

Intellectual Property in Heriot Watt – A Guide to the Policy

What's this policy all about ?

Heriot-Watt University wishes to encourage, alongside academic growth through education, research, the publishing of work and collaboration with others, the commercial exploitation of intellectual property developed by members of the university community to the mutual benefit of the creators and the university.

By the university community we mean those staff, students, visiting fellows and consultants working with and within Heriot Watt.

What is commercialisation ?

Commercialisation is carried out by taking work, protecting it and trying to sell it, or let others use it, for some sort of fee.

What we want to do is enlarge the scope for commercialisation within Heriot-Watt. UK educational institutions have a reputation for generating great knowledge. However, unlike the US, they don't have a reputation for successful commercialisation.

What we want to ensure is that where the work that you do could have some commercial value over and above its worth as publishable research, this is properly addressed.

Historically within academic circles in the UK, the emphasis has been on receiving funding to research, then publishing the results of that research. We don't wish to stop that, in fact we actively encourage it. Through this, great advances in many fields have been achieved.

However, often new technologies and inventions are not fully developed because development needs investment, and investment needs commercial returns, and to ensure commercial returns you need something to sell, and a freely available idea cannot be sold. That is why, in some cases, it is better for your efforts not to be published immediately, but instead to be protected and then published, for protection gives you something to sell, something to sell can bring in investment, and investment allows further development. Therefore in the interests of advancing the knowledge within the field you work in, it is important that you consider the commercial potential of your work from the outset, and if necessary ensure it is properly protected before you publish.

Commercialisation means making the most of your work.

So please remember - the university's desire to commercialise isn't at odds with the desire of academics to publish, or with principles of developing knowledge - in fact both can go hand in hand. All it calls for is a slightly different approach to things. This approach is what this policy is all about.

How does Heriot-Watt approach commercialisation ?

The approach has three principles:

In order to facilitate commercialisation, the University seeks to own the work done by certain members of the university community.

In order to protect commercialisation, the University seeks to make certain information confidential.

In order to encourage commercialisation, the University seeks to apportion any benefits amongst those who created it, those that made it possible through the provision of facilities and funding and those who commercialised it.

Underlying this policy are basic principles of professionalism in creating, identifying and commercialising intellectual property, and one of the aims of this policy is to ensure a set of clear and

easy to follow rules which form the basis university's approach and a clear and easy to follow process implementing those rules in practice.

What is Intellectual Property ?

What sort of work does this policy cover ?

As mentioned, under this policy the university seeks to own the intellectual property created by its community.

Intellectual property is what you produce when you're at the university. It's the results of learning and research.

It's what you create when you look at a problem and solve it with some new method or invention, or when you write about or research something. It covers know-how, expertise, techniques, research results, inventions, new methods, computer software and programs, algorithms, laboratory notebooks, books, articles, designs and distance learning material.

Intellectual property is protected through intellectual property rights. These include the right to make copies of a product, the right to reproduce printed work, the right to patent an invention, process or method, and the right use that patented invention, process or method to achieve a result.

By allowing other people to exercise these rights, benefits can be obtained – this is commercialisation. For example, patenting a product or a method, then allowing other companies to use it for money, or writing a piece of work, and allowing people to copy it for a fee, like in the case of distance and e-learning course materials, or designing a new product then allowing other people to produce it from your designs.

Is there anything in particular this policy does not cover ?

The university doesn't seek to own all the intellectual property created by its community.

This policy does not cover published articles in specialist journals and papers and books – the University gives ownership of these back to the writer. However this **specifically does not cover** teaching and distance learning materials, or anything which could form part of them, which remain the property of the University.

Also things you do on your own outwith your terms of employment at the university are not covered, that is to say if you wrote a fictional book at home then that would not be covered.

Attention is drawn here, though, to the university policy on conflict of interest which may be of relevance to staff concerning work done outwith the university, and the parts of this policy concerning confidential information, which affect what information members of the university community are allowed to publish.

Who does this policy apply to ?

