of English language proficiency and original or certified copies of academic transcripts.

Please refer to the supplemental item checklist on the Online Application form:

See website for details of fees:



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Open for consultation: Monday to Friday (9am - 5pm) and and weekends (10am - 4pm) except Public Holidays

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