UNRISK CDT 2027

NERC Centre for Doctoral Training - Understanding Uncertainty to Reduce Climate Risks (UNRISK)

Application process

Please ensure you have read the guidance on our website https://unrisk-cdt.ac.uk/ before applying. There is a 2-stage application process.

- **Stage 1:** All applicants to UNRISK, regardless of which university or department they are interested in (Leeds, UCL or Exeter), must submit the **University of Leeds online application form** (OLA) to obtain a 9-digit student ID number. As part of this stage you will also upload or send by email your proof of qualifications or provisional transcripts if you are currently studying, and any English language test results (if taken).
- **Stage 2:** Complete and submit the UNRISK application by working your way through the questions on this form.

The questions in this form are summarised at https://unrisk-cdt.ac.uk/application-process/ to enable you to prepare your answers offline. To avoid losing your data, we recommend that you prepare your answers to the structured personal statement offline and enter them in this form in one go. You can also click **Finish later** at any point to save and come back to complete the form later. Please note: you must 'submit' the form on completion for it to be considered.

Applications received after the deadline will not be considered.
Applications where we do not receive both the Leeds OLA and the UNRISK application form will not be considered.

If you have any questions related to the Leeds OLA form, please contact env-pgr@leeds.ac.uk. No advice can be provided regarding content of your responses.

Personal information supplied on your application is held in accordance with the Student Privacy Notice, which explains how the University of Leeds will collect and use your personal data.

University of Leeds Online Application check

The University of Leeds is managing all applications to the UNRISK CDT. Before proceeding with this UNRISK application form, you must first have completed stage 1 of the application process and submitted a University of Leeds online application.

1. I have completed and submitted the University of Leeds online application form and have my 9 digit student ID number
   *

- ◯ Yes
- ◯ No

Personal Details

2. First Name
*

0/32,000 characters

3. Last Name
*

0/32,000 characters

4. E-mail address
*

This will be used to keep you informed about the status of your application

example@example.com

5. Please add your nine digit student identification number *

Student ID Number (SID - this is generated when you submit your University of Leeds Online Application - please take extra care when entering this number as it will be used to manage your application).

0/9 characters

Project Details - 1

Please enter the details of the first project you wish to be considered for. You may choose a second project on the next page.
We do not accept applications from people wishing to submit their own proposal.

6. First project choice
*

- ◯ Supporting policymakers to incentivise effective and equitable land use change for Net Zero with AI
- ◯ Devolution of agri-environmental policy for enhancing nature and achieving net zero
- ◯ Quantifying uncertainty and spatial dependence in tropical forest forecasts to guide climate change mitigation
- ◯ Designing ensembles for efficient climate model emulation and uncertainty quantification
- ◯ Understanding uncertainty in risk modelling of European windstorms: the East Atlantic pattern and history matching
- ◯ Interpretable probabilistic AI for quantifying climate impacts on health
- ◯ Enhancing uncertainty quantification for climate modelling
- ◯ Quantifying the extent and intensity of marine heatwaves in a changing climate
- ◯ Tracking uncertainties from future storms to hazards and decisions
- ◯ Are forests becoming more vulnerable to climate extremes?
- ◯ Quantifying the likelihood of persistent extreme weather events in a changing climate
- ◯ Spatio-Temporal Models for Prediction of Extreme Rainfall Events
- ◯ Computing Rare Climate Event Probabilities Using Stochastic Modelling and Advanced Sampling Methods
- ◯ Exploring the uncertainty in recent global warming trends and related risks of extreme events with a global km-scale model
- ◯ Prioritising Conservation Planning Amid Climate Uncertainty
- ◯ Turning fragmented climate data into decision tools: who is most at risk, and how sure are we?
- ◯ Communicating model uncertainty in climate information to decision makers
- ◯ AI in climate information and communication: What's the benefit? What's the danger? What do people trust?
- ◯ Uncertainty in AI-Augmented Climate Risk Analytics for Global Food Supply Chains.
- ◯ Reducing Uncertainty in Aerosol-Driven Monsoon Variability and Climate Risk
- ◯ Unraveling Infrastructure Risk: Climate Extremes and the Future of Urban Resilience
- ◯ Will Greenland Reach a Tipping Point? Using Ice Age Evidence to Predict Its Future
- ◯ Reducing uncertainty in the effect of shipping on climate change.
- ◯ Changing climates: Unlocking the past to improve predictions of the future

