EPSRC Centre for Doctoral Training in Connected Photonic and Electronic Systems (PES CDT)



Guidelines for research projects with industry partners

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This CDT welcomes industry and clinical collaboration on research projects, at both MRes and PhD level.

Below are the guidelines, and an outline of the process, for industry-based research projects in collaboration with the PES CDT.

1. Supervisors (industry and academic)

All industry-based projects for the PES CDT must have both:

- an Industry Supervisor/Representative at the partner organisation, and
- a Principal Academic Supervisor at either UCL or the University of Cambridge.

All Academic Supervisors must:

- 1. Be on the approved list of PES CDT supervisors, and
- 2. Be approved to supervise PhD students generally, by either UCL or University of Cambridge.

To be eligible to propose PhD projects, the Academic Supervisor must ALSO:

3. Have had an MRes project proposal accepted by the PES CDT in the current year.

Industry partners may collaborate with different Academic Supervisors on different projects, as long as the aforementioned requirements for Academic Supervisors are met.

A list of current approved Academic Supervisors for the PES CDT can be provided on request.







2. Project requirements

- Remit and focus: projects must be within the field of Photonic and Electronic and Systems.
- **Abstracts** must include clearly defined: research objectives, methodology, engineering/scientific novelty and relevance to photonic and electronic and systems.
- MRes mini-projects should be structured to run for 26-weeks part-time (Nov-May) or 13-weeks full-time (June-Aug) based on 40 hour working week FTE. Students will be assessed by oral presentation and written dissertation at the end of their MRes projects.
- **PhD research projects** are 3-years in duration and can be based in industry, or at either university, or a combination of industry and university. Research students are assessed by written thesis and viva presentation at the end of their PhD.

3. Industry support

MRes projects - support

Financial support is welcomed but not required for MRes projects. However, we recommend that the industry partner cover project expenses such as the cost of consumables, travel to the site (if student is not EPSRC funded), etc.

PhD projects - support

Financial support is strongly recommended for PhD projects. There are many ways industry can support PhD projects, financially and in-kind:

- paying for a fully-funded or part-funded studentship (i.e. stipend, fees, expenses),
- paying a stipend top-up,
- paying for student travel and expenses,
- providing equipment and access to facilities,
- providing staff time in the form of supervision, knowledge exchange and expertise/consultation.

Indicative costs for a fully-funded 3-year PhD studentship at UCL can be found on our studentships website: https://www.ucl.ac.uk/research-innovation-services/award-services/research-studentships/studentship-budgets

As a rule of thumb, if the student is based in the company, at least 50% of costs should be covered.

4. Submitting a proposal

Contact us

We encourage industry partners to discuss their research proposals with a member of the <u>PES CDT Management Team</u> or an Academic Supervisor from a relevant <u>Research Group</u>. A list of current Academic Supervisors can be requested by email from <u>photonics-cdt-admin@ee.ucl.ac.uk</u>.

Ideally, the abstract and supervisory responsibility for the project should be agreed with the Academic Supervisor before the proposal is submitted to the CDT. However, speculative proposals may be submitted online or via email on the form below. We will then put you in touch with and appropriate Academic Supervisor for further discussion.







Submit a project proposal

When the abstract and supervisory responsibility has been agreed, proposal can be submitted either:

- online: https://www.ceps-cdt.org/programme/how-to-propose-a-project
 or
- complete the project proposal form below, then email to photonics-cdt-admin@ee.ucl.ac.uk

5. Project Timelines

PhD research projects	
Submit proposal by:	early February
Study mode:	full-time, over 3 years
Project start:	October each year

MRes mini-project 1	
Submit proposal by:	end of August
Study mode:	part-time, 26 weeks
Project start/end:	November to May

MRes mini-project 2	
Submit proposal by:	late February
Study mode:	full-time, 13 weeks
Project start/end:	June to August

6. Student's expression of interest

When MRes/PhD project lists are released to students they are advised to contact the project Supervisors to discuss their interest and suitability before choosing a project. For industry-based projects students should contact both the Principal Academic Supervisor at the university and the Industry Supervisor/Representative at the partner organisation. This is strongly recommended for MRes projects. It is a requirement for PhD projects.

7. Interviews

Industry partners may wish to interview interested students during the project selection and allocation process.

If a student interview is required by the industry partner this must be stated in the original project proposal along with contact details and the deadline by which students should express their interest. If multiple project proposals are submitted, this information must be included on each proposal.

Once a student has expressed an interest in a project by contacting the supervisor, an interview should be arranged by the Academic and Industry Supervisor and agreed with the student.

The interview must be held prior to the project selection deadline set by CDT Management when project lists are released.







8. Intellectual Property (IP)

IP policies differ at each institution.

IP at UCL

UCL will own any IP generated by a UCL student.

UCL's IP policy: https://www.ucl.ac.uk/enterprise/about/governance-and-policies/ucl-intellectual-property-ip-policy

IP at University of Cambridge

At the University of Cambridge the entitlement to intellectual property rights in material created by a student shall rest with the student.

