**FutureMade** is to look to the future, strive for better, aim for higher, make history. A future that mirrors our pioneering roots in 1821, the year we founded the world’s first Mechanics Institute. By choosing to study at Heriot-Watt today you will become part of a community working across boundaries and cultures. Collaborating with international business and industry to tackle the global challenges faced by the world we live in. Heriot-Watt undergraduates are highly employable and sought after by the best organisations worldwide.

Be [FutureMade](http://hw.ac.uk/Malaysia)
LOOK TO THE FUTURE.
STRIVE FOR BETTER.
AIM FOR HIGHER.
MAKE HISTORY.
BE AMBITIOUS.
BE BOLD.
Heriot-Watt University is aware of the challenges the youth of today face in terms of maintaining a healthy mindset, managing stress as well as developing meaningful social relationships in a landscape that has also become increasingly digitised. The university is no stranger to pioneering the global educational landscape with world-class programmes enhanced with a unique Positive Education approach.

### Transforming our Youth

Realising the important role our youths play today, Heriot-Watt has developed specific programmes both in online and offline modes that are designed to support every student to realise their full potential.

### Fit-For-Future

Adapting to the current environment which prohibits large gatherings, our Fit-For-Future programme applies the same techniques and content from our Youth Transformation Programme. Utilising our digital foundation platform, students are encouraged to engage in a positive transformation by focusing on developing their emotional intelligence, creativity, understanding their own personalities, their strengths and weaknesses, and developing a long-term vision and mission. This is done by setting realistic SMART goals through engaging and interesting activities. Using a proven emotional intelligence framework, and engaging activities focusing on expressing positive emotions such as empathy and gratitude, students are taught self-awareness, self-management, social awareness and relationship management.

On completion of the programme, students will develop a strong sense of self-confidence, ability to express their emotions in a positive way, and be able to relate comfortably to their peers and better manage their relationship with friends and family, providing a smooth transition and preparing them for the challenges of University studies.

The programme is open to students who have achieved a minimum of 5C’s in relevant subjects in SPM, IGCSE or equivalent. The programme objectives are:

- Apply the techniques for a successful mindset
- Identify your strengths, passion and potential
- Describe the four domains of emotional intelligence
- Develop and set realistic SMART Goals
- Understand team dynamics and what makes a successful team

The following are some of the sessions under the programme:

- The Successful Mindset
- Rewiring Your Brain
- Emotional Intelligence
- Knowing Yourself
- Setting SMART Goals
- Building Social Capital
- Team Dynamics
- Career Planning
- Project Showcase

Note: Our Youth Transformation Programme (YTP) will be suspended for the time being.
Maths Gym
Mathematical support and advice

The Maths Gym is a cross-campus initiative which aims to support all Heriot-Watt students, across all our campuses, to strengthen their mathematical and statistical skills and to boost their mathematical confidence.

We provide support to students from all degree courses that have maths or statistics related questions. Whether you need to brush up on basic skills, get to grips with a new topic or you just want to talk maths then we can help you achieve your goals! We provide support through drop-in sessions, small group appointments and online resources. Please look through our website https://mathsgym.hw.ac.uk to find out more about the support offered across the globe!
EmPOWER Programme

4-level Structured Programme Anchored by 6 Developmental Domains

**Features**

**Levels**

- **Watt** (Knowing and Leading Self)
  - Compulsory for Year 1 students
  - Focus on developing self-awareness, mental resilience, positive mindset and communication skills
  - Discover purpose through Impact Statement

- **Megawatt** (Leading Communities)
  - Aim to make a positive impact on communities
  - Create awareness towards global challenges and volunteer for a cause
  - Enhance social and economic capital

- **Kilowatt** (Leading Teams)
  - Develop leadership and people skills
  - Lead projects, events and extra-curricular activities on campus

- **Gigawatt** (Leading Enterprise)
  - Aim to create jobs and raise funds through social entrepreneurial ventures
  - Create global impact