This policy applies to all members of staff, as it is part of their contract of employment, and all visitors and consultants (whom must agree in writing to observe the intellectual property and confidentiality rules of the university, using the visitors agreement available from TRS, prior to commencing their work here), and certain students.

By visitors we mean really anyone who's visiting the university, be they undergraduate students, PhD students, academics, professors, members of staff from another university or people from various industrial organisations and companies. It's not limited to any level of academic standing or ability in this document, even though it may mean something else elsewhere.

If I'm a student how do I know if it applies to me ?

It depends on the type of work you are doing. This policy applies to:

- (a) Postgraduate research work when funded by any person or body other than the student themselves.
- (b) Any work done by the student, where the student is funded by a scholarship administered by the university.
- (c) Any work done by the student, where the student is funded by a doctoral training grant administered by the university.
- (d) Final year project work.
- (e) Vacational project work.
- (f) Guided research work.

What does this policy mean ?

Staff

If you're a member of staff then you're giving the university your intellectual property automatically by working here. This is one of the conditions of employment law, here as elsewhere. This is laid down in statutory rules enacted by the government, and the only way to avoid this is to seek exemption granted by the university.

Work funded by someone outside the university - important notes for staff

Work funded by an outside body now forms an important part of the work done by staff at the university.

Outside bodies include organisations such as the ESPRC, BBRSC, Leverhulme Trust or industrial sponsors such as Shell or Quinetiq.

The rule on employer ownership will not apply if you give your intellectual property to the funding body as a condition of receiving funding.

By giving away the intellectual property in your work your right to profit from it, and the universities right, will be restricted.

Furthermore, if it is not explicitly stated, you will not generally be able to continue researching this work once funding has ceased. There is no general exemption in law for non-commercial research into intellectual property owned by someone else.

Sometimes such agreements may even contain a clause giving away what is called your background intellectual property to the funder. This means the rights in all of the work you have done in the area, not just those in the work you're being funded for, may be given to your sponsor, restricting what you can do outwith the funded project a great deal. A disregard for intellectual property issues at the outset of a project can have huge consequences.

For example, you are funded by a company to do some research, and you've signed a letter of award to get this funding which contains provisions on intellectual property ownership. You invent something fantastic but when the time comes to commercialise it, you find that certain parts are owned by the company, as it was carried out as a consequence of their funding, and certain parts are owned by the university, as you used research results from work you did before you were funded. Now yourself, the company and the university all want to make money, but they can't agree on what each of them is due.

They fall out and no agreement is reached, and so the invention is never commercialised and developed, and all you have done goes to waste.

If you are submitting a research funding proposal please address who owns the intellectual property at the earliest opportunity, ideally in the proposal before it is passed to TRS.

If you have to sign a letter of award for funding, then please contact TRS if you know intellectual property ownership hasn't been addressed, or if it has and it looks like the funder will own it.

TRS can only help with intellectual property issues in research funding contracts if they are made aware of these issues before they are finalised.

All TRS will do is:

- (1) Clarify who owns the intellectual property produced.
- (2) If the intellectual property has not been dealt with, make sure that if possible it remains the property of the university.
- (3) If it is not, then make sure the university can get as much benefit as possible in other ways through, for example, licensing and further research rights.

This is not a hugely time consuming matter, and will not slow down the processing of your funding, but if you're successful in your work it will be invaluable.

Visitors and consultants – important notes for staff

Visitors, consultants and anyone else who is not a university employee are not automatically subject to this policy.

Staff are reminded that because of this, that when they invite someone to the university for study or research purposes they must get them to assign their intellectual property rights to the university and to agree to preserve confidentiality by using a visitors agreement, available from TRS, or the university may not own any intellectual property generated.

Visitors and consultants will not go unrewarded though, and if anything they help invent is successfully exploited then they will be treated as if a member of staff as regards reward.

If intellectual property is not assigned, this can create problems in who is allowed to exploit the work, and again work can go to waste due to a lack of clarity over who owns what.

Therefore, when you invite them, get them to agree and assign.

