



IAPETUS2 Studentship Competition 2020

Staff Guidance

17th October 2019 // VI

// Background

1. IAPETUS2 NERC Doctoral Training Partnership has been awarded 16 notional studentships per annum as part of the DTP2 award (<https://nerc.ukri.org/funding/available/postgrad/reponsive/dtp/dtp2/>). We are seeking collaborative PhD project proposals for the 2020 round, of which 25% or more should be CASE awards.
2. Within the Partnership's bid for funding and accreditation from NERC it was committed that an annual open competition would be held to award studentships across the Partnership's 9 Host Organizations (HOs). This document outlines how IAPETUS2's annual studentship competition will operate in the 2019/20 academic year to recruit its 2020 intake.

// Available Funding & Support

3. IAPETUS2 has at least 16 fully-funded postgraduate studentships available for students commencing their postgraduate research studies in the 2019/20 academic year.
4. HOs may commit to topping-up and adding to the number of IAPETUS2 studentships available with own institutional funding, following the UKRI's 50% studentship funding rule. These additional awards are formally classified as IAPETUS2 studentships and are selected via this competition, with the highest-ranked student from the funding HO selected outside of the first 16 award-holders selected for funding.
5. Each IAPETUS2 studentship is for 3.5 years in duration, commencing from the start of the 2019/20 academic year, and provides the following financial support:
 - a) A full tuition fee waiver at the UKRI Home/EU rate;

- b) A tax-free maintenance grant set at the UKRI national rate (which in 2019/20 is £15,009 and guaranteed by UKRI to increase in line with the GDP deflator);
 - c) Considerable project-specific Research Training Support funding (£6,000 to £10,000);
 - d) Provision of IAPETUS2 training events, travel + subsistence; and
 - e) Support for one or two external placements of up to six months in total duration.
6. Funding is available for both full- and part-time students. Part-time awards are for up to 7 years in duration and funded at 50% of the full-time rate.

// Eligibility & Requirements for Funding

7. All postgraduate research projects approved by IAPETUS2 must:
 - a) Be within the [NERC disciplinary remit](#).
 - b) Be hosted within one of IAPETUS2's HOs and within one of the HO's academic units that was part of IAPETUS2's original bid to NERC for DTP funding. (See **Appendix 2**)
 - c) Involve a joint supervisory team consisting of supervisors from two or more of IAPETUS2's HOs, with usually the supervisor from another HO being classified as the student's second supervisor, and additional supervisors from the first HO named subsequently. Please consider whether the size of the supervisory team is appropriate for a PhD studentship. *It may be more appropriate to include some colleagues in an advisory role rather than as a supervisor.*
8. For a student to be eligible to be considered and receive an IAPETUS2 studentship they must meet NERC's student-eligibility criteria (see <https://www.ukri.org/funding/information-for-award-holders/grant-terms-and-conditions/>). These criteria require all students to be Home or EU domiciled, and only allows for EU students to

receive a full maintenance grant if they have been resident in the UK for the last 3 years prior to the commencement of their studentship.

9. All HOs must be aware fully of the rules and regulations governing IAPETUS2's studentships and ensure necessary checks are undertaken. IAPETUS2 will also check that projects and nominations comply with NERC and IAPETUS2 guidelines.