**Developmental Domains**

- Emotional Intelligence, Resilience and Happiness
- Creativity, Innovation and Entrepreneurship
- Global Citizenship, Leadership and Impact
- Critical Thinking and Decision Making
- Employability and Industrial Relevance
- People Skills
<table>
<thead>
<tr>
<th>Watt</th>
<th>Knowing &amp; Leading Self</th>
<th>Emotional Intelligence, Resilience &amp; Happiness</th>
<th>People Skills</th>
<th>Creativity, Innovation &amp; Entrepreneurship</th>
<th>Critical Thinking &amp; Decision Making</th>
<th>Employability &amp; Industrial Relevance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defining impact (Impact Statement)</td>
<td>Self-awareness</td>
<td>Effective communication</td>
<td>Divergent thinking</td>
<td>Brainology</td>
<td>Preparing CV</td>
</tr>
<tr>
<td></td>
<td>Leadership style awareness</td>
<td>Self-management</td>
<td>Time management</td>
<td>Facilitating discovery</td>
<td>Thinking biases</td>
<td>Linkedin profile</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Active &amp; healthy lifestyle</td>
<td>Gratuity</td>
<td>Opportunity finding</td>
<td>Brain neurology</td>
<td>Career planning</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Reframing &amp; positive framing</td>
<td>Career fair</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Prof. dev. plan</td>
</tr>
<tr>
<td>Kilowatt</td>
<td>Influencing through impact (Impact Statement)</td>
<td>Social awareness</td>
<td>Effective collaboration</td>
<td>Lean startup</td>
<td>Evaluating claims</td>
<td>Business etiquette</td>
</tr>
<tr>
<td>Leading Teams</td>
<td>Awareness of the global challenges</td>
<td>Relationship management</td>
<td>Return on failure</td>
<td>Creating products, processes &amp; services</td>
<td>Analyzing inferences</td>
<td>Applying knowledge in industrial contexts</td>
</tr>
<tr>
<td>Megawatt</td>
<td>Widening impact</td>
<td>Leading at the happiness project</td>
<td>Negotiation, mediation &amp; persuasion</td>
<td>Financial literacy</td>
<td>Weighing decisions</td>
<td>Global industrial placement (work global)</td>
</tr>
<tr>
<td>Leading Communities</td>
<td>Resolving ethical challenges</td>
<td></td>
<td></td>
<td>Appreciating market &amp; customers</td>
<td>Analysing challenges</td>
<td>Creating opportunities for industrial networking</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Raising funds</td>
<td></td>
<td>Integrating commercial and industrial context to address community needs</td>
</tr>
<tr>
<td>Gigawatt</td>
<td>Global impact</td>
<td>Supporting those under their care emotionally</td>
<td>Lifelong learning</td>
<td>Running an enterprise</td>
<td>Assessing risk</td>
<td>Impacting industrial practice</td>
</tr>
<tr>
<td>Leading Enterprise</td>
<td>System thinking</td>
<td></td>
<td></td>
<td>Blue ocean strategy</td>
<td></td>
<td>Creating jobs</td>
</tr>
</tbody>
</table>
**EMPOWER PROGRAMME STRUCTURE**

**Watt Level**
- Offered through a General Compulsory Course to Year 1 undergraduate students
- Focus on how the brain works, growth mindset, emotional intelligence and character strengths self-assessment test
- Guided to find life purpose and draft an Impact Statement
- Accumulate 1000 EMPOWER points to complete each level and receive a Certificate of Completion
- EmPOWER Record of Achievement is awarded after completion of programme

**EMPLOYER TESTIMONIALS**

**MUHAMMAD AZMI BIN ZULKIFLI**
CEO, INVEST KL

We have hired quite a few Heriot-Watt students as employees and interns. Based on observations from throughout our workforce, the university’s students consistently share a solid grasp of fundamental actuarial principles, strong technical data skills, an aptitude for quick learning, and excellent communication skills. Heriot-Watt students are resourceful. They take initiative and can execute technical tasks with high quality. The students and graduates also demonstrate the curiosity necessary for learning new skills and techniques and display an openness to new ideas. These combined qualities are an ideal fit for our company, which strives to recruit talent with a thirst for knowledge and push the boundaries of innovation.