An agreement to assign and observe confidentiality can be put in place quickly and easily using a visitors agreement. If they can't assign, because, for example they've already given their rights to someone else or they wish to keep their intellectual property, then TRS can advise what is appropriate in the situation.

Students - important notes for staff

As staff members often take a supervisory role to students, it is their duty to make sure that ownership of the intellectual property in the work students carry out is addressed, especially when working on research projects for or collaborating with members of staff, or when funded by outside bodies.

This is normally done by the putting in place of a student assignment, as described in the next section.

Students

If you're one of the students to whom this policy applies then we strongly recommend that you give your intellectual property to the university by signing a Student Assignment.

Student Assignations are available at matriculation and from TRS. Please sign two copies, keep one for yourself, and return the other to TRS.

Please note that you do have the right to keep your intellectual property yourself and not assign it to the university. However we recommend you do, as the university technology team can be invaluable in helping you exploit your work, and if you don't give us your intellectual property then they can't help. We're not asking for something for nothing though, as you will get a share of any income generated from it as if you were a member of staff.

If you've got any queries about this then please don't hesitate to get in touch with TRS.

Students whose work is funded by a Heriot Watt doctoral training grant or scholarship

It is a condition of Heriot Watt doctoral training grants and scholarships that your intellectual property is given to the university.

You will have been notified of this at matriculation, where you will have also been given an assignation - please sign this and return it to TRS.

If any of the work you do is commercialised, then you will be treated as if you were a member of staff as regards benefiting from it.

If you've got **any** queries about this then please don't hesitate to get in touch with TRS.

Research postgraduate students funded by outside organisations

If you're a student funded by an outside organisation, such as a company, research council or such like, then it may be a condition of your funding that you assign your intellectual property to the university. For example if you're funded by the EPSRC it is a condition of your funding that you assign your IP to Heriot-Watt.

However, it may also be a condition of that funding that you assign it to someone else, especially in the case of industrially funded work, where in a lot of cases the funding company will look to own the intellectual property in the work it funds. For example, companies such as Quinetiq will generally look to own the IP in the work that you do here as a condition of the funding they provide.

*If you're a student and you have to sign **anything** as a condition of receiving funding, then we recommend you still sign the Student Assignment but also seek the advice of TRS, by telephone, email or in person in order to clarify your situation.*

If you have any queries about this then please don't hesitate to get in touch with TRS.

Students, Staff, Visiting Fellows and Consultants - Confidential Information

Staff are automatically subject to the university's confidential information policy when they become employed.

However, students, visitors and consultants are not, and if they are coming into contact with confidential information and they have not signed an agreement or they do not have to keep it confidential.

If a student, visitor or consultant is signing an intellectual property assignation it will be covered in that.

If they are not then they must be asked to sign a confidentiality information agreement separately to make sure the university's interests are safeguarded. These are available from TRS.

Staff are under an obligation to make sure the university's interests are safeguarded, and if they know of any situation where confidential information is being shown to any student, visitor or consultant, or to any person or organisation outside the university they must make sure a confidentiality agreement is put in place.

What is confidential information ?

This is, in short, anything which, if you told people about, might damage the commercial interests of the university.

It specifically includes information relating to intellectual property that could be protected, but isn't protected yet, and which if you told people about couldn't be protected, and any special know how or clever but non patentable methods of doing things, like trade secrets. It specifically includes all laboratory notebooks, including those stored in an electronic fashion.

You must be very careful with this sort of information.

This is of particular relevance to something that may be patented, because if other people know about it then it can't be.

Confidential information is also any information that you come into contact with that you're told is confidential.

If you don't keep it confidential then you may destroy rights other people who don't work here hold. They will be entitled to do something about this, which will most likely be sue the university and sue you, so you may have to pay compensation.

However, it is possible to share such information if the need arises, but, as mentioned above, to respect the interests of everybody involved you must make sure this confidentiality is preserved by whoever you tell.

Basically, if you want to disclose any Confidential Information you must have a Confidentiality Agreement in place.

In particular, when publishing information, for example in a poster display in your School or within a thesis or journal article, you must be careful about what you're publishing.