// Process

Stage I // Project Development & Approval

10. Eligible academic staff from across IAPETUS2's HOs are invited to submit proposed projects that are accredited by IAPETUS2 and available to prospective students to be undertaken whilst receiving an IAPETUS2 studentship.
 11. To manage demand for studentships, lead supervisors in successful projects for the 2019 round of IAPETUS2 studentships will NOT be eligible to be a lead supervisor in the 2020 round.
 12. Project proposals must be detailed within the [IAPETUS2 Studentship Project Online Form](#), which asks for the supervisory team to detail various aspects of the project, such as its methodology and timeline. The IAPETUS2 project-code number will be added once the completed form is approved. When completing the timeline, **please ensure that it is clear that funding ceases at the end of 3.5 years.**
 13. Once completed forms are submitted, the person who completed the form will receive an email confirming the form has been submitted successfully. The IAPETUS2 Director of the lead supervisor's HO, will approve (or otherwise) the proposal and then submit it to the IAPETUS2 Administrator to approve and publish on to the website.
 14. Within the Online Form, the supervisory team are also asked to detail:
 - a) The *Principal* IAPETUS2 Research Theme the project falls under (if any). Please see Appendix 3 for guidance in completing this section.
 - b) Which members of the supervisory team are Early Career Researchers (using the NERC definition of PhD + 8 years). Please list the ECR as the first supervisor on the form if this is indeed their role in the project, rather than listing a more senior colleague where the ECR is precluded from formally being first supervisor according to institutional regulations.
 15. The IAPETUS2 Administrator will check that proposed projects meet IAPETUS2's core requirements, and will then log and publish on IAPETUS2's website. Each project will be allocated an IAPETUS2 project-reference number, which is used to identify projects through the process and beyond. This number will be added to the project's web profile and shared with the principal supervisor.
 16. Project proposals can be developed and processed at any point up to Monday 18th November 2019; **however, all HOs are strongly advised to submit new projects into the competition as soon as possible, as this will enhance their visibility through advertising on the site.**
- c) The level of RTSG required to support the project. IAPETUS2 provides a minimum of £6,000 of RTSG to each project and amounts greater than this need to be listed **and justified**. A maximum RTSG of £10,000 will be available to a single project. In accordance with IAPETUS2'S RTSG policy, the final level of RTSG provided for each project will only be confirmed by IAPETUS2 at the end of the competition once the students making up the new cohort are confirmed. Remember to include details of all costs of specialist training that will not be covered by the core IAPETUS2 training programme.
 - d) Whether the project will involve one or more CASE partners and what their contribution will involve. NERC requires all DTPs to make 25% or more awards to CASE studentships, and NERC current CASE requirements are specified in Appendix 5. Where possible, letters of support from CASE partners should be provided at this stage; however, they can be shared with IAPETUS2 at any point through the process. Please remember a CASE partner can be added to a project/studentship at any point during the process until the Studentship panel meets in February 2019.
 - e) Whether any external (end-user) collaborative partners are involved in the project (see Appendix 6 for NERC's definition of an end-user collaboration).
 - f) How the project maps on to NERC's research areas in percentage units, identifying the primary classification from all the areas selected. To see the full list of NERC Research Areas, see Appendix 7.

17. Because of the changes involved in IAPETUS2, where a project was approved and advertised during the last studentship competition (2018/19) but not recruited to, it will NOT be considered automatically as an applicable project, and supervisors are asked to resubmit as appropriate using the new online form.

Stage 2 // Applications from Prospective Students

18. Prospective students must apply to the HO hosting the project(s) of their choice via the postgraduate student applications system of the partner organization. All applications must be made by Friday 10th January 2020 at 5 pm (GMT), which is the public deadline for applications that will apply across all of the Partnership.

19. Within a prospective student's application they need to specify clearly that they wish to be considered for an IAPETUS2 studentship and state the research project (s) that they wish to be considered for, quoting the relevant IAPETUS2 project references where possible. Although prospective students are encouraged to explore opportunities across the partnership, they may only finally be considered for an IAPETUS2 studentship for **one project**. After 13th January 2020, any prospective student who has made an application for more than one IAPETUS2 project will be contacted by email and asked to confirm which one of the projects they wish to be considered for. This does not prevent a prospective student also applying for a NERC-funded studentship outside of IAPETUS2.

20. Prospective students must provide/attach the following documentation/information to their application:

- a) Current CV.
- b) A cover letter written by the prospective student, no greater than 2 sides in length, detailing their reasons for applying and why they have selected the project that they wish to conduct.
- c) Two (or more) references, avoiding any references from any members of the supervisory team that are part of the research project that they wish to conduct.
- d) Full transcripts of previous qualifications obtained to date.

21. All HOs need to ensure that the correct application documents are provided by prospective students and that they are subject to the HO standard fee status assessment process.

22. All students who wish to be eligible for an IAPETUS2 studentship must also complete the IAPETUS2 Application Form found on the IAPETUS website by Friday 10th January 2020 at 5pm. Prospective Students who have not submitted both a Postgraduate student application to the HO hosting the project(s) and an IAPETUS application form on the IAPETUS website by the deadline will not be considered in the Studentship Competition.

