Industry collaboration for EPSRC studentships: PhD supervisors' guide

There are 5 potential routes to collaborate with an Industry Partner on EPSRC PhD studentships. This guide explains the key features of each one and gives contact details for further information.

For general information on CDTs, DTP & ICASE at Cambridge, see the <u>Cambridge EPSRC website</u>. (Please note the names ICASE/CASE/DTP/CDT are used across multiple Research Councils, but exact arrangements differ between Councils. This guide refers to EPSRC funding only.)

Please note that ALL collaborations in which an industry partner will contribute money or in-kind benefits must put in place a collaboration agreement. Please contact the ROO contracts team for your School early in the process when discussing potential arrangements with an industry partner:

- School of Physical Sciences: spscontracts@admin.cam.ac.uk
- School of Technology: <u>techcontracts@admin.cam.ac.uk</u>

Initial question: how much can your industry partner contribute?

Less than £33k: possible options are:

- ICASE additional partner (p3)
- Support a standard DTP studentship (p5)
- Partner with a CDT (p6)

£33k+: options include all of the above, plus:

- <u>ICASE</u> (p2)
- DTP CASE conversion (p4)
- Partner with a CDT (p6)

1. ICASE (industry contribution £33k+)

Key facts

- ICASE info on the EPSRC website
- Contact for more information: education@tech.cam.ac.uk (Naomi Hilton, EPSRC ICASE administrator)
- A company cannot apply for ICASE. They either have a voucher or they don't.
- Getting an ICASE voucher brings money to Cambridge that would otherwise go elsewhere.
- All ICASE projects since 2015 on the UKRI website. PhD supervisors can contact Naomi on education@tech.cam.ac.uk for a summary of this information in a digestible format.

How does ICASE work?

EPSRC allocates ICASE vouchers to businesses and related organisations, using an algorithm based on their financial contributions to EPSRC-funded research. Companies cannot apply for ICASE awards – they are automatically assigned them.

Companies choose which universities to redeem their vouchers with. Vouchers are allocated in late summer, and companies & academics have until late November to agree projects. Once a project is agreed, the industry PI registers the project on the EPSRC website – deadline end of November. At this point the voucher is formally assigned to Cambridge and you can begin recruiting for the student.

ICASE projects are often agreed off the back of an existing collaboration / relationship between an academic and a company. See which companies had vouchers for an Oct 2023 start - the 2024 list is likely to be broadly similar, at least for companies with 4+ vouchers.

What are the benefits of ICASE?

See Appendix 1, ICASE and DTP CASE conversions: benefits for academics, companies and students

Terms and conditions?

- 1. The company must hold a voucher! If they don't, ICASE is not an option for them. (Unless an unused voucher needs recycling see #5.)
- 2. The company must make a "minimum cash contribution" of £34,968 (for 2022/23 vouchers). EPSRC contribute £104k. The company can contribute more if they wish, either as a supplementary cash contribution or as benefits in kind.
- 3. The student gets a fully-funded co-sponsored 4-year PhD studentship.
- 4. The student must be offered a paid 3-month internship with the industry partner. Additional benefits are agreed at set-up and could include lab time, access to equipment, mentoring etc.
- 5. Very occasionally a company withdraws after a grant has started, and in these circumstances the EPSRC may allow the University to reassign the voucher to a different company, even one without an ICASE voucher. The minimum cash contribution applies to the new company. To enquire whether Cambridge currently has any vouchers with the potential to be reassigned, contact Naomi on education@tech.cam.ac.uk.

2. ICASE additional partner (industry contribution any size)

Key facts

- ICASE additional partner info on the EPSRC website (scroll down to "Additional partners")
- Contact for more information: education@tech.cam.ac.uk (Naomi Hilton, EPSRC ICASE administrator)
- Bringing on board an ICASE additional partner brings additional money to Cambridge
- All ICASE projects since 2015 on the UKRI website. PhD supervisors can contact Naomi on education@tech.cam.ac.uk for a summary of this information in a digestible format.

How does this work?

An ICASE project (#1 above) is allowed to have one additional industry partner (e.g. an SME). The additional partner does not need to hold a voucher. The only stipulation is that the additional partner must be UK based; beyond this, the nature and extent of the additional partner's involvement is at the discretion of the parties concerned. The collaboration agreement between the lead industrial partner, the University and the additional partner should formalise exactly how any contributions from the additional partner are delivered.

If you are interested in this option, speak to Naomi (<u>education@tech.cam.ac.uk</u>) to find out whether there are any potential ICASE projects in the appropriate area.

3. DTP CASE conversion (industry contribution £33k+)

Key facts

- CASE conversion info on the EPSRC website
- Contact for more information: SPSGradEd@admin.cam.ac.uk (Joanne Heritage, EPSRC DTP administrator); talk to your Dept Graduate Office about possibilities
- Uses money already assigned to Cambridge in our DTP allocation

How does a DTP CASE conversion work?

EPSRC DTP funding is allocated to Universities algorithmically, based on the amount of competitive EPSRC research funding they have already secured. Most of the DTP allocation is used for PhD studentships, and we are required to use 10% of it for CASE conversions.

In a CASE conversion, an industry partner makes a minimum cash contribution and the student is offered a 3-month placement with them, exactly as for ICASE. So the final studentship looks identical to ICASE, but begins with the University rather than with the industry partner.