**KAY HOW TAN**
HEAD OF MALAYSIA AND CHIEF OPERATING OFFICER, SOUTHEAST ASIA MARKETS
CHIEF OF STAFF, INDIA, SOUTHEAST ASIA AND TAIWAN MARKETS
RGA GLOBAL REINSURANCE COMPANY LIMITED, LABUAN BRANCH

The EMPOWER Programme is certainly a great initiative by Heriot-Watt University Malaysia to prepare graduates to be industry-ready. Students will be shaped to think about the greater purpose with focus on soft skills that are fundamental when joining the workforce. Employers are looking for that differentiating factor in today’s disruptive business environment. A structured programme such as this will be beneficial to increase students’ employability.

**STUDENT TESTIMONIALS**

**MOHAMMED SYAFIQ BIN SALLEH (BEng (HONS) MECHANICAL ENGINEERING)**

“The EMPOWER Programme made me realise that NO CGAL is worth missing out on! The programme has encouraged me to look inward, understand myself and analyse what is important to me. It has enabled me to understand new perspectives of my surroundings and the world.”

**VALENTINA NICSON (BEng (HONS) CIVIL ENGINEERING)**

“The community service component of this course helped bring our Impact Statement to life. It helped to boost life skills such as leadership, teamwork and communication through how we form our group, propose an event and negotiate and manage conflict among the group members. I personally vouch for the EMPOWER Programme and would highly recommend this course to continuously EMPOWER our Heriot-Watt community.”

**ARISSA NOORDINA BAHARI BT MOHD AMIR SHAHRIL BAHARI (BSc (HONS) ACTUARIAL SCIENCE)**

“The EMPOWER Programme, specifically the module on Impact Statement, had the students reflect on the past, the present and the future. In the present module, students had to come up with our ikigai, a Japanese concept for our reason for being. Ikigai is the intersection between what you love, what you are good at, what you get paid for and what the world needs. Leave one out and life becomes unfulfilled.”
At Heriot-Watt, you have the opportunity to enjoy a truly international experience. We are one of the world’s top universities for international student mix and you have the chance to become a global student by taking part in an Inter-Campus Transfer to our Scottish or Dubai campuses.

**Campus transfers are guaranteed**
as long as your programme is available at the campus you are transferring to and you meet progression requirements

**Tuition fee waiver**
off Dubai or UK tuition fees when you transfer

**Study for as little as one semester**
at one of our global campuses

**Study at our global campuses**
until completion

Heriot-Watt reserves the right to withdraw opportunities to participate in the Go Global programme, including Inter-Campus Transfers, at any time.
Actuaries manage risk and uncertainty and evaluate the likely impact of future events. Heriot-Watt’s Actuarial Science programme is world-famous for its excellence. It contains all the courses that are essential for ensuring a flying start to a career as an actuary whilst at the same time fostering highly transferable mathematical skills.

If you excel at mathematics, enjoy problem solving and are looking for a degree that will prepare you for a rewarding career – both intellectually and financially – Actuarial Science could be the programme for you.

This programme is one of the few in Malaysia which are fully accredited by the UK Institute and Faculty of Actuaries (IFoA). Good performance means exemptions from the Core Principles subjects (CS1, CS2, CM1, CM2, CB1, CB2), giving prospective actuaries an advantage over those in other mathematics-based programmes. The degree is also accredited by the Royal Statistical Society and by the Malaysian Qualifications Agency (MQA).

Additionally, we are also recognised by the Society of Actuaries (SOA) under Universities & Colleges with Actuarial Programs - Advanced Curriculum (UCAP-AC) which is the highest level of recognition in Malaysia.

**Year 1:**
- Probability and Statistics A
- Actuarial and Financial Mathematics A
- Multivariable Calculus and Real Analysis A
- Linear Algebra
- Probability and Statistics B
- Actuarial and Financial Mathematics B
- Multivariable Calculus and Real Analysis B
- Algorithmic and Scientific Programming

Optional and elective courses available for Year 1 include:
- Finance and Financial Reporting
- Database Management Systems

**Year 2:**
- Life Insurance Mathematics A & B
- Stochastic Processes
- Survival Models
- Derivative Markets and Discrete-time Finance
- Statistical Models A & B
- Portfolio Theory & Asset Models

**Year 3:**
Students typically take Introductory Economics, Continuous-time Finance, Risk Theory and Time Series Analysis, and can choose from a range of options such as Statistics for Social Science, Bayesian Inference and Computational Methods, Statistical Machine Learning and Optimisation.

