



Undergraduate Students' Programme Handbook

Programme Handbook

**BSc Actuarial Science
BSc Statistical Data Science**

2022-2023

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PART A: SCHOOL INFORMATION

A1. How to Use This Handbook

This handbook provides you with:

- An overview of your programme, its structure and its courses.
- Contact information for key staff in your programme, subject and academic School.
- Details of support and resources available to you as a Heriot-Watt student.

Take time to look through the information provided, but also use it for reference if you are unsure of anything, if you want to contact someone, or if you want to find out more about any aspect of your studies. This Handbook is not just for your first week or two at University, nor is it something to be read once and discarded, you will find it useful to refer back to its contents in the coming weeks and months. If you can't find the information you are looking for then you can ask your personal tutor.

All information is correct at the time the Handbook was produced.

A2. Welcome and Introduction

Welcome from the Principal and Vice Chancellor of Heriot-Watt University

I am delighted that you have chosen our unique and innovative University and have entrusted us with your education for the next few years. Heriot-Watt has been at the forefront of pioneering education and future thinking since 1821, and now more than 200 years on, we continue to lead the way in world class education as a distinctive, globally connected institution.

The global pandemic affected all of us, not least in how institutions delivered learning and teaching. You may have studied extensively online in the last year or two. Fortunately, we are now able to look forward to enhancing our on-campus learning and teaching, and offering an outstanding on-campus student experience at all of our global campuses, which is so valued by our students.

We have developed a unique approach to learning for this academic year called Globally Connected Learning, which blends on-campus teaching with online activities, support and resources to create a rich student learning experience. This will allow you to actively participate in the learning opportunities open to you and to engage with the global Heriot-Watt community, which spans five campuses in three countries.

The University is a community of people, with a purpose, and I would encourage you to seek out the opportunities that will enable you to further develop your own individual sense of purpose to impact society. Many students and staff participate in creating their own 'impact statement' during the course of their studies, so do look out for this.

Throughout your studies you will have the opportunity to thrive both personally and academically, and I would encourage you to take advantage of all that our campuses, student societies and global community has to offer you. As a University committed to preparing you for your future, we're delighted to offer opportunities for students to gain a

global perspective, whether at a single campus or abroad. Our Go Global programme will continue to offer inter-campus transfers and exchanges across our campuses in Dubai, Scotland and Malaysia, allowing you to study, socialise or experience new cultures and places. We encourage you to connect with likeminded individuals across the globe and grasp every opportunity with both hands.

Our graduates are sought-after by global professions and industries all over the world. The very nature of a Heriot-Watt education is one that allows you to benefit from our research-informed approach, underpinned by our rich heritage and values. We're dedicated to providing you with the confidence and purposeful leadership skills to be a global citizen, and the expertise to one day become a leader in your chosen field or career. Together we will help shape tomorrow to deliver benefits for all of society.

We look forward to supporting you as you grow and become a successful graduate of Heriot-Watt University. On behalf of our global *OneWatt* community, I'd like to take this opportunity to say: welcome to the family.

*Professor Richard A. Williams OBE
Principal and Vice-Chancellor*

Welcome from the Head of Malaysia Campus

It is with great pleasure that I welcome you to Heriot-Watt University Malaysia. You are starting your academic journey at a very special time for the whole world as it gears towards the post COVID19 recovery. While restrictions are being lifted and economies open up, we still have challenges to deal with. Now more than ever the world needs your knowledge, passion, and creativity. The way we respond to life's challenges will shape us as individuals and I believe that choosing to continue pursuing your dreams and further your studies with us will positively impact you for years to come.

Our graduates are leaders who are able to deal with future challenges and uncertainties. They are clear about their sense of purpose and have plans to mobilise that purpose into positive impact on the world. I am confident that this crisis will pass, and the full recovery will follow. Our number one objective now is to keep our students safe and prepare them to be ready to lead the post pandemic recovery effort to create a sustainable, equitable, and enjoyable world.

As we get ready to resume face to face learning and teaching activities, we continue to capitalise on our global presence, world class digital learning platforms, and Malaysia's first purpose-built green campus that offers excellent facilities while overlooking a stunning lake and providing an inspiring environment for academic study, flourishing and holistic growth.

Heriot-Watt University Malaysia will provide you with access to world class UK higher education with a focus on delivering professionally relevant learning and industry-linked research and knowledge exchange. The portfolio of programmes on offer at Heriot-Watt University Malaysia is aligned with the National and global plans for post pandemic recovery, economic growth, and sustainable development.

Congratulations on choosing Heriot-Watt University Malaysia and I wish you a very successful and rewarding journey with us.

Professor Mushtak Al-Atabi
Provost and Chief Executive Officer
Heriot-Watt University Malaysia

Welcome from the Head of School (Malaysia Campus)

I would like to extend a very warm welcome to all of you to Heriot-Watt University Malaysia (HWUM). We are pleased that you have entrusted us with your undergraduate studies and we are excited that you have joined our Actuarial Mathematics and Statistics (AMS) programmes; either BSc. (Hons) Actuarial Science, or BSc. (Hons) Statistical Data Science programme.

Embarking on your undergraduate studies can be daunting and full of uncertainties. For some of you, this will probably be the first time away from home. You will be meeting new acquaintances and friends, who will be an important and integral part of your life-long network. For those of you who are continuing, I hope that you are enjoying your journey and discovering new friends and knowledge.

While exploring this exciting journey, it is important to ensure that you are aware of your responsibilities while pursuing your degree. This handbook has been prepared to help you adapt to life at our School of Mathematical and Computers Sciences (MACS). Do make sure that you go through this handbook and it would be advisable that you get in touch with your personal tutor within the first two weeks.

Academic success is highly dependent on your participation in various activities beyond the classroom. These activities can be part of student societies, but it is not necessarily confined to within Heriot-Watt University. Pursuing internships, or relevant experiences are also part of your academic journey.

Over the course of pursuing your degree, it is hope that you will learn how to learn Independently. To be an independent learner takes effort, and how much effort you put into it will dictate your success in the programme.

On behalf of School of MACS, we look forward to providing you with new challenges and engaging sessions. As we are transitioning out of these unusual circumstances and the pandemic, we look forward to more in-person engagement. For the coming academic year, we will be employing Globally Connected Learning (GCL). GCL promotes the greater use of digital technology strengths, maximises the global approach of our global teaching teams, while embedding the learning diversity in our learning and teaching practices.

Good luck to all and have a great academic year!

Associate Professor Dr Ian Tan
Head of School

A3. Globally Connected Learning

Our University teaching model is Globally Connected Learning, an approach that blends on-campus teaching with online activities, support and resources to create a rich student learning experience. Throughout your studies at Heriot Watt you will be able to learn, interact and collaborate with your classmates and your academic teaching team through a range of inspiring activities and learning events.

If you are enrolled on our campus-based programmes you will be able to take full advantage of all that campus life offers. Our campuses are at the heart of our community and campus-based learning is core to the Heriot-Watt student learning experience. You will be expected to attend campus-based teaching and undertake any assessments or examinations scheduled on campus.

The specific balance of learning on individual courses will depend on the subjects you are studying and the activities and resources your course team have designed to help you engage effectively with your studies.

Our approach is founded on a commitment to student partnership. That means you are encouraged to take responsibility for your own learning, to actively participate in the opportunities open to you. Your course team will support you to plan your time carefully to [make the most of Globally Connected Learning](#).

We recognise that your studies will have been significantly disrupted in recent years as a result of the Covid pandemic. You can discuss any issues around your learning or your wellbeing with your personal tutor (see below) and with the University's support services (see below).

A4. Personal Tutor

Every student has a member of academic staff allocated to them as a personal tutor who will be a key source of advice, guidance and support during your time at Heriot-Watt. Your personal tutor is your first point of contact if you need advice on any issue, both academic and non-academic, and can refer you to other support services where relevant for non-academic matters. Personal tutors provide a clear point of contact for you throughout your degree.

While social distancing is in operation, or if you are off campus, you can still arrange to meet your personal tutor remotely and contact them by email.

More details about personal tutoring can be found [here](#).

Help and Advice

Every year a few students run into serious personal difficulties (e.g. family illness, accommodation, financial, etc.). As well as being generally supportive, your personal tutor can help in a number of practical ways. For example, if you are prevented from completing project work or sitting exams, your personal tutor can sometimes help with re-scheduling or making alternative arrangements for assessment. However, you must notify your personal tutor as soon as possible, or there is very little that can be done. This is particularly important if the difficulty affects your sitting Level 9 or 10 honours papers, as once taken there are **no resits allowed for honours papers**. Also, it is essential to submit a Mitigating Circumstances Form.

With other problems, your personal tutor can put you in touch with the appropriate University support service (e.g. Student Support Services or Student Union). Personal tutors are there to help; do not hesitate to contact yours if you need help.

A5. Key Staff Contact Details

Professor Sara Lombardo is the Executive Dean of the School of Mathematical and Computer Sciences, and Professor Catherine Donnelly is the Head of the Department of Actuarial and Mathematical Statistics. The School is led by Head of School and each Programme is led by the Programme Director of Studies, who is supported by an experienced team of academic staff located at the University's Campus in Putrajaya.

