

Tips and considerations for ICASE industrial partners

In May 2022 EPSRC held a workshop with representatives from ICASE-hosting universities where we discussed recruitment and placements. Many suggestions arose from this which you may find useful to consider.

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ICASE Recruitment

- Recruitment of students can take time, particularly to projects which require specific skills and expertise. We recommend you work with your chosen academic partners to develop/refine your project, and when writing the advertisement for recruitment. We encourage you to consider a [responsible innovation](#) process.
- Very narrowly focused projects may struggle to attract many applicants, so try to make projects and their advertisements as open and interesting as possible. Consider refining the project to increase interest if recruitment is failing to attract candidates.
- Providing an enhanced stipend (and referencing this in the recruitment advert) can help attract talented individuals to your project who might otherwise opt to go into employment. Offering an enhanced stipend might be something to discuss with your academic partner before determining the level of your cash contribution. It may also be helpful to consider tax thresholds so students don't lose out.
- Submitting your project sign-up information early can increase your chances of quickly recruiting a good candidate for your project. In 2021, EPSRC brought forward the timing of when we send out the Letters of Intent, sending them as soon as we completed the project checks, and several universities said this had helped with recruitment. The sooner we can check your project details, the sooner we can issue the Letter, enabling recruitment to access a larger talent pool.

- As well as recruiting through the usual channels for doctoral projects, it might be worth considering if your organisation can advertise the studentships (internally or externally) to reach a different, broader audience. A contribution towards an advertising budget might form part of the development discussion with the academic partner.
- EPSRC encourages you to support a diverse and inclusive research environment where there is equal access to opportunities. You may find [guidance and resources](#) on our website.
- Your student may have good ideas for refinements to your project.
- Please be aware that contract negotiations can take time, particularly when new partnerships are being established. This may delay recruitment, so try to begin as soon as possible. Avoid “email tennis” by getting relevant parties into a meeting to negotiate and expedite the process. Template contracts may make a useful starting point. The [Lambert Toolkit](#) may be useful when creating a collaboration agreement. IP agreement challenges formed part of the discussion at the 2023 EPSRC Prosperity Partnerships showcase, and while there were no real solutions provided, there was general agreement that it’s wise to start early, discuss early, decide early, and only bring lawyers in at the end to formalise the agreement.
- Funding for your project with a particular university will form part of a single grant held by that university. That grant is likely to contain funding for other projects belonging to different industrial partners who are also running their ICASE projects with that particular university. Please be aware that this arrangement may affect the way universities manage your project, including aspects of recruitment.
- Please ensure the industry supervisor for each of your projects understands the requirements of ICASE and has access to the key information about the scheme and project, including the information contained in this document, the letters of Intent and Support, and the “Useful links” provided below.

ICASE Student retention and withdrawal

- Building a good, close relationship with your student will help them feel more engaged and enthused and may increase the likelihood of successful completion of your project and their doctorate.
- **The student’s experience is central to the ICASE scheme, and the provision of both industrial and academic support, alongside meaningful placements and visits, are integral.** The quality of supervision can make a difference to the student’s progression with their project. We would remind you that by participating in ICASE you are committing to supporting and engaging with your projects, partners and students throughout the duration of the studentship.

- When a student withdraws it may be possible to recruit a replacement if sufficient time and money remain on the grant. The replacement must be entitled to the full benefits of ICASE outlined in the conditions. We suggest the cut-off is at about 15 months, at which point a significant amount of funds will have been spent. However, the consensus at the workshop was that the practical cut-off point is at about 12 months, as beyond this point too much work will have been done on the project to make it suitable for a new 4-year studentship. Where there is a shortfall in funding, this may be covered by the industrial partner and/or university. Alternative routes may be explored with the university where it is not possible to continue funding the project through ICASE.

Placements

Expectations and minimum requirements

- It is a condition of the scheme that industrial partners must offer a placement to each of their ICASE students, who may accept or refuse it. If an in-person placement with you is not appropriate (e.g., due to insurmountable security issues) then an alternative placement should be sought. Your partnering university will be able to advise.

Benefits of placements

- A report on ICASE benefits commissioned by EPSRC in 2018 found that, “Transferable skills, enhanced by the experience of working closely with the company, were frequently cited as the single most valuable benefit by students. The placement played an important role in facilitating this, exposing students to the company context, additional training, wider networks of technical, R&D and leaders within the company.” The placement may also foster a much stronger relationship between the student and your organisation, and may feed into your talent pipeline, providing a potential opportunity to recruit an excellent, highly-skilled individual with very relevant experience.
- Placements can provide many benefits for students, including increasing their understanding of the problem area/research context, grounding their research, helping with exam and interview preparation, broadening of horizons, strengthening their relationship with their industrial supervisor, building networks, providing a work reference, seeing various employment/career options and opportunities, and gaining knowledge, awareness, training and skills that might otherwise be unavailable to them (e.g. in commercialisation, strategy, and management). Sometimes a student may hit a block where the academic side of things is not progressing, and the placement can help as they can bounce ideas off a different group of researchers.