23. All applicants who are successful in obtaining an IAPETUS2 studentship must apply to Durham for the Postgraduate Certificate in Environmental Methods. Further details of the application process will be circulated to those who are successfully offered an IAPETUS2 studentship in late spring 2020.

Stage 3 // Assessing & Nominating Candidates to IAPETUS2

24. Each HO is responsible for considering all applications that it has received from prospective students and deciding which to nominate to IAPETUS2 for consideration for a studentship. HOs should put in place transparent and robust procedures for identifying and ranking prospective students, which focus on the quality of the applications and their fit to the available projects. As part of this process HOs are strongly advised:

- a) To utilize IAPETUS2's studentship assessment criteria, which the Partnership uses to grade prospective students (see **Appendix 4**);
- b) Interview prospective students, where possible, which could involve the applicant visiting the Department/School or completing it virtually, via Skype etc.

25. The nomination of prospective students to the IAPETUS2 Studentships Panel should be led and coordinated by the partner organization's DTP Director, who will be the principal point of liaison. Each HO's DTP Director is required to submit to the IAPETUS2 Administrator a listing of nominated candidates to be considered by the IAPETUS2 Studentships Panel together with associated documentation for each nomination. Nominations must be ranked in order of quality by each HO.

26. Only one nominee can be put forward for each project. The IAPETUS2 Studentship Committee may demand-manage the number of nominations each HO can make in order to make the interview process practicable.

27. For each nomination an IAPETUS2 Studentship Nomination Form needs to be completed and submitted, with the documentation listed in Paragraph 20 attached.
28. **All completed and approved nominations must be sent electronically to contact.iapetus@durham.ac.uk by Friday 7th February 2020 (12 noon GMT).**

Stage 4 // Selecting Nominations for Funding

29. All nominations submitted to IAPETUS2 will go on to be considered by the IAPETUS2 Studentships Panel, which will meet on Wednesday 19th February 2020.
30. The IAPETUS2 Studentships Panel members will review and grade nominations prior to the Panel meeting using IAPETUS2's assessment criteria (see **Appendix 4**) and referencing the rankings and other contextual information that each HO has provided. The results of each member's scoring will be collated to generate a combined ranking of all of the candidates, which will then be critically considered by the Panel.
31. The Studentships Panel strongly encourages all HOs to provide contextual information on candidates in the studentship nomination form, such as observations drawn from interviews and other forms of assessment, to complement the nominee's personal and academic details.
32. Shortlisted candidates will be interviewed in Durham (or by Skype if travel is not feasible) on 18th February 2020.
33. The Panel will use the collated scores from the nominations evaluation and from the interview process (weighted 70:30) to produce a ranked list and thereby confirm which candidates have been successful and also IAPETUS2's reserve list of candidates, which will be called upon should selected candidates subsequently decline the offer of a studentship. There is provision to ensure that each HO receives at least a minimum number of studentships, and to ensure that ECRs have access to studentships.
34. NERC requires IAPETUS2 to ensure that, over the lifetime of the DTP, 25% of the total notional studentships awarded to the DTP are CASE. The Studentship Panel will therefore make its final decisions on the award of studentships in such a

manner as to ensure that a minimum of **30%** of the studentships it awards will be CASE studentships. Please note that unlike in previous rounds, NERC Research Institutes and certain Independent Research Organizations are NOT eligible CASE partners.

Stage 5 // Offering Studentships to Selected Candidates

35. Following the meeting of the Studentships Panel, IAPETUS2 will process and issue award notifications directly to selected candidates, whilst also informing all other nominees of the status of their application, which includes candidates placed on IAPETUS2's reserve list and those that have not been successful at this juncture. It is the responsibility of HOs to communicate with candidates that they have not chosen to nominate to the IAPETUS2 Studentships Panel about the status of their application.
36. Prior to the issuing of award notifications to successful candidates, a memorandum will be circulated to all HOs confirming the candidates that have been successful and those that are on the reserve list. If there are any specific issues and/or questions affecting candidates following the deliberations of the Studentships Panel, these will be followed up in the run-up to the issuing of this memorandum and any further contact with candidates.
37. In cases where a successful candidate decides not to accept the offer of an IAPETUS2 studentship, the next highest-ranked candidate on IAPETUS2's reserve list will be contacted and made an offer. This process will be conducted in such a manner as to ensure that a minimum of 30% of the studentships awarded are CASE studentships. Where a HO is aware that a selected candidate has decided to withdraw from the competition they should report this to IAPETUS2 immediately to ensure such decisions are communicated and appropriate action taken.
38. **Decisions regarding awards and the issuing of award notifications will take place by 21st February 2020, with selected candidates having until 18th March 2020 at 12 pm (GMT) to decide whether to accept or decline their offer**, a date which has been agreed for candidate decisions across the national NERC DTP2 network.