Head of School (HOS)

Dr Ian Tan

Location: Staff Office 1, E1.17.2, Level 1, East Wing

Phone: +603 8894 3765

Email: i.tan@hw.ac.uk

Programme Director (Statistical Data Science) / Year Coordinator – Year 3

Mr Adrian Mitra Nathai

Location: Staff Office 1, E1.17.7, Level 1, East Wing

Phone: +603 8894 3858

Email: adrian.nathai@hw.ac.uk

Programme Director (Actuarial Science) / Year Coordinator – Year 2

Mr Lawrence John O'Brien

Location: Staff Office 1, E1.17.4, Level 1, East Wing

Phone: +603 8894 3794

Email: l.obrien@hw.ac.uk

Year Coordinator – Year 1

Dr Ong Kai Lin

Location: Staff Office 1, E1.17.20, Level 1, East Wing

Phone: +603 8894 3793

Email: k.ong@hw.ac.uk

A5.1 Academic Staff

Students are encouraged to contact directly any member of staff whose lectures they have attended if further help or advice is needed.

The MACS academic staff for 2022-23 are listed below, together with their emails and telephone extensions.

Name	Email	Extension
Dr Ian Tan	i.tan@hw.ac.uk	43765
Mr Karamjeet Singh Kranthir Singh	k.kranthir_singh@hw.ac.uk	43857
Dr Adrian Mitra Nathai	adrian.nathai@hw.ac.uk	43858
Mr Larry O'Brien, ASA	l.obrien@hw.ac.uk	43794
Dr Soo Huei Ching	h.soo@hw.ac.uk	43703

Dr Ong Kai Lin	k.ong@hw.ac.uk	43793
Dr Teoh Wei Lin	wei_lin.teoh@hw.ac.uk	43879
Dr Sarat Chandra Dass	s.dass@hw.ac.uk	43706
Dr Mahendran Shitan	m.sshitan@hw.ac.uk	43881
Dr Joshua Tan	joshua.tan@hw.ac.uk	43912
Dr Abdullah Almasri	a.almasri@hw.ac.uk	43920
Prof David Ngo Chek Ling	d.ngo@hw.ac.uk	43893
Dr John See	j.see@hw.ac.uk	43775
Ms Amiratul Ashikin Mohd Nasarudin	a.mohd_nasarudin@hw.ac.uk	43858
Dr Rosalind Deena Kumari	r.kumari@hw.ac.uk	43882
Mr Brendon Michael Bhagwandeem	b.bhagwandeem@hw.ac.uk	
Mr Chew Chun Yong	c.chew@hw.ac.uk	43885
Dr William Yoo Weimin	w.yoo@hw.ac.uk	
Dr Chit Su Mon	c.mon@hw.ac.uk	43880
Ms Nurul Ain Toha	nurul_ain.toha@hw.ac.uk	

A5.2 Administrative Support

The programme is supported through the Academic Administration Office and Student Service Centre. Staff in the office can help with administrative information and procedures.

Support can also be accessed via the Student Information Desk on the Student Self Service Portal (<http://www.hw.ac.uk/selfservice>).

Updating personal information, such as a change of address, is done through the Student Self Service portal.

Student Service Centre

Location: Level 1, East Wing

Phone: +603 8894 3610

Email: student-services-malaysia@hw.ac.uk

Academic Administration Office

Ms Nuryati Fazrina Zahari

Location: Staff Office 1, E1.17, Level 1, East Wing

Phone: +603 8894 3870

Email: n.zahari@hw.ac.uk

A6. Programme Overview

This handbook provides a reference to degree programme structures and other departmental information for students on Actuarial Mathematics and Statistics (AMS) degrees. This handbook is intended as a summary of AMS Programme Structures, but note that the University Regulations and Programme Structures take precedence in case of any discrepancy between them and the guide.

Information concerning examination timetables, University regulations and other general information can be found on the Academic Registry website at <https://www.hw.ac.uk/uk/services/academic-registry.htm>. Further sources of information are the MACS web site at <https://www.macs.hw.ac.uk/students/>.

A6.1 Programmes Offered

The following three years undergraduate programmes are offered within AMS at the Malaysia campus:

- F723 BSc (Hons) in Actuarial Science
- F740 BSc (Hons) in Statistical Data Science

The degrees may be awarded at honours or ordinary level. Study for an honours degree usually takes three years, and for an ordinary degree, two years. Note that only the full three years degree is accredited by the Malaysian Qualifications Agency (MQA).

All the degrees are designed to make it easy in most cases to transfer from one to another during the first years. In addition, the Heriot-Watt course scheme is compliant with the Scottish Credit and Qualifications Framework (SCQF). This makes credit transfers between Scottish universities easier.

Students normally study 4 courses per semester giving a total of 8 courses per year. The assessment may be by formal examination, or by continuous assessment, or by a mixture of the two methods. Each Heriot-Watt course is regarded as requiring 150 hours of student effort and is worth 15 SCQF credits. Thus, in each year of full-time study a student should accumulate 120 credits. More information about courses offered in each year and about progression and degree requirements, see Part B.

A6.2 Significant Dates in the Academic Year

Malaysia Campus session dates for 2022/2023

<https://www.hw.ac.uk/malaysia/study/apply/academic-calendar.htm>

A6.3 Canvas – the Heriot-Watt Virtual Learning Environment

Heriot Watt University has a Virtual Learning Environment (VLE) called Canvas. Each of your courses will have a site on Canvas where you will find all the information that you need to engage in your courses, including course materials, weekly activities, assessment information, etc. You may also be required to use Canvas to upload your work through Turnitin, a similarity detection programme which is in regular use by the Schools. Many courses will also include online assessments which are accessed and submitted through Canvas.

You can find the log-in to Canvas at canvas.hw.ac.uk and your User ID is the same as your User ID for the University Desktop Service, and your password is the same as your password for the University e-mail system.

A6.4 Lectures, Tutorials, Computer Labs and Feedback

Timetabled classes for courses will include lectures / online learning units, and tutorials / online interactive sessions, and, in some case, computer labs. In a face-to-face lecture you will usually need to make notes of the topics being taught and participate in interactive

activities. Online learning units are accessed via Canvas and are structured activities based on a reading assignment and other self-study activities. Tutorials and online interactive sessions provide opportunities to get feedback on the work you are doing, to ask questions about the course material, and to get extra help with problems.

Feedback is provided in a variety of ways in order to help you to reflect on and to evaluate your progress and to assist you to take steps to improve your work before the next relevant assessment. You can expect feedback on assessed coursework within three teaching weeks of the coursework submission deadline.

If you have problems after working through your course notes and attempting the tutorial questions or computer lab exercises, please ask for help: all lecturers can be contacted for help and advice (see course web pages on Canvas for contact details and for any scheduled office hours).

A6.5 Engagement with Courses

Please contact your Personal Tutor or Year Co-ordinator as soon as possible if there are problems that affect your attendance or your ability to study. If there are things that we or the University services can do to help then we will try our best to do that.

In order to satisfy the programme learning outcomes in each course, a satisfactory record of engagement with each course is required. This includes attending, physically or virtually, all scheduled course learning sessions, and handing in coursework by the stipulated dates. Students who, in the opinion of the Head of Department, fail to satisfy these requirements without good cause for any of the courses for which they are registered may, after due warning, be disallowed from presenting themselves for examination in those courses. In this case they will be deemed to have failed those courses. Please get in touch long before things get to that stage!

- Students are responsible for finding out where and when their classes, assessments, exams, resit exams etc. take place and for making the necessary arrangements to attend them.
- For students with medical and similar problems which cause them to miss face-to-face or online classes for periods of incapacity of greater than 4 days or if the absence occurs during an examination or other assessment students should fill in an online Mitigating Circumstances form and have supporting evidence such as a medical certificate (see Section A10 below for more details of what constitutes Mitigating Circumstances.) The Mitigating Circumstances Forms and processes can be found at <https://www.hw.ac.uk/uk/students/studies/examinations/mitigating-circumstances.htm>

A6.6 Teaching, Revision and Exam Weeks

The academic year consists of 30 weeks, divided into 2 semesters. In Semester 1 there will normally be 12 weeks of teaching (including a Consolidation Week in week 6, and revision time at the end) followed by a 2-week exam session. In Semester 2 there will be 12 weeks of teaching (including a Consolidation Week in week 6, and revision time at the end), followed by a 2-week break and then a 2-week exam session. Exams for 3rd year courses are usually in the first part of this exam period and those for 1st and 2nd year are in the later part.

Some courses will be assessed entirely by coursework, without a formal examination.

The University Registry is responsible for the scheduling and organisation of examinations: see www.hw.ac.uk/students/studies/examinations.htm

A6.7 Examinations and other assessments

It is the student's responsibility to check all relevant examination timetables (including resits) on the relevant webpage.