You must be careful not to jeopardize any of the rights the university holds or may hold, for example by writing an article on something that may be patented, or to disclose any information at a conference that's meant to be confidential, without first seeking permission from TRS.

So if you're dying to tell people about something new you've invented, hold back for a minute and think whether it would be more sensible to wait, and contact TRS to put in motion the process of protection.

What are the benefits to me of the university owning my work ?

You get to share in the rewards from the commercial exploitation of the work generated by the partnership of your knowledge and our facilities.

Since the facilities the university provides helps you to do things, and our commercialisation team help to make money from your work, we consider it right we receive part of the income if anything makes money.

However the lions share will still go to you, because you provide the unique knowledge to make it all happen.

Firstly if monies come in, then taxes may have to be paid. We ask that these come off first, as that's what the law says.

Secondly, if you've done work under some sort of grant or joint venture, then either whoever gave the grant to you may want some or all of this repaid, or your partner may want some of the monies under the joint venture agreement. This has to be done, or you wouldn't have been able to do the work in the first place because the grant or joint venture is what made it all initially possible.

Thirdly, if the university has had to spend money to protect intellectual property and to commercialize the work, then we ask for this to be repaid out of any monies that come in. This can be things like patent registration fees and market assessment reports. We think this is fair as if it hadn't been spent, then there would've been nothing to sell, and nothing would've come in.

After all of these factors have been accounted for then what's left is split up.

You get half.

Your School gets 40%.

(this is to help with the costs of running the facilities at the university, like buying equipment and maintaining buildings).

TRS's patent budget gets 10%.

(this is to help fund future IP protection and further the growth of innovation at Heriot-Watt).

Will the university always seek as much protection as it can ?

Unfortunately, obtaining protection for intellectual property can be a long and expensive process, and without the help of the university in many cases this may be unaffordable. However, this requires the university to make a judgement on whether seeking protection is worthwhile in commercial terms. Often, if intellectual property is non-commercial, it is very unlikely to be stolen, and therefore does not need as much protection as it could maybe be given. Also it would be unwise to spend more money on it that we could ever hope to receive back.

What happens if the university doesn't want what's protected anymore ?

If the university no longer wants any intellectual property it holds, or is unable to pursue protection in any given case, it will give first refusal to pick up rights or to continue any process to the inventor. If we have already spent money on the invention then we may ask you to pick up some of the costs that were involved. We'll look at what's fair in each situation to decide what these costs are.

What happens if I leave the university to work or study elsewhere ?

Any intellectual property owned by the university will be kept by the university.

Any confidential information must be kept confidential even after you've left.

When you leave the university will carry out an Intellectual Property Audit. This is done to take stock of what you've done whilst at the university, basically to make sure its properly protected, because if it isn't then often its hard to do after you've left, because to protect things the university will need certain information from you, and if you're not there it can be hard to get.

Any monies that come in from the work you did whilst at the university will still be split up as if you're still with the university. Don't worry – by leaving, you're not leaving any reward due from any of your inventions.

How does the University approach the practical process of commercialisation ?

As part of this policy the University guarantees a level of service to anyone who creates intellectual property within its community. In return for this we expect those who create intellectual property to be open about and co-operative about the work they've done. Through this combination of guarantee and co-operation the commercialisation process is designed to work sensibly and smoothly.

In short the process is as follows:

The inventor lets TRS and their appropriate Head of School or Head of Support Service know about an invention.

TRS provide them with an Invention Disclosure Form (IDF), a copy of the policy and a commercialisation case number within 24 hrs.

The inventor fills in the IDF and returns it to TRS within two weeks. Once TRS receive the form several things happen:

1. TRS initially assess the commercial potential of the invention and undertake a prior art search – the results of these are then communicated back to the inventor for comment within two weeks.
2. A meeting of the Innovation Exploitation Board (IEB) is convened to discuss the invention within six to eight weeks. The IEB is made up of a panel of university staff and will look at the IDF, the initial assessment of the invention's commercial potential and the results of the prior art search. The IEB will decide the best way in which to proceed with the invention and communicate this decision back to the inventor within a week of their meeting.

