



## UNRISK CDT (2026)

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

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### Application process

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.

If you have any questions related to this form, please contact [env-pgr@leeds.ac.uk](mailto: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



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 \*

- ☐ Harnessing chaos to estimate climate hazards
- ☐ Quantifying climate projection uncertainty arising from the signal-to-noise paradox
- ☐ Using Statistical Emulators to Quantify and Understand Urban Climate Risks
- ☐ How effective would agroforestry be in the UK and where and when should we deploy it?
- ☐ Supporting policymakers to incentivise effective and equitable land use change for Net Zero with AI
- ☐ Midlatitude storm tracks and their impacts in a changing climate
- ☐ Reducing uncertainty in land surface model projections
- ☐ Exploring uncertainty due to clouds in modelled future climate change systematically
- ☐ Extreme value modelling of rainfall from high resolution radar data in a changing climate
- ☐ Probabilistic machine learning methods for blending weather forecasts towards optimal health risk prediction
- ☐ Quantifying risk of climate change to forest-based carbon projects
- ☐ AI mapping between drivers of future climate uncertainties and weather and climate impacts in Africa
- ☐ Reducing uncertainty in the effect of shipping on climate change
- ☐ Aerosols, Clouds, and Climate Projections: Tracing Uncertainty Across Scales
- ☐ Changing climates: Unlocking the past to improve predictions of the future
- ☐ Computing Rare Event Probabilities Using Large Deviations Theory, Path Integrals, and Sampling Based Methods
- ☐ Financial Implications of Uncertainty in Cascading Climate Shocks.
- ☐ Improving Predictions of Tropical Forest Response to Climate Change
- ☐ The power of present-day observations to constrain uncertainty in future climate projections
- ☐ Climate uncertainty and complexity of compound events and implications for the water system in Eastern England
- ☐ Integrating Data Mining, AI and Multi-Criteria Analysis for Water-Related Climate Impacts
- ☐ Modelling tropical storms using survival analysis and AI: understand, describe, predict
- ☐ Quantifying uncertainty and outlining plausible futures for compound heat-health risks
- ☐ Spatio-Temporal Models for Prediction of Extreme Rainfall Events
- ☐ Expert judgement and communication of uncertainty in the production of climate information

- ☐ Reducing uncertainty in glacial lake outburst flood (GLOF) risk and decision making
- ☐ Climate Change and Uncertainty in Catastrophe Modelling: Aligning UK Flood Risk Perceptions with Reality
- ☐ Freezing Points: Ice Nucleation Experiments, Climate Intervention, and the Politics of the Sky
- ☐ Epistemology of weather and climate prediction: What certainty can we have in the future of our environment?
- ☐ Detecting the benefits of climate mitigation across the Earth system
- ☐ Quantifying crop-climate risk across timescales to inform decision-making
- ☐ Constraining the role of tropical clouds in climate change using novel satellite observations
- ☐ African heatwaves in a warmer world: risks, impacts and adaptation
- ☐ Advanced Machine Learning Techniques for Quantifying Uncertainty in Climate Impact Assessment on Biological Systems
- ☐ Uncertainty and Predictability of Rainfall for Agricultural Planning in Kenya
- ☐ Testing the ability of AI-based regional models to capture changes in storm tracks using climates of the geologic past
- ☐ Uncertainty in climate change and its impact on earthquake risk
- ☐ Space-time extreme value models for heatwaves under different climatic conditions
- ☐ Forecasting the ecosystem and biogeochemical responses to sea ice change in the Southern Ocean

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 \*



## 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

- ☐ Harnessing chaos to estimate climate hazards
- ☐ Quantifying climate projection uncertainty arising from the signal-to-noise paradox
- ☐ Using Statistical Emulators to Quantify and Understand Urban Climate Risks
- ☐ How effective would agroforestry be in the UK and where and when should we deploy it?
- ☐ Supporting policymakers to incentivise effective and equitable land use change for Net Zero with AI
- ☐ Midlatitude storm tracks and their impacts in a changing climate
- ☐ Reducing uncertainty in land surface model projections
- ☐ Exploring uncertainty due to clouds in modelled future climate change systematically
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- ☐ Forecasting the ecosystem and biogeochemical responses to sea ice change in the Southern Ocean

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 \*

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](mailto: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](mailto: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 (less than 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 (less than 20 words)

42. Employer 2 - Employer name

43. Start date

44. End date

45. Job title

0/32,000 characters

46. State role and responsibilities (less than 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 (less than 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 (less than 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 (less than 50 words).

## Structured Personal Statement

58. What motivates you to do a PhD? (less than 100 words) \*

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

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

61. What motivates your second choice of PhD research project and the associated supervisory team (if applicable)? (less than 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. (less than 400 words) \*

63. Is there anything that you would like to tell us about your personal circumstances that affect your application? For example, caring responsibilities, bereavement, etc. This information will be used to contextualise the assessment of your application. (less than 100 words)

## Fee Status

64. 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 2025 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

65. 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