Should you be required to resit any exams, you **must** be available to take them. Therefore, **do not book holidays or take on any other commitments during the resit diet**. Students who are taking face-to-face exams are normally expected to take the examination at the campus at which they are studying. Resits can only be taken at an overseas location in exceptional circumstances.

Any basic scientific calculator **other than** graphics calculators, programmable calculators, or those with text storage or retrievable facilities may be used in examinations. (Calculators are not provided.). Unless there are special circumstances, students are **not** allowed to use translation dictionaries in examinations.

Students are **not** allowed to have mobile phones or other communication devices on or about their persons during face-to-face examinations. Phones may be left at the front of the examination room, but they must be switched off.

Cheating in an exam or other assessed work is considered to be a very serious offence.

Students should be aware that taking unauthorised material into an exam room (even if you do not use it), is considered to be an attempt to cheat. **Do not take any material into the exam hall with you – put it in your bag or in the bin.**

If a student is found cheating in an exam the Student Discipline policy will apply – see <https://www.hw.ac.uk/students/doc/discguidelines.pdf>.

Assessment

Each course is awarded a grade in the range A-F: grade E is the minimum required for the award of credits, but at least a grade D is needed for progression to subsequent courses. Other grades are interpreted as follows:

A - excellent, B - very good, C – good, F - inadequate. (See [Supplementary Information](#) for further details).

The minimum mark needed to gain a grade D is usually 40%. The correspondence between marks and other grades varies from course to course, but is approximately as follows: grade A, 70% or over; grade B, 60-69%; grade C, 50-59%; grade D, 40-49%.

- Level 7 and 8 Courses

Course assessment is generally based on either coursework, an exam at the end of the semester, or a combination of both. Details for individual courses can be found in the relevant course description. If you do not obtain a grade D (or higher) in a Level 7 or 8 course at the first attempt, you are entitled to one further attempt.

- Level 9, 10 and 11 Courses

Assessment of Level 9, 10 and 11 courses is generally as for Level 7 and 8. However, in some cases, the exam for a first semester course may take place at the end of the second

semester. Also, note that some pairs of courses are **synoptically linked**; that is, both courses are assigned the same grade, based on the average mark for the individual courses. Details are in the relevant course description. All Level 9, 10 and 11 course marks count towards the **final degree classification** (see also Section A7.4 Final Degree Assessment).

Coursework and continuous assessment

As well as end of semester examinations, most courses on the AMS degree programmes involve some element of coursework or continuous assessment such as midterm tests. Students will be informed on the course Canvas site of the important dates for tests and project submission and must ensure that they attend / submit at these times. These dates are fixed and cannot be altered for individual students.

If you are unexpectedly unable to attend an assessment or submit a piece of coursework due to circumstances beyond your control you should contact the course lecturer and your personal tutor as soon as possible, as well as submit an application for consideration of Mitigating Circumstances (see Section A10 for more detail).

Submission of Coursework Policy

The University recognises that, on occasion, students may be unable to submit coursework and dissertations by the submission date. As such, the University has agreed a policy which states:

- No individual extensions are permitted under any circumstances (unless course coordinators decide to give an extension to an entire class).
- Standard 30% deduction from the mark awarded (maximum of five working days);

In the case where you submit coursework up to five working days late and you have valid mitigating circumstances, the mitigating circumstances policy will apply and appropriate mitigation will be applied.

Formative feedback will be provided on all coursework submitted up to five working days late. Any coursework submitted after five working days of the set submission date shall be automatically awarded a no grade with no formative feedback provided.

There will be no extensions granted to coursework (this includes undergraduate and postgraduate taught dissertations).

A link to the policy can be found here:

<https://www.hw.ac.uk/services/docs/learning-teaching/policies/submissionofcoursework-policy.pdf>.

Plagiarism, Collusion and Cheating

Cheating in examinations and coursework, plagiarism (i.e., the presentation of another person's ideas or work as one's own), and collusion (i.e., the presentation of work produced collectively as individual effort), are very serious offences and are dealt with severely. They carry a range of penalties up to and including expulsion from the University. Students are responsible for familiarising themselves with the University policy on these matters.

The University website contains detailed explanation of what is meant by plagiarism with examples and consequences, see

<https://www.hw.ac.uk/students/studies/examinations/plagiarism.htm> as well as Appendix A of this Guide, and [University Regulations](#) on the Registry's website.

Your course leader will always be very clear about the extent to which you can collaborate and share ideas with your classmates. It is never acceptable to share your electronic files, your reports (as hard copy or in electronic form), or your computer code with anyone else.

A6.8 Course Experience Survey

At the end of each course, you will be asked to complete a Course Experience Survey. Your views and feedback are important to your lecturers and to the School. The information gathered from these evaluations is used by your lecturers to continue to enhance the courses that they teach. The information is also analysed by the department and the School and contributes to the annual review of your programme. Please be sure to provide course feedback whenever it is sought.

A6.9 Student-Staff Liaison Committee

The Staff-Student Liaison Committee (SSLC) provides a forum for the discussion of various issues affecting undergraduate courses and provides valuable feedback to the Department. Typical issues raised include organisational problems encountered by students and or matters related to course content and delivery.

The Committee consists of the School Officer, the Year Co-ordinators, and at least two student representatives from each of the three undergraduate years. Student representatives are elected annually.

The Committee meets once or twice a semester, and the minutes of its meetings are made available to all students via Canvas.

A6.10 Exchange Opportunities

Students on the Actuarial Science programme have the opportunity to transfer to the University's Edinburgh campus. Students can transfer for one or two semesters in Year 2 (and then return to Malaysia), or students can permanently transfer to Edinburgh in either of Years 2 or 3. Further information about Inter-Campus transfers is available on the Go Global site: <https://www.hw.ac.uk/uk/students/studies/go-global.htm>.

A6.11 University Prizes

A number of prizes, for overall performance in each year, are available to AMS students.

Year 1: University Prize

Year 2: University Prize, Longevitas Prize for Survival Models

Year 3: Watt Club Medal for the Best Student, Roger Gray Memorial Prize in Statistics, and the Sir Edward (SEJ) Prizes for Best Student in Malaysia Campus

A7. Programme Structure and Delivery

The University operates a Heriot-Watt Assessment and Progression System (HAPS) which specifies minimum progression requirements. Schools have the option to apply progression requirements above the minimum University requirement, which are approved by the Studies Committees. Students should refer to the programme specific information on progression requirements. This information is detailed below.

The Progression Board meets at the end of the academic year to decide which students will be allowed to proceed to the next year of their degree programme. The Year Co-ordinators will write to inform you if you must resit any exams. The Registry also makes the results available online.

Each course has a five-character code; the first two characters indicate the department, the third is the level (0, 1 indicate Levels 10, 11 respectively). Usually, but not always, Level 8 courses are taken in the 1st year, and Level 9 and 10/11 courses in the 2nd and 3rd years respectively.

A7.1 Year 1

▪ First Year Courses

1st Semester Courses		Required	Optional
F78PA	Probability & Statistics A	AS, SDS	
F78AA	Actuarial & Financial Mathematics A	AS, SDS	
F18CD	Multivariable Calculus & Real Analysis A	AS, SDS	
F18CF	Linear Algebra	AS, SDS	
F78AP	Algorithmic and Scientific Programming	AS, SDS	

2nd Semester Courses		Required	Optional
F78PB	Probability & Statistics B	AS, SDS	
F78AB	Actuarial & Financial Mathematics B	AS, SDS	
F18CE	Multivariable Calculus & Real Analysis B	AS, SDS	
C37FF	Finance & Financial Reporting		AS, SDS
F28DM	Database Management Systems		AS, SDS

AS-Actuarial Science

SDS-Statistical Data Science

▪ Degree Requirements

Actuarial Science and Statistical Data Science

Eight mandatory courses, plus one optional course in Semester 2. Note that F78AA and F78AP are 7.5 credits (i.e. half courses). Students should note that C37FF can lead to exemption from the CB1 examination of the Institute and Faculty of Actuaries (see Section A16 - Actuarial Exemptions).

▪ Proceeding to 2nd Year

If you obtain a grade D or better in all nine courses at the first attempt, you will be allowed to proceed to the 2nd year of both AS and SDS. Otherwise, you will be required to resit some exams in August. If you do not obtain D or better at this second attempt, you will not be able to continue on the AS or SDS programmes but it may be possible to transfer to another degree programme subject to the approval of the School.

A7.2 Year 2

▪ Second Year Courses

1st Semester Courses		Required	Optional
F79MA	Statistical Models A	AS, SDS	
F79SP	Stochastic Processes	AS, SDS	
F70LA	Life Insurance Mathematics A	AS	
F79PA	Portfolio Theory & Asset Models	AS	SDS
F79PS	Statistics for Social Science	SDS	
F27ID	Introduction to Interaction Design		SDS

2nd Semester Courses		Required	Optional
F79MB	Statistical Models B	AS, SDS	
F79SU	Survival Models	AS, SDS	
F70LB	Life Insurance Mathematics B	AS	
F79DF	Derivative Markets & Discrete-time Finance	AS	SDS
F79BI	Bayesian Inference & Computational Methods	SDS	
F19MO	Ordinary Differential Equations		SDS

AS-Actuarial Science

SDS-Statistical Data Science

▪ Degree Requirements

Actuarial Science

Eight mandatory courses.