The IEB may recommend the following courses of action:

That a patent application should be filed, and commercialisation sought.

That more work needs to be done before a patent application should be filed and commercialisation sought.

That the invention has insufficient commercial potential and a patent application should not therefore be sought by the university (in such cases the university is consequently happy for the inventor to seek a patent in their own name).

That a spinout company should be formed to deal with this invention (see next section).

If the IEB decide that a patent should be filed and commercialisation pursued, then the following happens:

1. A technology broker is immediately appointed. This gives the inventor a constant point of contact in TRS. The broker then draws up a commercialisation plan within 4 weeks and forwards it to the inventor for comment.
2. Within 6 weeks any planned patent applications are progressed to ready to file status by TRS.
3. Within 4 weeks a brief non-confidential description of the invention is added to the TRS web pages.

Once this has been done TRS will begin to commercialise the invention, and to seek a patent.

As things progress TRS will keep the inventor informed of any progress and will issue bi-monthly reports for the first year and quarterly report thereafter until the process of commercialisation is complete. These reports will let the inventor know how much income has been generated by the project and what has been spent on the project so far (important as these costs have to be met before any income is distributed). Also every six to nine months the IEB will review the project to make sure it is worth continuing. Again, if they do not wish to continue the project, the inventor can do so in their own name, although the university will generally ask for a reimbursement of the costs they have incurred so far before they allow this.

The aim of this process is to successfully commercialise inventions. This means it will finish when license deals have been signed, or the invention has been sold to a company - basically when the invention is generating the amount of income that could be reasonably expected from it.

What about new companies ?

One of the ways in which inventions are successfully commercialised by a university is through the formation of what is called a spin-out company. This is where the inventor forms a company, and along with the university, the inventor and other connected people take an equity stake. This is sometimes the best way in which to commercialise an invention as it can facilitate the raising of large funds through the venture capital process and allow for more hands on management of potentially highly successful innovations.

The university is open to hearing requests from inventors who want to form spinout companies, and may sometimes recommend this course of action in particular cases without an initial request. Everything is dealt with through the IEB.

All that needs to be done if an inventor wishes to form a spinout company is that when they initially contact TRS about an invention they mention this desire.

TRS will then send out, along with the usual IDF, a spin-out pack.

All the inventor then has to do is to then include a spin-out application form with their completed IDF to TRS.

The IEB will then consider the proposal when they meet and the inventor will be informed of their decision within the usual time frame.

If a positive decision is made then the University will form the company. When the university does so the following guidelines and points of information are relevant:

1. The university's initial stake will be 24% of the equity. These shares will hold the same rights as those held by the inventor. If there is more than one inventor involved then the university recommends their shares of the equity be equal. The university recommends that staff and students do not invest money in spinout companies as this can be very risky. If doing so they must be prepared to lose all of their investment. The university also recommends that a proportion of the equity (ideally around 10 to 15%) be held unallocated, as this can help when trying to attract top level directors and such-like with invaluable business skills into the new company from outside the university.
2. Management of a new company is onerous and demands significant business skills. In all instances where a member of staff wishes to be part of the management team but has not had previous experience managing a successful new company it is recommended that they seek external appointments who have the necessary experience – and commitment to the new company – and themselves take on the role of Chief Technology Officer or Chief Scientist.
3. A member of university staff may opt to, instead of becoming part of the company management team, make arrangements to be appointed as a consultant to the company. In those instances the university will draw up the necessary agreements under the normal

consultancy arrangements and assist with negotiations between the relevant School and the company