- ◯ Seamless regional climate prediction under uncertainty and adaptation decision-making
- ◯ Innovative data driven approaches to predicting long-term European wind storm risk
- ◯ Climate uncertainty and complexity of compound events and implications for the water system in Eastern England
- ◯ Ways to achieve maximum feasible reduction in aerosol radiative forcing uncertainty
- ◯ AI mapping between drivers of future climate uncertainties and weather and climate impacts in Africa
- ◯ Will climate change make sewage pollution worse?
- ◯ Reducing uncertainty in the impact of climate on biodiversity
- ◯ Uncertainty in Urban Heat Risk: Thermal Exposure, Social Vulnerability and Adaptation in Tier II Indian cities
- ◯ Testing the ability of AI-based regional models to capture hydroclimate changes of the geologic past
- ◯ Compound Wind and Rainfall Extremes over Europe: understanding uncertainties from climate to financial risk
- ◯ UNBURNT: UNcertainty from wildfire hazard to BUilt-environment Response, adaptatioN and insurabiliTy
- ◯ Robust and scalable spatio-temporal modelling
- ◯ Statistical models for extreme European hail events with challenging data structures
- ◯ Humanitarian risk pools responding to a changing climate

7. Project based at which University

*

- ◯ University College London
- ◯ University of Exeter
- ◯ University of Leeds

Please note you will need to meet any entry requirements for Postgraduate Research admissions at the chosen university and the relevant School/ Department the project is based in. This may include English Language requirements, academic requirements etc. Please contact the project supervisors if you are unsure.

8. Lead supervisor first name

*

0/32,000 characters

9. Lead supervisor last name

*

0/32,000 characters

Project Details - 2 (Optional)

Please enter the details of the second project you wish to be considered for.
We do not accept applications from people wishing to submit their own proposal.

10. Second project choice

- ◯ Supporting policymakers to incentivise effective and equitable land use change for Net Zero with AI
- ◯ Devolution of agri-environmental policy for enhancing nature and achieving net zero
- ◯ Quantifying uncertainty and spatial dependence in tropical forest forecasts to guide climate change mitigation
- ◯ Designing ensembles for efficient climate model emulation and uncertainty quantification
- ◯ Understanding uncertainty in risk modelling of European windstorms: the East Atlantic pattern and history matching
- ◯ Interpretable probabilistic AI for quantifying climate impacts on health
- ◯ Enhancing uncertainty quantification for climate modelling
- ◯ Quantifying the extent and intensity of marine heatwaves in a changing climate
- ◯ Tracking uncertainties from future storms to hazards and decisions
- ◯ Are forests becoming more vulnerable to climate extremes?
- ◯ Quantifying the likelihood of persistent extreme weather events in a changing climate
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- ◯ Robust and scalable spatio-temporal modelling
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- ◯ Humanitarian risk pools responding to a changing climate

11. Project based at which University

- ◯ University College London
- ◯ University of Exeter
- ◯ University of Leeds

12. Lead supervisor first name

0/32,000 characters

13. Lead supervisor last name

0/32,000 characters

Please note you will need to meet any entry requirements for Postgraduate Research admissions at the chosen university and the relevant School/ Department the project is based in. This may include

English Language requirements, academic requirements etc. Please contact the project supervisors if you are unsure.

Structured CV - Education and Qualifications

First degree award (BSc, BA, Integrated Masters, etc.)

14. Name of programme studied
*

0/32,000 characters

15. Institution studied at
*

0/32,000 characters

16. Has this been awarded or is it ongoing?
*

- ◯ Awarded
- ◯ Ongoing

17. Expected completion date
*

18. Predicted grade
*

0/32,000 characters

19. Date awarded
*

20. Classification (grade) awarded for the first degree *

0/32,000 characters

21. Dissertation (or final project) title(s) - if applicable.

0/32,000 characters

22. Dissertation (or final project) grade/expected grade - if applicable

0/32,000 characters

23. I have uploaded transcripts of my degree or entered my predicted grade (provisional transcript) when I completed the University of Leeds online application form *

Please send transcripts to ENV-PGR@Leeds.ac.uk if you have answered no to this question.

- ◯ Yes
- ◯ No

Structured CV - Education and Qualifications

Second degree award (MSc, MA, Masters etc...)