Statistical Data Science

Three mandatory and one optional course each semester. SDS students may choose any Level 7, 8 or 9 course as an option, subject to timetable constraints and the approval of the Year Co-ordinator. However, note that only Level 9 and 10 courses count towards the final degree assessment (see Section A7.4 - Final Degree Assessment).

▪ Synoptic Links (see Section A6.6 – Level 9, 10 and 11 Courses)

The following pairs of courses are synoptically linked:

- F79MA and F79MB,
- F79SP and F79SU,
- F79PA and F79DF,
- F70LA and F70LB.

▪ Proceeding to 3rd Year

Students who obtain a grade D or better in all eight courses will be allowed to proceed to the 3rd year.

If you obtain a grade D or better in at least six courses and have an average mark of at least 40%, you may be permitted, at the discretion of the examiners, to proceed to the 3rd

year of an AMS degree. In these cases, you will be advised by the examiners of your options and may be required to resit some papers in August, to satisfy the prerequisites for the 3rd year courses.

However, note that otherwise, no resit is allowed for an Honours paper, and in all cases, it is the marks obtained at the first attempt that form part of the Final Degree Assessment (see Section A7.4). For further information, consult your personal tutor.

- **Ordinary Degrees**

A candidate who obtains a grade D or better in at least four Level 9 courses and a total of at least 360 credits may be awarded the ordinary degree of BSc.

A7.3 Year 3

- **Third Year Courses**

1st Semester Courses		Required	Optional
F79PS	Statistics for Social Science		AS
C27IE	Introductory Economics		AS
F70CF	Continuous-time Finance		AS, SDS
F10MM	Optimisation	SDS	AS
F20ML	Statistical Machine Learning	SDS	AS
F70DA	Statistics Dissertation A	SDS	
F10DA	Data Assimilation		SDS

2nd Semester Courses		Required	Optional
F79BI	Bayesian Inference & Computational Methods		AS
F19MO	Ordinary Differential Equations		AS
F70RT	Risk Theory		AS, SDS
F70TS	Time Series Analysis	SDS	AS
F70DB	Statistics Dissertation B	SDS	
F70ST	Statistics Special Topic		SDS

AS-Actuarial Science

SDS-Statistical Data Science

- **Degree Requirements**

Actuarial Science

Eight optional courses.

Direct entrants to AS may take C27IE and/or C37FF to obtain exemption from the CB2 and/or CB1 examinations of the Institute and Faculty of Actuaries

Statistical Data Science

Three mandatory courses plus one optional course first semester, and two mandatory courses plus two optional courses second semester.

A7.4 Final Degree Assessment

The Examiners take into account all course marks at Level 9 and above in deciding the class of Honours: the final mark is the average of those marks (note that Level 7 and 8 course marks are not included). In broad terms, an average mark of over 70% for first class honours, 60% - 70% for upper second class honours, 50% - 60% for lower second class honours, and 40% - 50% for third class honours, would be required, subject to the agreement of the Examiners.

Note that 480 credits are required for the award of an honours degree.

In borderline cases, a positive view may be taken of an improving performance from second to third year.

A8 Compulsory General Studies (MPU) Courses

The Malaysian Qualifications Agency (MQA) requires all Malaysian and non-Malaysian students to pass the Ministry of Education General Studies (MPU courses) as stipulated in **Section 43(3), Act 555** of the Private Higher Educational Institution Act as requirement to qualify for the award of an undergraduate degree.

The objective of General Studies is to provide a holistic education across the disciplines for both Malaysian and International undergraduate students and opportunities to engage in diverse life-long learning skills while acquiring valuable knowledge. The General Studies comprises four broad categories namely:

U1: Appreciation of the philosophy, values, and history

U2: Soft skills mastery

U3: Knowledge expansion about Malaysia

U4: Community management skills that are practical, such as community service, extra-curricular.

A8.1 MPU Course Schedule

Year of Study	Semester	MPU Group	Course Code	Course Name	Credit
1	1 (Sept'22)	U4 (For Malaysian and International students)	MPU 3422 (K20AI)	Self-Empowerment and Social Responsibility I	
		U2 (For Malaysian students only – compulsory to students who did not sit for SPM or did not obtain a Credit in SPM Bahasa Melayu)	MPU 3212 (K20AE)	National Language A	2
	2 (Jan'23)	U1 (For Malaysian students)	MPU 3182 (K20AK)	Appreciation of Ethics and Civilisations	2
		U1 (For International students)	MPU 3143 (K20AB)	Malay Language Communication 2	3

		U4 (For Malaysian and International students)	MPU 3422 (K20CI)	Self-Empowerment and Social Responsibility II	2
2	1 (Sept'23)	U1 (For Malaysian and International students)	MPU 3192 (K20AJ)	Philosophy and Current Issues	2
3	2 (Jan'24)	U2 (For Malaysian and International students)	MPU 3222 (K20AG)	Life Skills (Curriculum Mapping by HWUM)	2
		U3 (For Malaysian and International students)	MPU 3312 (K20AH)	Knowledge Expansion about Malaysia (Curriculum Mapping by HWUM)	2

Important Notes: It is the responsibility of each undergraduate student to complete and pass the MPU courses scheduled by the University as a prerequisite for the award of a Bachelor Degree. MPU courses must be taken within the duration of studies, regardless of the year of entry. The University is required to provide evidence of completion of these courses to the relevant Malaysian authorities in order to ensure that student's academic qualifications are fully recognised upon completion of studies.

Passing Marks, Attendance and Deferment: Passing mark for compulsory courses is **40%**. An attendance record of **80%** is compulsory for all students taking MPU courses. Students who wish to defer any MPU courses in a particular semester should submit their deferment application form to the MPU Coordinator by the second week of each semester when courses are offered. Students who are enrolled to the course but do not turn up for their classes and examinations will be given grade "F". Whereas, students who were absent for their final exams will receive grade "ABS (Absent)" for their MPU Courses and would need to take the August resit examination. If students fail to take the August resit examination, they must re-take the course the following year. The duration and completion for Self-Empowerment and Social Responsibility (MPU 3422) is two semesters (one Year) and final grade and marks for this course will only be revealed at the end of semester 2.

MPU Courses for Transfer Students: As long as students are registered and studying in Malaysia, they are required to take MPU courses according to the schedule above. Only students who have received their acceptance letter for transfer and are studying abroad do not need to take MPU Courses. However, if they return to complete the programme in Malaysia, they must complete all the required MPU courses for a degree to be conferred. Students who are unable to complete their MPU courses following the given schedule will be required complete their MPU Courses during the Summer Break (May to August each year).

A9. Communication

How We Will Contact You

When we contact you during term-time we will use your University e-mail address. In some circumstances, we will also use your term-time address. In emergencies we will use e-mail or telephone. Outside term time, we may continue to use your University e-mail address, and we may write to your home address. You must keep your contact addresses up to date and **check your University e-mail regularly**, otherwise you might miss important information

Your Responsibilities

It is your responsibility to ensure that the University has the most up to date contact information.

Please inform the University of any changes to personal details, particularly term-time and home addresses, to ensure that we hold up-to-date records.

If you need to change your address, please login to Student Self Service (<http://www.hw.ac.uk/selfservice>).

If you require your name to be changed, please inform the Student Service Centre and provide the appropriate paperwork.

Please note that letters from the University are automatically sent to students' term addresses as recorded on the student record system, so it is particularly important to ensure address details are kept up to date.

How to Contact Us

Information about the best way to contact your course lecturers are available on Canvas course pages.

More generally, the best way to contact staff is via email. You can use the University's People Finder to find email addresses for University staff:

<https://www.hw.ac.uk/uk/about/contact/people-finder.htm>.

Approved University Communication Channels

To help enhance communication and collaboration with all students across our campuses, staff must use approved Heriot-Watt University internal channels / tools when sharing learning and teaching advice, information and guidance (e.g. official Heriot-Watt email and telephone, Skype for Business, MS Teams, and the Virtual Learning Environment).

Students should also communicate with academic and administrative staff via approved Heriot-Watt University internal channels (e.g. official Heriot-Watt email and telephone, Skype for Business, MS Teams, Collaborate Ultra and Canvas). Students must not use their personal social media profile (e.g. Facebook, Instagram, Twitter etc.) or personal channels / tools for any communications with students (e.g. personal mobile use for calls, text / WhatsApp, personal emails etc.).

Heriot-Watt University's official social media channels including Facebook, Instagram, Twitter, YouTube and LinkedIn are outward facing and used to showcase the University to external parties. Their use is aligned with our goals, for example, around enhancing research reputation and in connection with student recruitment.