4. No shares may be held by any members of staff who weren't involved in the invention or who aren't involved in the management of the company.
5. The university will license the invention to the company as long as all costs that have been incurred relating to the protection of the invention by the university are reimbursed. A royalty rate will be agreed at the point of license, but will not generally be payable until the company reaches a certain point (for example a certain level of turnover or a certain date). Also the university requires that the company repay any costs of incorporation relating to the company – favourable payment schedules can be arranged as regards this. In exceptional circumstances the University may elect to transfer ownership of intellectual property to the company for a price. In those instances the intellectual property will be valued and the price will reflect such matters as the market, the window of opportunity, and the business plan of the company. The company and its shareholders, excluding the University, will be responsible for any tax payable as a result of the transfer.
6. Generally the company will be given first refusal on any inventions which come out of the lab of the inventor whose invention is being used by the spinout company for a period of two years following the formation of the company.
7. The university will release the inventor on leave for up to two years to work in the company, so long as their appropriate Head of School or Head of Support Service approves, and will do its best to re-employ them at the end of this period. During this period, if the leave is full time, all salary payments and such like will stop. However if the leave is only part time they will continue, but the university will invoice the spinout for their share (according to time spent working there) plus an administrative overhead. Any leave given may be cancelled on three months notice. Staff are reminded that they should take advice on the implications for pension arrangements before accepting employment with a spinout company.
8. If an inventor is on part time leave, or if a member of university staff is working as a consultant to the company, they are asked to keep two separate laboratory notebooks, basically because this will show what work is done on the universities time and what on the spinouts time. These should be independently signed for verification each week. Electronic notebooks can be used, so long as their contents can be independently verified.
9. Members of staff involved with a spinout company, including those working on university premises, are expected to adhere to the normal ethical standards to ensure that confidential information or property owned by either the company or the university does not "leak" to the other party. Standards are indicated in the Code of Practice for Research
10. The university will also endeavour to make their facilities available to the company, so long as the appropriate Head of School or Head of Support Service approves. This will be at market rates, but favourable payment schedules can be arranged that are not normally available to outside companies.
11. In the interests of fairness, if an inventor is receiving income from the company they are expected to forego their share of any royalties from that work that are distributed by the university internally. This avoids them being paid twice – once by the company, and once from the share of the royalties that the company pays to the university. Instead their internal university share will go to their School.
12. The company will also be entitled to use the Heriot Watt name and logo as a badge of origin in relation to company and product publicity, but only in conjunction with certain wording. This wording is contained in the policy.

Is there anything else I should be aware of ?

In the interests of clarity we ask anyone undertaking research within the University should record research results in a hardbound laboratory notebook in accordance with University policy. This helps establish inventive contribution to work done here, and may help ensure that if you help invent something you are appropriately rewarded. Electronic notebook recording is permitted, but must be done in such a way as to ensure that the contents and their date of creation can be independently verified.

We also ask that if you're a member of staff and you're being asked to act as a consultant to an outside company, that when you agree to be a consultant you get something in writing defining your area of involvement with the company. Again, this helps to define who owns what you invent. No-one wants to invent a new product or method, and then have to fight with a third party who think they own it. Even if it is eventually established that the company doesn't have any rights in the work, a lot of time, effort and money can be spent getting there. Having boundaries established in advance avoids all of this.

Finally, we also ask that if you think there may be a conflict of interest arising in your work, then you raise this with TRS as soon as you are able. Most times there isn't a problem, but its important to check, and TRS can confirm at the outset that there is no conflict, saving you worry as your work progresses. Conflicts of interest arise when you are acting for two or more interests that may be in competition, for example where you are negotiating with a company on behalf of the University, but you also are or soon to be a director of or consultant to that company.

So, in short, when must I deal with TRS ?

If you're a student whose work is covered by the policy - sign two copies of the student agreement, returning one to TRS and keeping the other for your records.

If you're one of those students and you want to keep your intellectual property – let TRS know.

If you're a student or member of staff and working with or funded by anyone from outside the university - let TRS know

If you're a student or member of staff and have signed or have been asked to sign any agreement relating to intellectual property or confidentiality from outside the university, including in particular award letters relating to funding.

If you're a student, member of staff, visitor or consultant and you think you're creating something that could be commercially exploitable – let TRS know.

If you are a member of staff and a student you're working with is creating something you think could be commercially exploitable – let TRS know.

If you're a student, member of staff, visitor or consultant and you're creating something that you want to be commercially exploited – let TRS know.

If you want to publish or give out any information on any work that could be patentable or any information that could be confidential – check with TRS first.