Cambridge's IP policy: https://www.admin.cam.ac.uk/univ/so/2012/chapter13-section2.html

IP agreements and funding of studentships

Any exception to the standard IP policies at either institution will require a signed written agreement between the university (where the principal academic supervisor is based), the student, and project partner. This applies to MRes and PhD projects and PES CDT students.

The CDT Director and IP team at the respective university must be consulted before an agreement is put in place.

Students are not permitted to sign agreements concerning their university studies without approval from the university.

IP terms specific to PhD projects

For PhD projects involving any grant of IP rights to a project partner, the following terms apply:

- I. A written contract covering IP and financial terms must be in place between the university (where the principal academic supervisor is based), the student and the partner organisation/company.
- II. Where it is agreed that IP is to be owned by the partner organisation, and the studentship is EPSRC funded, the partner organisation must provide financial support for the studentship. Illustrative funding levels for the grant of IP rights are: 50% of maintenance and fees, plus a student stipend top-up which is 100% funded by the partner organisation. Such projects involve substantial involvement with the partner and are deemed to be partner organisation-/company-led.
- III. Where a project is deemed to be partner organisation-/company-led and the student is primarily based at the company, the university's policies and regulations for 'working away / off-site working' should be adhered to:
 https://www.cambridgestudents.cam.ac.uk/your-course/graduate-study/your-student-status/work-away
 https://www.ucl.ac.uk/research/integrity/policies-and-guidelines/site-and-lone-working
- IV. Where a project is university-led the IP rights will normally be retained by the university. UCL policy is to offer first refusal on the licensing of IP to a partner providing financial support to the project. IP policies differ at each institution. See section above for the specific policy information.
- V. Students are not permitted to sign agreements concerning their university studies without approval from the university.







9. Contacts

CDT Management Team: https://www.PES-cdt.org/about

Directors UCL: Professor Alwyn Seeds <u>a.seeds@ucl.ac.uk</u>, Professor Cyril Renaud

c.renaud@ucl.ac.uk,

Dr Chin-Pang Liu chin.liu@ucl.ac.uk, Dr Lalitha Ponnampalam l.ponnampalam@ucl.ac.uk.

Directors University of Cambridge: Professor Richard Penty rvp11@cam.ac.uk, Dr Michael Crisp mjc87@cam.ac.uk, Professor Daping Chu dpc31@cam.ac.uk, Professor Rachel Oliver rao28@cam.ac.uk.

Research Groups: https://www.pes-cdt.org/research/research-groups

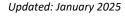
Administrators: Vicki McGrath v.mcgrath@ucl.ac.uk, Kam Lundin cps-sec@eng.cam.ac.uk

General enquiries: photonics-cdt-admin@ee.ucl.ac.uk

Research Groups: https://www.PES-cdt.org/research/research-groups

Project submission form: https://www.PES-cdt.org/programme/how-to-propose-a-project

Website: http://www.PES-cdt.org/









Project proposal form



EPSRC Centre for Doctoral Training Photonic and Electronic Systems (PES CDT)

Please ensure you follow these guidelines. Incomplete proposals and projects outside the PES CDT remit cannot be accepted.

Project criteria

- Projects must be within the field of Photonic and Electronic Systems.
 (i.e. have significant photonics content with emphasis on systems, communications and electronics). Purely materials focused projects are not suitable for this programme.
- Abstracts must include:
 - clearly defined research objectives,
 - methodology (i.e. what the student will be doing),
 - engineering/scientific novelty of the research,
 - how the project meets the remit of the <u>PES CDT</u>.
- We welcome project proposals with industry or with clinical engagement.

MRes dissertation marking

Primary supervisors on MRes mini-projects are required to mark/assess the written dissertation(s) of the student(s) they supervise at the completion of the project. This is normally at the end of May (project 1) and end of August (project 2). Each MRes dissertation must have two assessors/markers so you may be asked to be the second marker for an extra dissertation. We kindly request that you are available to complete the marking at these times.

Privacy statement

The information you provide may be published on publicly available sites to demonstrate impact and benefits of EPSRC funded research. Please ensure confidential information is not included in this summary.

Email completed forms to: v.mcgrath@ucl.ac.uk or cps-sec@eng.cam.ac.uk

<u>or</u>

Submit online at: https://www.pes-cdt.org/programme/how-to-propose-a-project







Project title		
Project type and dates	□ PhD (full-time, October start)□ MRes (part-time, November-May)□ MRes (full-time, June-August)	
Supervisor(s) name State if primary / secondary / industry		
Email		
Location	☐ Cambridge ☐ UCL ☐ Industry	
Abstract Ensure this section includes: objectives, methodology, novel content of the research and how the project meets the remit of the CDT in Photonic & Electronic Systems (PES). Provide as much detail as possible.		







Industry or Clinical Engagement
(For PhD projects)
ATAS statement - summary of research
International students choosing this project will require a summary of research statement to support their visa application. A single paragraph description of the project is usually sufficient. Supervisors may wish to provide this now (insert details below) or at the time of project allocation (we will request this if required).