A10. Tell Us About Things That Impact on Your Studies

Every year a few students run into serious personal difficulties (e.g. family illness, accommodation, financial, etc.). As well as being generally supportive, your personal tutor can help in a number of practical ways. For example, if you are prevented from completing project work or sitting exams due to mitigating circumstances, your personal tutor can advise you about the Mitigating Circumstances process. However, you must notify your personal tutor as soon as possible if you are having difficulties. This is particularly

important if the difficulty affects your sitting Level 9 or 10 honours examinations, as once taken there are no resits allowed for honours papers.

If you have any mitigating circumstances that could adversely affect your assessment performance you should complete an online Mitigating Circumstances Application form and submit it, along with appropriate supporting evidence **as soon as possible**. Examiners can take illness into account *only* if valid medical evidence is supplied. We are also required to ask for documentary evidence of other circumstances. We may then be able to take this into account in decisions on examinations or other assessments, to discuss various options for advancing your studies, or simply to help put you in contact with appropriate University support specialists. The online form and the policy document can be found at www.hw.ac.uk/students/studies/examinations/mitigating-circumstances.htm

Events or circumstances that would normally be recognised as grounds for consideration of mitigating circumstances might include:

- Illness or accident affecting the student
- Bereavement – death of a close relative or significant other
- Significant adverse personal or family circumstances
- Other significant exceptional factors that are outside the student's control (e.g. Jury Service, although University assessments might be a reason for a student to be excused), or for which there is evidence of adverse effects.

Events or circumstances that would not normally be considered grounds for consideration of mitigating circumstances include:

- Holidays or other events that were planned or could reasonably have been expected
- Assessments that are scheduled close together or on the same day, or that clash due to incorrect registration by the student
- Misreading the timetable for examinations or otherwise misunderstanding the requirements for assessment
- Inadequate planning or time management
- Last-minute or careless travel arrangements
- Consequences of paid employment
- Exam stress or panic attacks not supported by medical evidence

Mitigating Circumstances information is handled in confidence, so do not be afraid to tell us something. Notification should be before the examination session concerned, and certainly no later than the Examiners' Meeting (usually at the end of the semester, or mid-August in the case of resits). It is particularly important for final-year students to present all information to the department before the final degree award meeting, since it takes time to reconsider a degree award decision after it is made (you have to make a formal appeal) and you will certainly miss the summer graduation.

Your personal tutor can also direct you to appropriate University support services for professional advice and help with a problem. Personal tutors are there to help; do not hesitate to contact yours if you need help.

In certain situations, it may be in your best interests to suspend your studies temporarily. It sometimes helps to take time out to deal with issues that are stopping you studying

effectively – this might be a health or personal issue – and return to University at an agreed date. A **Temporary Suspension of Studies (TSS)** is when a student stop studying at the university for an extended period of time (usually no longer than one academic year), and then returns to resume their studies.

For further information see

<https://www.hw.ac.uk/students/studies/leaving/temporary-suspension-studies.htm>.

If you are considering applying for a suspension of studies, you should contact your personal tutor or Year Co-ordinator to discuss this with them.

A11. Changes to Course or Programme Registration

If you wish to change your course registration, you can do this [online](#) after you complete online enrolment up until the **end of the second week of the semester**.

Occasionally the online system may block a course change request. In such cases, please consult your personal tutor or Year Co-ordinator, and they will advise you about your options for make changes to your course registration.

If you would like to change to a different programme of study, you are advised to discuss the various options with your personal tutor or your Year Co-ordinator. Whether you will be able to change to a different programme will depend on many factors, so please have a discussion with your personal tutor or Year Co-ordinator as soon as possible if you are considering making changing to a different programme.

For further information about course and programme changes, please see

<https://www.hw.ac.uk/uk/students/studies/record/change-course-programme.htm>

A12. Computing Facilities

All students are issued with accounts on the University Desktop Service network. E-mail, word-processing, specialist mathematics and statistics packages, and spreadsheet facilities are available on the University Desktop Service network. Details of how to access the University Desktop Service and how to use e-mail are provided to new students. Help is also available via e-mail at ISHelp@hw.ac.uk.

Students are expected to use the computing facilities in an appropriate and considerate way. Abuse of the facilities is subject to various disciplinary measures, ranging from a ban on access to the facilities to, in extreme and flagrant cases, expulsion from the University. Examples of abuse include monopolising a terminal for non-academic related purposes, running excessively long or inappropriate print jobs, and displaying, circulating or printing offensive material on or from the Internet. Computer games and relay chat are specifically forbidden. More information regarding Heriot-Watt's I.T. facilities and regulations can be found at: <https://www.hw.ac.uk/uk/services/information-services.htm>.

A13. Careers and Graduate Futures Service

The Careers and Graduate Futures Service provides high quality careers guidance, education and information services to Heriot-Watt students and graduates. It delivers these through class-based sessions, a dedicated web site www.hw.ac.uk/students/careers.htm, a well-equipped information centre, drop-in query sessions, and individual appointments. In addition to providing comprehensive information on all aspects of careers, from part-time

work to job seeking in the graduate labour market, they also run practical sessions that include *Producing an Effective CV*, *Preparing for Interview* and *Practice Aptitude Tests*.

You can find the Careers and Graduate Futures Service at the Ground Floor, East Wing and can be contacted at mycareers@hw.ac.uk.

A14. Graduate Attributes

As a student of Heriot-Watt you are part of a global community. You will meet new people, discover new interests, develop your life skills and enhance your employability and career prospects. The University will provide you with the opportunity to develop skills, qualities and academic abilities during your time as a student. These are known as the Four Heriot Watt Graduate Attributes: Specialist, Creative, Global and Professional,

These Graduate Attributes can help you shape your experiences while studying and to present your skills and qualities effectively to employers. For more information see <https://www.hw.ac.uk/services/docs/academic-registry/gradattributes-visual.pdf>.

Professional Development & Careers Advice

Professional development planning (PDP) is incorporated in all three years of the AMS degrees. This is a structured process designed to help students reflect upon their own learning, performance and achievements. One of its main purposes is to support students in the planning of their professional, education and career development, keeping the University's Graduate Attributes in mind.

In addition to taking a PDP course in 1st year, students will periodically be asked to attend seminars on developing skills, given by, for example, prospective employers. In later years of your studies there are opportunities to develop presentation and group working skills. Students are encouraged to take every opportunity to help develop their own skills.

Career guidance is available through the University's Careers Advisory Service, which gives a number of presentations on topics related to careers. Students are encouraged to contact mycareers@hw.ac.uk for advice.

A15. Code of Practice

What you can expect from AMS Staff

Teaching is one of the most important duties for AMS staff. Although academic staff have research and administrative duties which also need our attention, we aim to provide:

- Commitment to helping you learn.
- Politeness and respect.
- Availability for meetings, either during scheduled office hours or at pre-arranged times.
- Timely feedback and marks for coursework.
- A prompt response from your personal tutor.
- A timely reply to general email questions.
- An opportunity to see your exam script to see where you went wrong, either at scheduled feedback sessions or by contacting the course leader.

Sometimes staff members are away on University business and won't be able to respond as quickly as normal. If this happens, they will tell you about it (e.g. on an "out-of-office" message) and will advise you who to contact instead.

If you have a problem...

For personal problems or any other problem that is interfering with your studying, please discuss it with your personal tutor. We are here to help. You can also discuss any personal problems with our counsellor at counsellinganddisability@hw.ac.uk or contact +603-8894 3614/3874.

For problems about a course, talk to the lecturer first. If that doesn't help, you can raise the matter with your Class Rep. or the Year Co-ordinator.

What staff can expect from AMS students

Most importantly, we expect you to take charge of your own learning. This is your degree - to get the most of your time at the University you need to be independent and proactive. We understand that you may have other demands on your time, but as full-time students, your studies should come first. In addition, we expect:

- Commitment to your learning.
- Politeness and respect, including switching off phones and other social media during classes.
- Attendance, physical or virtual, at all scheduled learning sessions and tests
- Preparation for classes as specified by your lecturers, such as studying lecture notes, working on tutorial questions and participating in online activities. For every hour of timetabled class, we expect you to spend 2-3 hours in private study.
- Persistence. Some topics and problems in mathematics are challenging and we expect you to make a sustained effort to master difficult topics. We are there to help you if you get stuck.
- Basic organisational skills, including coming to classes with pen and paper ready to take notes or with equipment for electronic note-taking, and using a calendar so that you don't forget deadlines and appointments.
- Attendance at any scheduled meeting with a staff member. If you can't make a scheduled meeting with a staff member, please notify them in advance rather than just not turning up.
- Checking your email daily and logging into CANVAS at least every other day.
- A timely reply to email from staff.
- Willingness to learn from feedback on tutorial work, projects and exams, and an attempt to improve your work based on that feedback.
- Finally, we encourage you to keep yourself informed about new and interesting developments in your discipline (beyond what you learn in your courses). The department is full of experts in a wide range of areas who are happy to chat with you about topics of current interest. Seek them out!

A16. Actuarial Exemptions

Dr Ian Sharpe (I.Sharpe@hw.ac.uk) is the AMS Exemptions Officer and can advise on matters relating to exemptions from the Institute and Faculty of Actuaries (IFoA) examinations.