Students take a total of 8 or 9 courses per year including core, optional and elective courses/projects. For full details of the optional and elective courses please refer to our website.
BSc (HONS) STATISTICAL DATA SCIENCE
KPT/JPS [N/462/6/0014] [PA 8513] 06/22

Intake: September

The applications of statistical data science range from economics and medicine to social and environmental sciences. Our BSc in Statistical Data Science provides a blend of both theoretical and applied elements of modern statistics, and aims to give students the training in modelling, analysing and interpreting real data that is required in the economy, industry and research. The first year of the programme covers basic mathematics, probability and statistics. The final two years focus on specialist topics of statistical modelling and advanced courses in mathematics and data science. A variety of statistical computer packages are used.

Our programme is accredited by the Royal Statistical Society. It is possible for students who have completed the programme to apply for some exemptions from the Institute and Faculty of Actuaries (IFoA) professional examinations.

Year 1:
- Probability and Statistics A & B
- Linear Algebra
- Actuarial and Financial Mathematics A & B
- Multivariable Calculus and Real Analysis A & B
- Algorithmic and Scientific Programming

Optional and elective courses available for Year 1 include:
- Finance and Financial Reporting
- Database Management Systems

Year 2:
- Stochastic Processes
- Statistical Models A
- Statistics for Social Science
- Survival Models
- Statistical Models B
- Bayesian Inference & Computational Methods

Optional courses available for Year 2 may include:
- Portfolio Theory and Asset Models, Derivative Markets and Discrete-time Finance, Ordinary Differential Equations and to Interaction Design.

Year 3:
- Optimisation
- Statistics Dissertation A
- Statistical Machine Learning
- Time Series
- Statistics Dissertation B

Optional courses available for Year 3 may include:
- Artificial Intelligence and Intelligent Agents, Big Data Management, Continuous-Time Finance, Data Assimilation, Risk Theory, Statistics Special Topic.
Heriot-Watt’s Actuarial Science programme appealed to me as it is among the top-ranked in the field. The course is designed so that the skills learned are directly transferrable to the workplace. The courses not only strengthen our theoretical knowledge, but also ensure that we are industry-ready.”

Oscar Tan Kah Jie  
BSc (Hons) Actuarial Science student and former Foundation in Business student  
Former School: SMJK Heng Ee
Your Study Pathway

Choose the Go Global Route

**Go Global Route**

- Complete Year 1 in Malaysia → Transfer to the UK Campus for Year 2 → Complete Year 3 and Graduate in Malaysia

**Study in Malaysia**

- 3 + 0 Actuarial Science
- 3 + 0 Statistical Data Science

**Study in the UK**

- 0 + 3 / 0 + 4*
  - Direct Entry to Year 2, UK

* Only possible for programmes available in both Malaysia and UK campuses

Or Choose to Study in Malaysia or Transfer Directly to the UK

**Foundation in Business with Actuarial Science at Heriot-Watt University Malaysia**

**Study in Malaysia**

- 3 + 0 Actuarial Science
- 3 + 0 Statistical Data Science

**Study in the UK**

- 0 + 3 / 0 + 4*
  - Direct Entry to Year 2, UK

- Actuarial Science
- Actuarial Science and Diploma in Industrial Training*
- Financial Mathematics
- Mathematics
- Mathematics with Finance
- Mathematics with Finance and Diploma in Industrial Training*
- Mathematics with Statistics
- Statistical Data Science
- Mathematical, Statistical and Actuarial Science and Diploma in Industrial Training*
- MMath Mathematics*
- Mathematics with Physics**
- Mathematical, Statistical and Actuarial Science

**Malaysia and UK Equivalency**

| Malaysia Foundation Programme | Year 1, UK |
| Year 1, Malaysia Campus | Year 2, UK |
| Year 2, Malaysia Campus | Year 3, UK |
| Year 3, Malaysia Campus | Year 4, UK |

**1 + 2 / 1 + 3**

- Complete Year 1 in Malaysia, and Entry into Year 3, UK

- Actuarial Science and Diploma in Industrial Training*
- Financial Mathematics
- Actuarial Science
- Statistical Data Science
- Mathematical, Statistical and Actuarial Science

**Notes**

* Only possible for programmes available in both Malaysia and UK campuses
** Only for students who had taken Foundation in Science and have attained a specific grade in Physics.