// Further Information

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Appendix I // Timeline

Dates	Activity / Milestone
Monday 18 th November 2019, 5 pm	Last date for new projects to be submitted on to the IAPETUS2 website using the Project submission form by supervisors
Friday 10 th January 2020 5 pm	Deadline for prospective students to apply for a studentship
Wednesday 15 th January 5 pm (Final List of applicants to projects)	Deadline for students who have applied to more than one project to decide which project (organised by Jen Gadouleau in consultation with Academic Leads)
Friday 7 th February 2020 12 noon	Deadline for Host Organizations to submit nominations to the IAPETUS2 Administrator
Tuesday 11 th February 2020 9 am	Nominations circulated to the IAPETUS2 Studentships Panel.
Tuesday 11 th February 2020 5 pm	Invitation to Interviews sent out
Tuesday 18 th February 2020	Interviews of shortlisted candidates
Wednesday 19 th February 2020	IAPETUS2 Studentships Panel convenes
Friday 21 st February 2020	All nominated candidates notified by IAPETUS2 of award decisions
Wednesday 18 th March 2020	Deadline for selected candidates to accept or decline their award offer. (NERC Universal Acceptance Date.)
Thursday 19 th March 2020 onwards	Onwards Reserve offers made (where required).

Appendix 2 // IAPETUS2 DTP Host Organizations

Partner Organization	Departments/Schools
British Antarctic Survey	All staff active within NERC's disciplinary remit.
British Geological Survey	All staff active within NERC's disciplinary remit.
Centre for Ecology & Hydrology	All staff active within NERC's disciplinary remit.
Durham University	All staff active within NERC's disciplinary remit.
Glasgow University	Engineering Geography & Earth Sciences Mathematics & Statistics Scottish Universities Environmental Research Centre Institute of Biodiversity, Animal Health & Comparative Medicine
Heriot-Watt University	School of Energy, Geoscience, Infrastructure and Society except those part of the Oil and Gas CDT and SUPER DTP
Newcastle University	All staff active within NERC's disciplinary remit except those part of the One Planet DTP
St Andrews University	Earth & Environmental Sciences Centre for Biological Diversity, and relevant parts of the Biomedical Sciences Research Complex (and not those part of the SUPER DTP) Geography & Sustainable Development
Stirling University	Biological and Environmental Sciences

Appendix 3 // IAPETUS2 Research Themes

In the IAPETUS2 Proposal, our research themes were broadly defined under five headings. The descriptors are outlined below, but note that they are descriptions of past and ongoing research excellence rather than being exclusive descriptions of future research. Please use the following descriptors to define which of the themes your project principally falls under, and note that it would be unusual to specify more than two themes. It is entirely possible that NERC-facing research carried out within the partnership does not fall under any of these themes, and projects that fall outwith these themes will be assessed in exactly the same way as all other proposals. We aim to support research across the NERC remit, and there are no quotas for each theme, but we will seek to attain a balance of projects under different themes over the lifetime of IAPETUS2.

1 Global Environmental Change documents and interrogates the proxy records archiving the patterns, rates, durations and timing of past climate and environmental change. It has two foci:

- Ice-Sheet Dynamics and Sea-Level Change researches the mechanisms that drive melting of polar ice sheets via quantifying rates and modelling of ice loss and ice-sheet evolution under changing climate and the subsequent impact of sea-level change.
- Changing Environments and their Reconstruction creates the timescales, geochemical proxies and instruments used for monitoring, calibrating and reconstructing environmental change, including in extreme environments, and its impact on human activities and evolution.