A16.1 Introduction

The Actuarial Science degree has been accredited by the Institute and Faculty of Actuaries (IFoA), which means that students can obtain exemption from some of the subjects in the IFoA's examination system. There are two routes to gaining exemptions: Accreditation (or "block" exemption) and individual exemptions.

Exemptions are awarded by the IFoA based on the information provided to them by Heriot-Watt. They are not awarded by Heriot-Watt. The guidance we provide to students regarding exemptions in student guides and elsewhere is our understanding of how the IFoA normally expects to determine exemptions. However, the IFoA and the Independent Examiners appointed by the IFoA retain discretion regarding exemptions. Normally what that means in practice is that the score required for individual exemptions (see "individual exemptions" below) varies from year-to-year. But we cannot guarantee any aspect of the exemptions process.

▪ Accreditation

Students graduating with a sufficiently high average mark, and who have passed all relevant courses, will generally be eligible for exemption from all Core subjects covered in their degree. This is often called the "block exemption".

▪ Individual Exemptions

Students who do not attain the accreditation threshold as above will be considered for exemption from individual subjects as described below. The exemption standard for each subject will be reviewed each year by the profession's Independent Examiners and may vary from year to year.

Note that the accreditation policy does not cover exchange arrangements; in this case, all exemptions will be recommended on a subject-by-subject basis, taking into account performance at Heriot-Watt and the exchange university.

A16.2 Core Principles Stage

Exemptions will normally be awarded under the IFoA Curriculum 2019 system (CM1, CM2, CS1, CS2, CB1, CB2) not the old IFoA CT system.

We expect exemptions to be based on performance in university examinations as set out in the following tables, but note the comments above regarding IFoA discretion. These are not guaranteed to be the final mappings. The exemption mapping depends on when you joined year 1 of the degree, since courses were updated in 2019-20. The numbers in each table represent the weighting given to each subject in each individual exemption. So, for example, we would expect eligibility for exemption from CM2 to be based on the average of F79PA, F70CF and F79DF, ie one-third (0.33) each.

Students who joined Stage 2 in 2019-20 or later (Stage 2 is year 2 in Edinburgh and year 1 in Malaysia)						
Course Code	CM1	CM2	CS1	CS2	CB1	CB2
C27IE						1.00
F78AA	0.25					
F78PA			0.25			

F79MA			0.25			
F79PA		0.33				
F79SP				0.25		
F70LA	0.25					
F70CF		0.33				
C37FF					1.00	
F78PB			0.25			
F78AB	0.25					
F79MB			0.25			
F79SU				0.25		
F70LB	0.25					
F79DF		0.33				
F70TS				0.25		
F70RT				0.25		

(The difference between these two tables is the weightings for CS1.)

Note that from 2021-22 onwards, F78AA is a half course (i.e., 7.5 credits not 15 credits) and F78AB is a full course. As such, it is possible that the weightings for CM1 may change for students sitting F78AA/B in 2021-22 or later.

The IFoA assesses CB3 (Business Awareness) through an online test and does not grant exemption from this subject on the basis of university studies.

A16.3 Later Stages of the Professional Syllabus

The later parts of the professional syllabus are divided into three stages: Core Practices, Specialist Principles, and Specialist Advanced. To qualify as a Fellow it is also necessary to fulfil the profession's Personal and Professional Development (work experience) requirements and online professional skills courses.

The profession recommends that UK-based students taking a Specialist Advanced paper also take the corresponding UK Practice Module. UK Practice Modules are not required to qualify as a Fellow, but are required in order to practise in the UK in certain reserved roles.

No exemptions are available from the undergraduate course for the later stages of the professional syllabus, although some courses are relevant, as indicated in the brackets. Graduates who proceed to the MSc in Actuarial Management (available at the UK campus) may obtain exemptions from later stages.

Core Practices Stage

Subject CP1 Actuarial Practice

Subject CP2 Modelling Practice

Subject CP3 Communications Practice

Specialist Principles Stage

Students choose two subjects.

Subject SP1 Health and Care

Subject SP2 Life Insurance	(F70LP)
Subject SP4 Pensions and Other Benefits	(F70PE)
Subject SP5 Investment and Finance	
Subject SP6 Financial Derivatives	(F70CF, F79DF)
Subject SP7 General Insurance: Reserving and Capital Modelling	(F70RT)
Subject SP8 General Insurance: Pricing	(F70RT)
Subject SP9 Enterprise Risk Management	(F71RM)

It is also possible to pass one of two subjects from the Specialist Principles stage by writing a Master's thesis in an actuarially relevant subject (Subject SP0).

Specialist Advanced Stage

Students choose one subject.

Subject SA1 Health and Care	
Subject SA2 Life Insurance	(F70LP)
Subject SA3 General Insurance	
Subject SA4 Pensions and Other Benefits	(F70PE)
Subject SA7 Investment and Finance	

It is also possible to pass the Specialist Advanced stage by writing a research dissertation (Subject SA0).

A16.4 General Information

Some general points to note about the exemption system are:

A16.4.1 The University cannot grant exemptions, the Independent Examiner appointed by the IFoA makes recommendations to the IFoA. Usually the recommendations are accepted.

A16.4.2 Decisions regarding recommendations for exemptions are generally made on the basis of the student's performance at the first sitting of the relevant University exam. Resits granted as a first attempt under University rules, eg because of medical or other mitigating circumstances, are counted as a first attempt for exemption purposes also. A resit that does not count as a first attempt under University rules but which is necessary for the purposes of progression or graduation may be counted for exemption purposes but the maximum mark that can be used for exemption purposes is the pass mark (40%). Any other resit is not normally counted for exemption purposes, ie the mark is used for exemptions is the mark achieved on the first attempt.

A16.4.3 Decisions on a particular exemption are made by the Independent Examiner following a meeting of staff and the Independent Examiner held at the end of the academic year in which the relevant information becomes available, following which students are informed of these decisions. However, the recommendations are not sent to the IFoA until the end of the academic year in which the student graduates. Graduating students will be issued with a letter confirming the recommendations, and advising on how to claim them upon joining the IFoA as a student member.

A16.4.4 The IFoA will not grant any exemptions (or confirm that any will be granted) until a student has joined the profession, at which time you should apply through the IFoA Website. State clearly on the form that you are a graduate of the AMS Department at Heriot-Watt University; there will then be no need to supply details of syllabi or exam

papers. Note there is a fee payable to the profession for each exemption granted.

A16.4.5 There are frequent discussions between the AMS department and the IFoA about the rules and practices concerning exemptions. The above notes reflect the current position but it is possible that changes may occur without prior notice.

A16.5 Further Information

Further information about the IFoA's Education strategy can be found on their website (www.actuaries.org.uk).

A16.6 Exemption FAQs

A16.6.1 What happens regarding the individual exemptions if I don't pass a course that contributes to that exemption?

You must have attempted all the courses that contribute to the relevant exemption. For example, to be recommended for exemption from CS2 you must have attempted all four of F79SP, F79SU, F70TS, F70RT. Your weighted average for that exemption subject must also be at least the level set each year by the independent examiners. The required average is often around 60% to 65%, but it can vary outside this range and is not known until the end of the year.

However, you do not need to have passed each one of F79SP, F79SU, F70TS, F70RT individually so long as your weighted average is sufficient. So if the required average was 60% and you scored 30%, 90%, 64%, 64% in F79SP, F79SU, F70TS, F70RT then your average for CS2 exemption would be 62% and your score in F79SP would not be expected to prevent you from receiving an exemption from CS2.

A16.6.2 What subjects is the accreditation average (used for block exemption) based on?

It is based on the subjects that map to individual exemptions, ie the subjects in the table in section B4.2. They are weighted according to the number of credits (except where an exam was cancelled due to the pandemic in 2019-20).

A16.6.3 The accreditation average used to be the same as degree average. Why has this changed?

The calculation of the accreditation average is now consistent with the approach that the IFoA uses at other universities, which the previous use of degree average for block exemption was not.

For all students who started their programmes in 2021 or earlier, the IFoA agreed that it would be fair to consider transitional issues as we move from degree average to the current approach. We will highlight to the IFoA Independent Examiners any graduates in this group who would have received the block exemption under the old approach but not under the updated approach. These students will not automatically receive block exemption. However, the IFoA Independent Examiners will consider these case individually and decide whether or not to exercise discretion to award exemptions.

Students who began their programmes in 2022 or later will not receive any transitional treatment. The updated accreditation average method will be used.