Entry to the UK campus is contingent upon agreed progression rules and entry requirements that are set by the UK campus. Please check with the Registry when you are making plans to do your transfer.
Summary of Entry Requirements

Foundation Intakes: April, July and September

<table>
<thead>
<tr>
<th>Programme Name</th>
<th>Qualification</th>
<th>Subject Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundation in Science</td>
<td>SCs 6.0</td>
<td>English, Mathematics, Additional Mathematics, Physics and Chemistry</td>
</tr>
<tr>
<td>Foundation in Business</td>
<td>SCs 6.0</td>
<td>English and Mathematics and other relevant subjects</td>
</tr>
<tr>
<td>Foundation in Business Actuarial Science and Statistical Data Science route (select from Accounting or Computing options)</td>
<td>SCs 6.0</td>
<td>English, Mathematics, Additional Mathematics and other relevant subjects</td>
</tr>
<tr>
<td>Foundation in Business (Psychology Route)</td>
<td>SCs 6.0</td>
<td>English, Science, Mathematics and other relevant subjects</td>
</tr>
</tbody>
</table>

**May be subject to school assessment**

ENGLISH LANGUAGE REQUIREMENTS

The following are the English language requirements for entry into our programmes.

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Foundation</th>
<th>UG</th>
<th>UG - Actuarial</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELTS</td>
<td>5.5</td>
<td>6</td>
<td>6.5</td>
</tr>
<tr>
<td>Cambridge</td>
<td>FCE Grade C</td>
<td>FCE Grade B</td>
<td>FCE Grade A</td>
</tr>
<tr>
<td>Pearson PTE Academic</td>
<td>51</td>
<td>57</td>
<td>60</td>
</tr>
<tr>
<td>MUET</td>
<td>–</td>
<td>Band 4</td>
<td>Band 5</td>
</tr>
<tr>
<td>SPM</td>
<td>C</td>
<td>B+</td>
<td>A</td>
</tr>
<tr>
<td>11+ GCE-O</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>GCSE/IGCSE</td>
<td>C</td>
<td>B</td>
<td>A</td>
</tr>
<tr>
<td>UEC</td>
<td>B4</td>
<td>B3</td>
<td>A2</td>
</tr>
<tr>
<td>TOEFL IBT</td>
<td>70</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

In order to study effectively at Heriot-Watt, you need excellent English language skills. For those who need assistance and do not meet the English entry requirements above, Heriot-Watt University Malaysia provides a Pre-Sessional English Programme (PSEP). Find out more about our PSEP on our website: hw.edu.my/english

If your country's qualification is not listed, or you have any questions, contact our Recruitment and Administrations Office: MYadmissions@hw.ac.uk
Heriot-Watt University Malaysia accepts applications all year round.

APPLY ONLINE

You can apply online for our programmes at bit.ly/HWUMApply. You must create an account to use the online application form. You don’t have to complete the application 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:
▶ www.hw.edu.my/fees

DISCLAIMER OF LIABILITY

Heriot-Watt University will make all reasonable efforts to deliver the programmes described in this brochure.

Prospective students should be aware that it is occasionally necessary to modify, discontinue or combine programmes and/or make changes to entry requirements. This may be necessary for a number of reasons such as low enrolments, illness or departure of staff, industrial action or reduction of funding. Changes will only be made if the University reasonably considers it to be necessary.

If a programme is discontinued, the University will use reasonable endeavours to provide a suitable alternative and will take all reasonable steps to minimise disruption, or allow a student to withdraw without penalty if a programme is cancelled or significantly varied, with an appropriate refund of tuition fees and deposits.

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