2 Geodynamics-Geochemistry-Resources investigates the structure and processes governing the solid and deep Earth, volatile cycling, formation and evolution of continental crust, plate tectonic mechanisms and natural resources. It has three foci:

- Deep-Earth Processes studies mantle rheology, plate-mantle interactions, element cycling, Earth's thermal and compositional evolution and its geodynamo.
- Crustal Processes focusses on the geochemical and geophysical characterization of the interactions between Earth's surface and deep Earth, subduction processes and the genesis of continental crust.
- Geoenery and Mineral Resources determines the availability and environmentally sustainable extraction of conventional and unconventional hydrocarbon-based resources, low carbon alternatives, recycling of energy by-products and discovery of rare earth elements and ore formation.

3 Biogeochemical Cycles determines the rates and durations of elemental cycling and stable isotope geochemistry, particularly carbon, nitrogen, sulphur and phosphorus, through the Earth System from the Archaean to the present. It addresses biospheric evolution, planetary habitability, changing ocean-atmosphere compositions and long-term climate and ecosystem productivity through two foci:

Modern Carbon and Sulphur Cycles studies determine the physical, chemical and microbial processes influencing the natural and anthropogenic fluxes through Earth's surface environments via three research strands: *Soil, Headwaters-to-Coastal* and *Marine Carbon and Sulphur*.

Biogeochemical Cycle Evolution studies the key biogeochemical cycles and Earth's redox chemistry and how those have transformed and influenced the diversification of life and prehistorical composition of the atmosphere through geological time.

4 Hazards: Processes-Risk-Resilience focusses on hazards via novel technology for real-time monitoring and modelling and providing hazard advice to the UK government and stakeholders. There are three research foci:

Volcanoes, Earthquakes, Landslides and Avalanches documents and studies those phenomena in real time and analysis of the archives of past events.

Fluvial and Urban Processes focusses on developing physical and statistical models to better quantify risk from and prediction of extreme rainfall, groundwater flooding and pollution.

Marine and Coastal Geohazards focusses on those phenomena that affect the coastal regions through the offshore to the deep marine.

5 Evolution-Biodiversity-Ecosystems evaluates the function, behaviour and evolution of biodiversity in natural systems through integration of knowledge from molecular to landscape scales using genomics, modelling, Earth observation and GIS via two foci:

Evolution and Systematics study the environmental and evolutionary processes that determine behaviour, population structure, speciation and overall ecosystem function, including disease epidemics and responses to

environmental change.

Conservation Ecology and Environmental Change Biology uses field monitoring (long-term and large-scale), Earth observation, lab- and field mesocosm experiments and statistical and process-based modelling to integrate and analyse scientific, social and economic data.

Appendix 4 // Student Assessment Criteria

Marking Scheme for Initial Nomination

Each criterion is marked out of 10 by Reviewers and is then weighted to reflect their respective importance to the total score of each application.

Description	Scoring
Very High Priority for Funding	9 to 10
High Priority for Finding	8
Should be Funded if Possible	7
Suitable for Funding in Principal, but in a Competitive Context is Not a Priority	6
Not Recommended for Funding	1 to 5
Not Sufficient Evidence to Judge Proposal	0

Criteria

All eligible nominations for studentships will be assessed by the IAPETUS2 Studentships Panel against the following criteria.

Criterion	Weighting
<p>1. Background</p> <p>This criterion includes the qualifications and references of the nominee and should focus on the candidate's ability to conduct high-quality doctoral research in the environmental sciences. At least a good 2:1 is required at undergraduate level; whilst a good Masters degree and/or significant relevant work experience may be used to support lower undergraduate performance.</p> <p>Reviewers should focus carefully on the extent to which the reference writers support the candidate and other contextual information provided. Strong testimonials will focus on the particular abilities of the candidate that make them suited for postgraduate research and the project that they have selected, and should support them unreservedly. A weak reference will indicate significant problems or provide 'stock' or general replies.</p>	50
<p>2. Project Fit</p> <p>Candidates need to clearly demonstrate how their skills, qualifications, experience and interests fit to and support the project they intend to study. Reviewers should reference the candidate's background, testimonials, personal statement and other contextual information as evidence when considering this criterion.</p> <p>A strong application will clearly articulate the candidate's interests and experience to the project, whilst also outlining their anticipated training and development needs during their studies.</p>	40
<p>3. Future Potential</p> <p>Reviewers will also consider the candidate's future potential to deliver their specific research project and contribute to the wider academic environment and discipline in which they will be active.</p> <p>A strong candidate will demonstrate that they are well equipped to deliver their proposed research project and also able to engage in other related activities and initiatives that will not only support their individual research, but the wider IAPETUS2 and/or disciplinary community.</p> <p>Contextual information arising from interviews and other forms of interaction/assessment may provide Reviewers with further useful evidence as to the future trajectory of the candidate.</p>	10