A17. Course Descriptions

The aims and summary of the some of the courses on your degree are provided in this section. For detailed course guide please click on the programme at this link:

<https://www.macs.hw.ac.uk/students/ams/ug-programmes/>

A9.1 Level 7 Courses

[C37FF Finance and Financial Reporting](#)

[C27IE Introductory Economics](#)

[F27ID Introduction to Interaction Design](#)

A9.2 Level 8 Courses

[F78PA Probability and Statistics A](#)

[F78PB Probability and Statistics B](#)

[F78AA Actuarial and Financial Mathematics A \(7.5 Credits\)](#)

[F78AB Actuarial and Financial Mathematics B](#)

[F18CD Multivariable Calculus & Real Analysis A](#)

[F18CE Multivariable Calculus & Real Analysis B](#)

[F18CF Linear Algebra](#)

[F78AP Algorithmic and Scientific Programming \(7.5 Credits\)](#)

[F28DM Database Management Systems](#)

A9.3 Level 9 Courses

[F79MA Statistical Models A](#)

[F79MB Statistical Models B](#)

[F79SP Stochastic Processes](#)

[F79PS Statistics for Social Science](#)

[F79PA Portfolio Theory and Asset Models](#)

[F79SU Survival Models](#)

[F79DF Derivative Markets and Discrete-Time Finance](#)

[F79BI Bayesian Inference & Computational Methods](#)

[F19MO Ordinary Differential Equations](#)

A9.4 Level 10 and 11 Courses

[F70LA Life Insurance Mathematics A](#)

[F70LB Life Insurance Mathematics B](#)

[F70RT Risk Theory](#)

[F70TS Time Series Analysis](#)

[F70CF Continuous-Time Finance](#)

[F10MM Optimisation](#)

[F20ML Statistical Machine Learning](#)

[F70DA Statistics Dissertation A](#)

[F70DB Statistics Dissertation B](#)

[F10DA Data Assimilation](#)

[F70ST Statistics Special Topic](#)

STUDENT GUIDE TO PLAGIARISM ¹

Plagiarism is intellectual theft and is a major offence which the University takes seriously in all cases. Students must therefore avoid committing acts of plagiarism by following these guidelines and speaking to academic staff if they are uncertain about what plagiarism means. Those who are found to have plagiarised will be subject to the University's disciplinary procedures, which may result in penalties ranging from the deduction of credits and modules already achieved by students to compulsory termination of studies. Students are advised to refer to Regulation 50 at www.hw.ac.uk/documents/Regulations-2020-21.pdf and to the Guidelines for Staff and Students on Discipline at <http://www.hw.ac.uk/students/studies/examinations/plagiarism.htm> for further details of how the University deals with all acts of plagiarism.

Introduction

- 1.1. This guide is intended to provide students at Heriot-Watt University with a clear definition of plagiarism and examples of how to avoid it.
- 1.2. The guide may also be of use to members of staff who seek to advise students on the various issues outlined below.

Definition

- 1.3. Plagiarism involves the act of taking the ideas, writings or inventions of another person and using these as if they were one's own, whether intentionally or not. Plagiarism occurs where there is no acknowledgement that the writings or ideas belong to or have come from another source.
- 1.4. Most academic writing involves building on the work of others and this is acceptable as long as their contribution is identified and fully acknowledged. It is not wrong in itself to use the ideas, writings or inventions of others, provided that whoever does so is honest about acknowledging the source of that information. Many aspects of plagiarism can be simply avoided through proper referencing. However, plagiarism extends beyond minor errors in referencing the work of others and also includes the reproduction of an entire paper or passage of work or of the ideas and views contained in such pieces of work.

Good Practice

- 1.5. Academic work is almost always drawn from other published information supplemented by the writer's own ideas, results or findings. Thus, drawing from other work is entirely acceptable, but it is unacceptable not to acknowledge such work. Conventions or methods for making acknowledgements can vary slightly from subject to subject, and students should seek the advice of staff in their own School about ways of doing this. Generally, referencing systems fall into the Harvard (where the text citation is by author and date) and numeric (where the text citation is by using a number). Both systems refer readers to a list at the end of the piece of work where sufficient information is provided to enable the reader to locate the source for themselves.

¹ The author acknowledges the following sources of information used in preparing this guide to Plagiarism:

"Plagiarism – A Good Practice Guide", Carroll, J and Appleton, J (2001) and various extracts from Student/Course Handbooks 2004/2005, Schools at Heriot-Watt University

1.6. When a student undertakes a piece of work that involves drawing on the writings or ideas of others, they must ensure that they acknowledge each contribution in the following manner:

- **Citations:** when a direct quotation, a figure, a general idea or other piece of information is taken from another source, the work and its source must be acknowledged and identified where it occurs in the text;
- **Quotations:** inverted commas must always be used to identify direct quotations, and the source of the quotation must be cited;
- **References:** the full details of all references and other sources must be listed in a section at the end of any piece of work, such as an essay, together with the full publication details. This is normally referred to as a “List of References” and it must include details of any and all sources of information that the student has referred to in producing their work. (This is slightly different to a Bibliography, which may also contain references and sources which, although not directly referred to in your work, you consulted in producing your work).

1.7. Students may wish to refer to the following examples which illustrate the basic principles of plagiarism and how students might avoid it in their work by using some very simple techniques:

1.7.1. Example 1: A Clear Case of Plagiarism

Examine the following example in which a student has simply inserted a passage of text (*in italics*) into their work directly from a book they have read:

University and college managers should consider implementing strategic frameworks if they wish to embrace good management standards. *One of the key problems in setting a strategic framework for a college or university is that the individual institution has both positive and negative constraints placed upon its freedom of action.* Managers are employed to resolve these issues effectively.

This is an example of bad practice as the student makes no attempt to distinguish the passage they have inserted from their own work. Thus, this constitutes a clear case of plagiarism. Simply changing a few key words in such a passage of text (e.g. replace ‘*problems*’ with ‘*difficulties*’) does not make it the student’s work and it is still considered to be an act of plagiarism.

1.7.2. Common Mistakes

Students may also find the following examples² of common plagiarism mistakes made by other students useful when reflecting on their own work:

- “I thought it would be okay as long as I included the source in my bibliography” [without indicating a quotation had been used in the text]
- “I made lots of notes for my essay and couldn’t remember where I found the information”
- “I thought it would be okay to use material that I had purchased online”
- “I thought it would be okay to copy the text if I changed some of the words into my own”

² Extract from ‘Plagiarism at the University of Essex’ advice copyrighted and published by the Learning, Teaching and Quality Unit at the University of Essex (<http://www.essex.ac.uk/plagiarism/reasons.html>), reproduced with kind permission.

- “I thought that plagiarism only applied to essays, I didn't know that it also applies to oral presentations/group projects etc”
- “I thought it would be okay just to use my tutor's notes”
- “I didn't think that you needed to reference material found on the web”
- “I left it too late and just didn't have time to reference my sources”

None of the above are acceptable reasons for failing to acknowledge the use of others' work and thereby constitute plagiarism.

1.8. What follows are examples of the measures that students should employ in order to correctly cite the words, thought or ideas of others that have influenced their work:

1.8.1. Example 2: Quoting the work of others

If a student wishes to cite a passage of text in order to support their own work, the correct way of doing so is to use quotation marks (e.g. “ ”) to show that the passage is someone else's work, as follows:

“One of the key problems in setting a strategic framework for a college or university is that the individual institution has both positive and negative constraints placed upon its freedom of action”.

1.8.2. Example 3: Referencing the work of others

In addition to using quotation marks as above, students must also use a text citation. If the work being cited is a book, page numbers would also normally be required. Thus, using the Harvard system for a book:

“One of the key problems in setting a strategic framework for a college or university is that the individual institution has both positive and negative constraints placed upon its freedom of action” (Jones, 2001, p121).

The same reference could also be made to a book using the numeric system:

“One of the key problems in setting a strategic framework for a college or university is that the individual institution has both positive and negative constraints placed upon its freedom of action” (Ref.1, p121).

More often, a piece of work will have multiple references and this serves to show an examiner that the student is drawing from a number of sources. For example, articles by Brown and by Smith may be cited as follows in the Harvard system

“It has been asserted that Higher Education in the United Kingdom continued to be poorly funded during the 1980's [Brown, 1991], whereas more modern writers [Smith, 2002] argue that the HE sector actually received, in real terms, more funding during this period than the thirty year period immediately preceding it”.

or as follows using the numeric system:

“It has been asserted that Higher Education in the United Kingdom continued to be poorly funded during the 1980's [Ref 1], whereas more modern writers [Ref 2] argue that the HE sector actually received, in real terms, more funding during this period than the thirty year period immediately preceding it”.

1.8.3. Example 4: Use of reference lists

Whichever system is used, a list must be included at the end, which allows the reader to locate the works cited for themselves. The Internet is also an increasingly popular source of information for students and details must again be provided. You should adhere to the following guidelines in all cases where you reference the work of others:

If the source is a book, the required information is as follows:

- Author's name(s)
- Year of Publication
- Title of Book
- Place of Publication
- Publishers Name
- All Page Numbers cited
- Edition (if more than one, e.g. 3rd edition, 2001)

If the source is an article in a journal or periodical, the required information is as follows:

- Author's name(s)
- Year of Publication
- Title of Journal
- Volume and part number
- Page numbers for the article

If the source is from the Internet, the required information is as follows:

- Author's or Institution's name ("Anon", if not known)
- Title of Document
- Date last accessed by student
- Full URL (e.g. <http://www.lib.utk.edu/instruction/plagiarism/>)
- Affiliation of author, if given (e.g. University of Tennessee)

The way in which the information is organised can vary, and there are some types of work (for example edited volumes and conference proceedings) where the required information is slightly different. Essentially, though, it is your responsibility to make it clear where you are citing references within your work and what the source is within your reference list. **Failure to do so is an act of plagiarism.**

- 1.9. Students are encouraged to use a style of acknowledgement that is appropriate to their own academic discipline and should seek advice from their mentor, course leader or other appropriate member of academic staff. There are also many reference sources available in the University Library which will provide useful guidance on referencing styles.

