

Programme of study for Doctor of Philosophy – CDT Satellite Data in Environmental Science (Full Time mode only) 2023/24

Faculty responsible for the programme

Faculty of Environment. This CDT is delivered in partnership with the University of Edinburgh.

Programme length

The Standard Period of Study for the programme is 45 months and the Thesis Submission Deadline is 48 months.

Criteria for Admission

Minimum Bachelor Degree with First Class or Upper Second Class Honours (I or II(i)) in a relevant subject, or equivalent.

IELTS: 6.0 overall with at least 5.5 in all components. TOEFL IBT: 87 (minimum score of 20 in listening & reading, 21 in writing and 22 in speaking)

Year One

- The candidate will commence research under the direction of their supervision team will have at least 10 formal supervision meetings a year.

In addition, the PGR will participate in:

- 9 weeks of training offered in two 4-weeks blocks: Block One at Edinburgh University and Block Two at University of Leeds, plus a further week at the National Oceanographic Centre
- A Field Trip that will also include a week of specialist training
- Annual SENSE Industry Symposium
- The following formal monitoring and progression points will take place in year 1:
 - Month 3: Completion of the training plan
 - Month 8: First Formal Progress Report
 - Month 14: Completion of Transfer Process

Candidates will be required to undergo the formal assessment procedure for transfer to PhD status before the end of the first year of study. The decision to transfer will be based on the submission of appropriate material for assessment and all Postgraduate Researchers (PGRs) must undergo an oral examination by an assessment panel which must include at least two independent individuals who have not been involved in the supervisory support of the candidate. The PGR will be interviewed by the assessment panel in the form of a viva voce examination.

Year 2

- The candidate will commence research under the direction of their supervision team will have at least 10 formal supervision meetings a year.

- PGRs undertake 1 week of residential courses on discipline-specific training run by partner organisations in the CDT. They will also participate in further professional development training including:
 - Science Communication
 - Big Data
 - The Annual SENSE Industry Symposium
- The following monitoring will take place in year 2:
 - By month 24: Annual Progress Review

Year Three

- The candidate will commence research under the direction of their supervision team will have at least 10 formal supervision meetings a year.
 - 1-week residential course and other non-residential professional development training
 - Minimum 3 months Industrial Placement at the end of Year 3
 - Annual SENSE Industry Symposium
- The following monitoring will take place in year 3:
 - By month 36: Annual Progress Review and plan for submission within the 4-year deadline

Year Four

- The candidate will commence research under the direction of their supervision team will have at least 10 formal supervision meetings a year.
 - Annual SENSE Industry Symposium, Public Engagement and Outreach Activities
 - Month 48: Thesis submission

Learning Outcomes / Transferable Key Skills / Learning Context / Assessment for PhD

1. Learning Outcomes

On completion of the research programme PGRs should have shown evidence of being able:

- to discover, interpret and communicate new knowledge through original research and/or scholarship of publishable quality which satisfies peer review
- to present and defend original research outcomes which extend the forefront of a discipline or relevant area of professional/clinical practice
- to demonstrate systematic and extensive knowledge of the subject area and expertise in generic and subject/professional skills
- to take a proactive and self-reflective role in working and to develop professional relationships with others where appropriate

- to independently and proactively formulate ideas and hypotheses and to design, develop, implement and execute plans by which to evaluate these
- to critically and creatively evaluate current issues, research and advanced scholarship in the discipline
- to demonstrate systematic knowledge of and be able to critically assess, analyse and engage with the ethical and legal context of their research and any ethical and legal implications of their research.

2. Transferable (Key) Skills

PGRs will have had the opportunity to acquire the following abilities through the research training and research specified for the programme

- the skills necessary for a career as a researcher and/or for employment in a senior and leading capacity in a relevant area of professional/clinical practice or industry
- evaluating their own achievement and that of others
- self-direction and effective decision making in complex and unpredictable situations
- independent learning and the ability to work in a way which ensures continuing professional development

3. Learning Context

This will include the critical analysis of, and decision making in, complex and unpredictable professional and/or clinical situations. The structure of the programme will provide research and/or professional training, breadth and depth of study and opportunities for drawing upon appropriate resources and techniques. Opportunities will be provided for PGRs to:

- develop to a high level interests and informed opinions
- develop to a high level their design and management of their learning activities
- develop to a high level their communication of their conclusions
- make an original contribution to the field

PGRs will be expected to engage in the exercise of autonomous initiative in their study and work in professional environments.

4. Assessment

Achievement will be assessed by the examination of the candidate's thesis¹ and performance under oral examination. Assessment will involve the achievement of the candidate in:

- evidencing an ability to conduct original and independent broad and in-depth enquiry within the discipline or within different aspects of the area of professional/clinical practice normally leading to published work
- drawing on and/or developing a range of research techniques and methodologies appropriate to enquiries into the discipline/area of professional practice
- demonstrating independent critical ability in the application of breadth and depth of knowledge to complex issues within the discipline or specialist area of professional/clinical practice
- drawing on a range of perspectives on the area of study
- evaluating and criticising received opinion
- making reasoned and well-informed judgements on complex issues within the specialism whilst understanding the limitations on judgements made in the absence of complete data
- the written style and overall presentation of the thesis

¹ or alternative form of thesis