Interviews and Overall Evaluation

All nominees will be interviewed in a single set of panels (see Appendix I) using a set of common questions about their application and PhD. Nominees are requested to ensure that they are available in person (usually in Durham) or by Skype on the advertised dates. These interviews are weighted 30 % in the overall evaluation of the studentships panel, with 70 % coming from the evaluation of the initial nomination.

Appendix 5 // CASE Studentships

1. NERC defines CASE studentships as collaborative training studentships where students interact and engage with external organizations in the private, public or third sectors during the completion of their research and training.
2. A standard NERC CASE studentship must meet the following requirements:
 - a) The external CASE partner must be a non-HEI organization. Additionally, university spin-off companies where the HEI owns less than 50% of the controlling interest can also act as CASE partners. NERC Centres and certain IROs (see list at <https://www.ukri.org/funding/how-to-apply/eligibility/>) are NO LONGER eligible as CASE partners on a DTP2 studentship.
 - b) The CASE Partner must host the student for at least 3 months or more during their studentship.
 - c) The CASE partner must contribute at least £1,000 per annum for 3 years as an addition to the student's RTSG. This payment should be made to the Host Organization and not paid directly to the student.
3. The day-to-day management of CASE studentships, encompassing entering into the relevant legal agreements and contracts is handled by the host HO. A dedicated CASE collaborative agreement, which covers the financial support being provided, the liabilities and obligations of the respective parties and the management of intellectual property, must be entered into for each IAPETUS2 CASE studentship.

Appendix 6 // Collaborative Studentships

The DTP2 Announcement of Opportunity document defines Collaborative Studentships as follows:

In addition to CASE studentships, any number of DTP studentships may be 'collaborative' (i.e. no formal partnership requirements and/or project partners **not** eligible to be CASE partners). These collaborative studentships will also be monitored and recorded through reporting processes and will be formally recognised by NERC as a success metric as part of its ongoing monitoring of DTP performance. Proposals must describe how such collaborative relationships will be developed and maintained, and the benefits they will provide to students' training.

Appendix 7 // NERC Research Areas

NERC require information about advertised and funded projects to see how they align to the breadth of NERC topics, as well as to evaluate whether there is any bias in topics supported. This form is based on the NERC Research Areas (see <https://nerc.ukri.org/funding/application/howtoapply/topics/> for further details).

On the form, you will be asked to select all the categories that most align with this project. The total category weight for all categories must be 100%.

- Palaeobiology
- Science-based archaeology
- Atmospheric kinetics
- Boundary layer meteorology
- Land-atmosphere interactions
- Large scale atmospheric dynamics and transport
- Ocean-atmosphere interactions
- Radiative processes and effects
- Stratospheric processes
- Tropospheric processes
- Upper atmosphere processes and geospace
- Water in the atmosphere
- Climate and climate change
- Palaeoenvironments Regional weather and extreme events
- Behavioural ecology Community ecology
- Conservation ecology
- Population ecology
- Systematics and taxonomy
- Population genetics and evolution
- Earth engineering
- Earth resources
- Geohazards
- Glacial and cryospheric systems
- Hydrogeology
- Hydrological processes
- Mantle and core processes
- Physics & chemistry of earth materials
- Quaternary science
- Sediments and sedimentary processes
- Tectonic processes
- Volcanic processes
- Environment and health
- Environmental microbiology
- Environmental genomics
- Planetary surfaces and geology
- Environmental physiology
- Ecotoxicology
- Pollution
- Biogeochemical cycles
- Ecosystem-scale processes and land use
- Land-ocean interactions
- Ocean circulation
- Earth surface processes
- Soil science Water quality
- Environmental biotechnology
- Environmental informatics
- Survey and monitoring
- Technology for environmental applications