Managing Plagiarism

- 1.10. Students, supervisors and institutions have a joint role in ensuring that plagiarism is avoided in all areas of academic activity. Each role is outlined below as follows:

How you can ensure that you avoid plagiarism in your work:

- Take responsibility for applying the above principles of best practice and integrity within all of your work
- Be aware that your written work will be checked for plagiarism and that all incidents of plagiarism, if found, are likely to result in severe disciplinary action by the University. The standard penalty is to annul all assessments taken in the same diet of examinations (for details please refer to Regulation 50 at <http://www1.hw.ac.uk/ordinances> and to the Guidelines for Staff and Students on Discipline at <http://www.hw.ac.uk/students/studies/record/discipline.htm>).

How your School will help you to avoid plagiarism:

- Highlight written guidance on how you can avoid plagiarism and provide you with supplementary, verbal guidance wherever appropriate
- Regularly check student work to ensure that plagiarism has not taken place. This may involve both manual and electronic methods of checking. A number of plagiarism detection packages are in use at Heriot-Watt University, one example being the Joint Information Systems Committee (JISC) “TurnitIn” plagiarism detection software.
- Alert you to the procedures that will apply should you be found to have committed or be suspected of having committed an act of plagiarism and explain how further action will be taken in accordance with University policy and procedures.

How the University will endeavour to reduce student plagiarism:

- Provide clear written guidance on what constitutes plagiarism and how to avoid it directly to your School and to you
- Alert you and staff in your School to the penalties employed when dealing with plagiarism cases
- Take steps to ensure that a consistent approach is applied when dealing with cases of suspected plagiarism across the institution
- Take the issue of academic dishonesty very seriously and routinely investigate cases where students have plagiarised and apply appropriate penalties in all proven cases.

PART B: UNIVERSITY INFORMATION

B1. Programme and Course Content

The content of our programmes and courses is reviewed annually to make sure it is up-to-date and relevant. Individual courses are occasionally updated or withdrawn. This is in response to discoveries through our world-leading research; funding changes; professional accreditation requirements; student or employer feedback; outcomes of reviews; and variations in staff or student numbers. In the event of changes the University will consult and inform students in good time and will take reasonable steps to minimise disruption.

B2. Our Values

At Heriot-Watt, we have an established set of values that help up to nurture innovation and leadership and show our commitment to continuous development in all our activities. They are:

- **Belong** to a diverse, inclusive and international community working together across boundaries and cultures
- **Inspire** curiosity to learn and find solutions that transform lives
- **Collaborate** by working in partnership to shape the future whilst taking responsibility for our own actions
- **Celebrate** excellence and take pride in the achievements of our students, staff and alumni

Find out more about the [Heriot-Watt Values](#) and what they mean to us.

B3. Student Partnership Agreement

Heriot Watt University and the Heriot-Watt Student Union (UK), Heriot-Watt Student Association (Malaysia) and Heriot-Watt Student Council (Dubai) work in partnership to develop a Student Partnership Agreement (SPA) each year. The Agreement identifies the main, agreed priorities for working in partnership each academic year and outlines an associated action plan.

Heriot-Watt University has a long and proud tradition of student engagement in institutional governance and decision-making and the Student Partnership Agreement sets out our ambition to continue to work in partnership across all of our campus locations, with the aim of increasing engagement with the institution, enhancing the student experience and engendering a sense of belonging to the University community.

The Student Partnership Agreement is available [here](#).

B4. University Regulations

Heriot-Watt has a detailed set of rules that govern how the University operates, these are the University's [Ordinances and Regulations](#). Ordinances are set by the Court, which is the University's governing body, outline how the University is governed. University regulations provide the framework for the University's academic work and the education of our students and they define the policies, procedures and support available to our students.

In addition to the university-wide regulations, students studying at Malaysia campus must adhere to the following policies:

1) Attendance

Students are expected to attend all scheduled face-to-face learning sessions (e.g. timetabled lectures, seminars, tutorials, workshops and laboratory sessions) as stipulated by your School. However, some learning activities will continue to be delivered online, and students are expected to log into the live webinar sessions as scheduled by their lecturers.

Your academic progress and participation will be monitored and tracked by your lecturers to ensure that you are making adequate progress in your learning activities. The only exception should be in circumstances where ill health or other legitimate reasons prevent student attendance. In this case, students should submit a self-certification with medical certification.

i) Self-certification form and supporting documents

Students who are absent from any learning-teaching activities are required to fill in the self-certification form which can be obtained from the Student. Checks may be made with the authorising bodies/medical professionals to confirm the accuracy of the supporting documents (e.g., medical certificates). If there is any concern that the supporting document provided has been submitted under false pretences, the student may be disciplined by the University. Disciplinary penalties previously issued for similar offences include suspension from the University. The submission of falsified documents to the University is taken very seriously.

ii) International students attendance requirement

International students must maintain at least 80% attendance in all enrolled courses throughout each semester. Current regulations and requirements outlined by the Ministry of Education (Malaysia) and Immigration Department of Malaysia that the attendance of all international students are to be monitored and reported to the respective authorities.

2) Policy on student fee refunds (to be confirmed)

i) Scope

This policy applies to fees, charges and fines for on-campus students studying at Heriot-Watt University Malaysia.

ii) HWUM policy

Under Section E - Ordinance 1:

All fees and charges due to the University are payable in advance and except in exceptional circumstances shall not be returned.

However, at the University's discretion the following refund policy will apply and providing that a request in writing for such a refund is received:

- a) Registration Fee, Visa application and related fees are not refundable under any circumstances.
- b) Subject to sub paragraph (a) above, if a student provides notice more than 2 weeks before the commencement of the semester, 100% of the tuition fees paid may be refundable.
- c) Subject to sub paragraph (a) above, if a student provides notice within 2 weeks before the commencement of the semester, 50% of the tuition fees paid may be refundable.
- d) Subject to sub paragraph (a) above, if a student provides notice within 2 weeks after the commencement of the semester, 50% of the tuition fees paid may be refundable.

- e) No fees are refundable 2 weeks after the commencement of the semester.
- f) Subject to sub paragraph (a) above, if a student is required to leave the programme due to medical reasons based on medical evidence, the student may be eligible for a full refund of all fees paid.
- g) All refunds whether of fees, deposits or other payments, shall be free of interest and shall be subject to the right of set-off by Heriot-Watt University Malaysia against any fees or other payments due and owing to Heriot-Watt University Malaysia.
- h) For all semesters, all fees, charges and fine must be fully paid by the due dates. Heriot-Watt University Malaysia reserves the right to review the status and to take such necessary action as Heriot-Watt University Malaysia deems fit if payment is not received by the due dates. Such action may include the barring of the student from classes, examinations and facilities, result hold, suspension or termination of the student's studies. In such circumstances, Heriot-Watt University Malaysia further reserves the right and shall be entitled to defer the marking of any examination paper, and to withhold all certificates and records of the student. No student with outstanding debt shall be permitted to graduate.

In the event that a student is expelled or is suspended or discontinues the programme due to misconduct or any disciplinary matter or the non-attainment of academic requirement, there shall be no refund of fees paid.

B5. Your Student Portal

The Student Portal brings together your services and relevant information in one place. Below is a summary of the services available to you via the portal:

- Office 365 suite: through single sign-on, all of your Office 365 services will be accessible through the Portal.
- Library: whether you want to search for books or view your loans & reservations, the Portal allows you to do this on your phone or desktop.
- Canvas: access your courses here, including announcements, tasks and assignments.
- Student Information: all university-level regulations and policies relating to your studies can be found on the Portal.
- Campus and School News: the Portal enables the University to promote events and experiences which will help you develop your skills.
- Personalised: You can hide, add and move tiles on your dashboard.
- AskHWU: You can find everything you need to help you navigate your time at HWU through the new AskHWU search tile. Ask questions of the University and enquire directly with members of staff to get information about ID cards, student finance, confirmation of studies letters, exams, enrolment, Careers, Wellbeing Services and much more.
- Appointments: book appointments with a range of different services (Student Wellbeing Services, Careers, Finance etc.) through your student portal.

You can access your student portal [here](#).

B6. Your Virtual Learning Environment

Heriot-Watt's Virtual Learning Environment (VLE) is called [Canvas](#). It is a vital learning and communication tool for you and your lecturers, so make sure you log in and check Canvas every day. For further support see the [Canvas Student Guides](#).

B7. A to Z Guide: Essential Student Information

This [A to Z guide](#) covers essential information about the support and resources available to you as a Heriot-Watt student.