24. I have completed or am undertaking a second/further degree
*

Second degree award (MA, MSc etc)

- ◯ Yes
- ◯ No

25. Name of programme studied
*

0/32,000 characters

26. Institution studied at
*

0/32,000 characters

27. Has this been awarded or is it ongoing?
*

- ◯ Ongoing
- ◯ Awarded

28. Expected completion date
*

29. Predicted grade
*

0/32,000 characters

30. Date awarded
*

31. Classification (grade) awarded for second degree
*

0/32,000 characters

32. Dissertation (or final project) title(s) - if applicable.
*

0/32,000 characters

33. Dissertation (or final project) grade/expected grade - if applicable
*

0/32,000 characters

34. I have uploaded transcripts of my degree/s or entered my predicted grade when I completed the University of Leeds online application form
*

Please send your transcripts to ENV-PGR@Leeds.ac.uk if you have answered no to this question.

- ◯ Yes
- ◯ No

Structured CV - Education and Qualifications

Additional relevant qualifications and experience

35. Please list any further formal qualifications relevant to the project applied for (at most 50 words)

36. Peer-reviewed publications are not required to apply to the UNRISK CDT, but if you have any please list them here.

0/32,000 characters

Structured CV - Education and Qualifications

Employment History & Work Experience or Internships

Please include in this section any **relevant** employment, work experience or internships. You will have the opportunity to refer to them and explain their relevance in the structured personal statement.

37. Employer 1 - Employer name

0/32,000 characters

38. Start date

39. End date

40. Job title

0/32,000 characters

41. State role and responsibilities (at most 20 words)

42. Employer 2 - Employer name

0/32,000 characters

43. Start date

44. End date

45. Job title

0/32,000 characters

46. State role and responsibilities (at most 20 words)

47. Employer 3 - Employer name

0/32,000 characters

48. Start date

49. End date

50. Job title

0/32,000 characters

51. State role and responsibilities (at most 20 words)

52. Employer 4 - Employer name

0/32,000 characters

53. Start date

54. End date

55. Job title

0/32,000 characters

56. State role and responsibilities (at most 20 words)

57. Please list any other relevant academic or professional training or experience you have gained not already covered. You will have the opportunity to refer to them and explain their relevance in the structured personal statement (at most 50 words).

Structured Personal Statement

58. What motivates you to do a PhD? (at most 100 words)
    *

59. What attracts you to a PhD in a centre for doctoral training and in UNRISK in particular? (at most 100 words)
    *

60. What motivates your first choice of PhD research project and the associated supervisory team? (at most 200 words)
    *

61. What motivates your second choice of PhD research project and the associated supervisory team (if applicable)? (at most 200 words)

62. What skills and experiences have prepared you for PhD research?
    We are looking for a well-evidenced narrative explaining how your knowledge, understanding, skills and experiences in education, research, work or life have prepared you for UNRISK. This section allows you to highlight aspects of your cv that are most relevant to the PhD you are applying for. (at most 400 words)
    *

63. Describe specific aspects or challenges of your first-choice project that you learned from talking to the supervisor. If you were unable to, briefly state why. (at most 200 words)

64. If you have a poor mark noted anywhere in your application and you can provide a specific, evidenced reason why this does not reflect your usual standards, please give information here. It should be something that was not already taken into account formally by the awarding institution. For example, a short illness which affected an exam would not be classed as a disability, so would otherwise go unrecorded. (less than 100 words)

Fee Status

65. Are you a UK/Home fees applicant? Guidance on whether you are eligible for home fee status is available here.
*

- ◯ UK/Home fees
- ◯ International / overseas fees

Applicants from under-represented groups

UNRISK is ringfencing 5 interview slots in 2027 for UK/Home fees applicants to **Leeds or Exeter** who self-identify as from under-represented groups within NERC. UNRISK has identified the following groups for UK/Home fee status applicants:

- o Black, Asian & minority ethnic groups (self-identify)
- o Disabled people (self-identify)
- o Applicants from a disadvantaged socio-economic background (self-identify, fulfil any of the four sub-criteria). Criteria based on the 2021 Social Mobility Commission Socio-economic diversity and inclusion Employers toolkit and recently updated government guidance.

If you wish to be considered for these ring-fenced opportunities, please complete this form. Please note this form is separate from the Equity, Diversity and Inclusion (EDI) questions which are part of the University of Leeds online application form (OLA) that you completed at Stage 1. This is because the data collected on the OLA is used solely for reporting to the funder (NERC) and not for EDI initiatives that we are developing in UNRISK.

Declaration

66. The information given on this form is complete and accurate to the best of my knowledge and I believe it gives a true description of my qualifications and experiences.
    *

- ◯ Yes