Planning placements

- The placement should be integral to the studentship, not an afterthought. It is good to discuss basic plans for the placement with the academic supervisor during the planning stages. Provision for the placement(s) should be written into the collaboration agreement, bearing in mind that things may change as the project progresses. It is important to balance doctoral objectives with industry objectives. Planning should include catchups between the student and their academic and industry supervisors (perhaps with involvement from their university’s ICASE

management staff, if appropriate) to ensure the placement is optimal. Once arrangements are clearer, a formal placement plan will ensure all parties have the same expectations, and help things run smoothly.

- When planning a student's placement, it is essential to consider its purpose. This may include any or all of the following: an opportunity for integral project work; providing real experience of working for industry; building confidence; networking with industry leaders and experts; brainstorming and testing ideas; connecting to new opportunities and linking with other projects and people. Students should be involved in the planning of their own placement, so they understand the expectations on them, and are able to get the most out of the experience
- Think about logistics, transportation and accommodation requirements at an early stage, especially where a student has particular needs, or where the placement is overseas. Where there are challenges such as geographical location, IP concerns, or caring commitments, etc., consider possible ways to make placements work. Where it is impractical to surmount challenges then an alternative placement may be sought as described elsewhere in this document.
- All parties need energy, enthusiasm, and motivation to make placements work. The following will all help make a successful placement: preparation, pre-work, planning, making the incoming student feel welcome, and providing a good induction and safety training. There are other important experiences that don't have to be related to the project. For example, getting the emplaced student involved in team/strategy meetings can help make them feel they are working with the industrial partner.
- Students may have an uneven experience if each placement is arranged separately, so it may be a good idea for the university's ICASE management staff to help co-ordinate placements with the academic and industry supervisors (or at least be looped into conversations). These ICASE management staff may then develop a holistic view of placements at their university, learn what really works well, and thus provide advice on getting the most out of them.
- The immediate team of academic and industrial supervisors plus the student (with some support from the university's ICASE management staff) should be dedicated to ensuring that the student gets the best possible experience during their placement.
- It is vital to create a clear set of expectations for all parties involved in each project. For placements, this may include the timing and structure (whether it happens in one block or in multiple parts), when they occur, and what activities are expected. Bear in mind that flexibility is important and there will not be a one-size-fits-all solution.
- The student should essentially be treated as a temporary employee while on placements, being provided with a desk, IT equipment, an induction, and a mentor. Consider the pace of work needed - a productive work environment is good, but it is important that the student doesn't feel like they are working a full-time job and doing their doctorate at the same time. A lack of technical equipment at the industrial partner is not a good reason for not offering a placement, as there are various

approaches and a multitude of benefits to be gained. We recommend the university's ICASE management staff, academic supervisor and industrial supervisor discuss plans at an early stage, and evolve them over time with the student's input, to ensure that an appropriate and valuable experience is provided.

- The industrial partner's safety procedures and other relevant processes might be shared with the student well ahead of their placement to prepare them for what might be a significantly different working environment compared with what they are used to.
- Where a placement with your organisation cannot take place, consider permitting a placement with an alternative, relevant company. Perhaps a combination might work - a virtual placement with the main Industrial Partner alongside an in-person placement with a different company. All parties will need to agree to this and ensure there are no conflicts of interest.
- Fully- or partially virtual placements can work if an in-person placement is not appropriate, or impractical. The nature of the project may determine how effective a virtual placement might be, e.g., consider if you can send samples/data to the student. The student may not get the same interactions with colleagues and won't get to experience the facilities, but it may be possible for the student to shadow an employee. A remote placement is better than no placement, but the aim should still be to provide a good representation of working with the industrial partner. A virtual placement should not be used as a convenience.
- Inexperienced supervisors might be able to approach colleagues for advice when planning placements, and the university may also provide guidance. It doesn't make sense to have to "reinvent the wheel" each time.

Structure and timing of the placement

- Think about the structure of the placement and how it will fit into the student's academic timeline to enable them to gain the greatest benefits from it. Some benefit more from taking the whole placement in a single block, while others find frequent/regular engagement is preferable (e.g., a day, or a week at a time). Having multiple, shorter placements over time can help the student become more involved in the research with the industrial partner and become embedded beyond just their project area. Placements at a significant distance from the student's base may be better taken in a large block to minimise travel. While an overseas placement can be the right option, and may seem more attractive, consider if it is the best option for the student. A more local placement may permit more flexibility and enable multiple visits to occur over a longer period.
- In terms of timing, an early placement can be a training opportunity and may really help develop relationships and deepen understanding for the project ahead. Some report that the optimum time is around 18-24 months into the project, and that placements are particularly useful when the outputs can be used as part of the final thesis. A placement towards the end of the studentship may help with commercialisation of work, and/or be beneficial towards recruitment of the student by the industrial partner but leaving it too late may disrupt the student's ability to focus on their thesis and future plans.



Useful links

- [General information about ICASE / ICASE student's experience blogs](#)
- [UKRI Training Grant Terms and Conditions](#)
- [ICASE Grant Additional Conditions](#). These are the additional conditions from the last ICASE round and are intended for reference only. Minor changes may be introduced before the new ICASE grants are generated
- [Konfer](#). The Konfer platform helps you discover and engage with experts beyond your typical reach and discuss new ideas and opportunities for projects.
- [Guidance, policies and standards](#) on research ethics and integrity, open research and responsible innovation.