CASE conversion studentships are awarded competitively. In Michaelmas Term the DTP administrator invites PIs to submit collaboration proposals, with a deadline of February. Successful PIs can recruit for the coming October.

What are the benefits of a DTP CASE conversion?

See Appendix 1, ICASE and DTP CASE conversions: benefits for academics, companies and students

Terms and conditions?

- To be eligible, organisations should have clear links to the UK, ideally having a UK-based research capability or commercial production capability, but links may take other forms such as having a large supply-chain infrastructure in the UK. They must have the capacity to host the student for placements, and this may be overseas.
- 2. The company must contribute a minimum of a third of the cost of a full studentship. As an example, a 3.5 year studentship will likely cost around £100,000, the industry contribution will therefore be £33,333. The company can contribute more if they wish, either as a supplementary cash contribution or as benefits in kind.
- 3. Students will be 100% funded by the EPSRC DTP, with the industry provision contributing towards consumable and training costs and/or a higher stipend rate.
- 4. Studentships can be 3-4 years in duration.
- 5. The student must be offered a paid 3-month internship with the industry partner. Additional benefits are agreed at set-up and could include lab time, access to equipment, mentoring etc. All costs relating to the internship must be covered by the industry partner.
- 6. If a company withdrew after a CASE conversion had started, this may open up a "space" for a new CASE conversion with a different company. Contact Jo Heritage at SPSGradEd@admin.cam.ac.uk if you want to discuss this possibility.

4. Support a standard DTP studentship (industry contribution any size)

Key facts

- <u>Info on the EPSRC website</u> (scroll down to end of page)
- Contact for more information: SPSGradEd@admin.cam.ac.uk (Joanne Heritage, EPSRC DTP administrator); talk to your Dept Graduate Office about possibilities
- Brings in additional money to Cambridge

How does this work?

The DTP Management Committee allocates DTP funds to departments each year. Departments have differing arrangements for allocating their funds to supervisors or students, so contact your Postgraduate Office/Administrator to find out how your department manages these.

Funding for a standard DTP studentship includes a stipend at the UKRI rate, fees at the home rate and a Research Training Support Grant (RTSG). It is permitted to collaborate with an industry partner on a standard DTP studentship, and EPSRC strongly encourage such collaborations. Unlike a CASE conversion, there is no minimum industry contribution. The maximum industry contribution is 50% of the total studentship. (The EPSRC contribution must be no lower than 50%.)

The industry contribution will support the agreed percentage of studentship costs, and can also be used to provide additional RTSG and/or to provide lab access/equipment. There is flexibility to allow departments and the partner to agree how the cost of the studentship will be split.

By supporting a studentship with industry funds, the collaboration allows the EPSRC grant to go further and fund more students in total.

5. Partner with a CDT (industry contribution any size)

Key facts

- 2018 CDTs: info on the EPSRC website
- 2023 CDT bid: info on the EPSRC website
- Current Cambridge CDTs
- Contact for more information: (i) contact the dedicated administrator of the CDT that you are interested in working with; (ii) for general queries, contact education@tech.cam.ac.uk (Dr Sally Birse, EPSRC CDT Hub manager)

CDTs are major projects awarded competitively; the value of a CDT is ca. £8m over 8 years. In 2018 Cambridge was awarded 6 CDTs; the March 2023 round is smaller and Cambridge hopes to be awarded 2-4 CDTs.

It is expected that University CDT bids include significant industrial leverage, in some cases up to 40-50%. However, industry collaborations can also be added once a CDT is up and running, and this is strongly encouraged. If you have a relationship with a company working in an area related to a CDT, contact the CDT administrator to find out options for potential additional collaboration.

Industry partners can become involved at any stage of a CDT:

- Fully fund one or more studentships either written into the initial bid, or arranged as an additional collaboration during the CDT
- Part-fund one or more studentships either written into the initial bid, or arranged as an additional collaboration during the CDT
- In-kind contributions of training, access to labs / equipment, mentoring, etc

Appendix I: ICASE and DTP CASE conversions: benefits for academics, companies and students

In 2019 a 10-year report on ICASE and DTP CASE was delivered. Companies, academics and students were asked to identify the benefits of the schemes to them.

Benefits to companies

- ICASE is used as an affordable and low-risk way to initiate collaboration with a new institution or academic that, if successful, grows into a larger relationship
- One company said that they purposely try to place ICASE projects with early-career academics to help them to establish themselves
- Company-university partnerships that began with ICASE have led to supporting professorships, investment in a joint-funded lab, and several Prosperity Partnerships

Benefits for academics

- Introduce new academics within that university to collaboration with that company
- Joint supervision enabling the university to maintain and sustain the relationship with the company
- Provide a unique and critical element of feedback and strategic direction for their research activity

Benefits for students

- Strong progression into R&D related roles in private sector and academia
- Exposure to commercial business practices and increased understanding of commercial priorities
- Interpersonal skills such as developing different reporting styles, handling meetings and progress reviews, working with non-technical people
- Opportunities to expand academic and technical skills
- Opportunities to publish and present at conferences and in-company

Information from EPSRC ICASE workshop for Universities May 2022; quoted with permission