

Irish Research Council

Call for Nominations for the Irish Research Council-European Space Agency Traineeship Scheme 2019

Introduction

The mission of the Council is to enable and sustain a vibrant and creative research community in Ireland. The Council is an associated agency of the Department of Education and Skills and operates under the aegis of the Higher Education Authority. The core function of the Council is to support excellent research and opportunities across all disciplines and career stages. It promotes diverse career opportunities for researchers by partnering with enterprise and employers. The Council also has a role in supporting research with a societal focus and has established partnerships across government and civic society.

The Irish Government has agreed to actively participate in the international research programmes of the European Space Agency (ESA), as set out in *Innovation2020*, Ireland's strategy for research and development, science, and technology. The Council is committed to cultivating skills and expertise in space exploration and technologies, as well as developing the training of master's graduates¹ in Ireland. The Irish Research Council engaged with Enterprise Ireland, the national delegate for the Irish space industry, to establish training needs and strategic priorities for the country. These needs are reflected in the traineeship opportunities provided by the ESA.

In 2016, the Council officially agreed to fund trainees in ESA centres across Europe. The Council is promoting an opportunity for master's graduates to complete a traineeship at the ESA beginning October 2019.

I. The Traineeship

The Irish Research Council-European Space Agency Traineeship provides practical training in ESA projects. Individual opportunities are outlined in the accompanying documents. The traineeship integrates participants with expert professionals and emphasises tutor-directed, degree-related, real-world task completion.

The successful candidates for the traineeship will spend one year at the ESA with a possible extension of a further year. During this time, the trainee will be assigned to specific projects and will contribute to the development of leading-edge research and knowledge in the areas of science operations, data analytics, artificial intelligence, telecommunications, navigation, mission operations and human spaceflight. The traineeship is particularly relevant to master's graduates who are interested in developing a career in the space industry or applied technologies.

¹ Master's graduates of Republic of Ireland Higher Education Institutions. Graduates must be of Irish or ESA member state nationality. A master's graduate should hold a master's degree or equivalent as specified in the Irish National Framework of Qualifications Level 9 award. See <http://www.nfq-gqi.com/> for more details.

II. Stipend and conditions

The duration of the traineeship is one year with the possibility to extend for a second year if agreed by all parties. Successful trainees must be available to commence on the indicative date in October 2019 as provided by the ESA. Deferral of the commencement of the traineeship is not permitted. The training period cannot be interrupted unless special circumstances occur, such as medical leave. In such special cases, the interruption period will be duly authorised by the Council and the ESA.

The Irish Research Council-European Space Agency Traineeship will consist of the following:

- i. a monthly stipend of €2,160;
- ii. a one-off relocation reimbursement of €2,160, payable after the first month;
- iii. annual health, accident, risk and travel insurance that covers the trainee for the duration of their traineeship;
- iv. trainees may take annual leave up to a total of 30 working days, in addition to the official holidays of the host country;

III. Eligibility criteria

This call invites research offices from higher education institutions (HEIs) to nominate talented master's graduates who would be interested in and would benefit from completing a traineeship in ESA. Nominating HEIs include universities and institutes of technology (See VII).

The call is competitive and final decisions on granting the traineeship rest entirely with ESA. Nominees must pass a staged selection procedure consisting of a national process, followed by ESA's own assessment. The Irish Research Council runs the Irish national process.

Nominees must:

- i. have Irish or ESA member State nationality²;
- ii. be resident in the Republic of Ireland for three of the past five years;
- iii. have completed a master's degree no later than September 30, 2019 in an eligible Irish HEI;
- iv. meet the master's degree specifications in the individual opportunities;
- v. have a minimum of 2.1 or above in their undergraduate studies.

² This is a condition set down by the ESA under the partnership agreement.

IV. How to apply

Graduates nominated by the Research Offices should complete the application process online. Steps involved are as follows:

1. Nomination by the Research Office

Research Offices should select up to five talented master's graduates for nomination. The Research Office should **only** share the link to the online application system with their nominees.

2. Online Application System for Nominees

The Council will share the link to the online application system with Research Offices. Research Offices wishing to nominate individuals should share the link with the selected nominees **only**.

- a. **Nominees** should create a Profile in the online system and complete the relevant fields. Nominees should confirm the Academic Referee details. Nominees may apply for up to two positions and indicate their preference.
- b. **Academic Referees** will be requested to complete the Academic Reference form for the relevant candidate on the online system. An email will be sent to the Academic Referee with the relevant link and information.
- c. **Research Offices** will be notified of the submission of both the Nominee's and Academic Referee's forms and will endorse the applications which the institution wishes to nominate for the scheme.

3. Endorsement by the Research Office

The Research Office will be asked to endorse the online application on the system and to conclude the process by submitting the Research Office Declaration on the online system.

In order for an application to be evaluated, the following documents are required to be uploaded in the online system by the nominee:

1. Statement of Motivation
2. CV (two-page limit).
3. Scanned copies of the nominee's undergraduate and master's degree transcripts to date.

The closing date for the online submission of completed and endorsed nominations is as follows:

- **Nominee Form - noon (Irish time) 14 June 2019**
- **Academic Referee - noon (Irish time) 21 June 2019**
- **Research Officer - noon (Irish time) 28 June 2019**

Please note: Nominee forms, Academic References and Research Office endorsements received after the relevant deadline will not be considered.

All nominees must meet the eligibility requirements and the relevant disciplinary criteria outlined in the ESA traineeship opportunity. Institutions should nominate only those individuals who have confirmed a genuine willingness to take up a traineeship should it be offered by ESA. The Council

reserves the right to decline any nomination that does not meet the eligibility criteria or requirements for the scheme. Unsolicited information, ineligible, incomplete or misleading nominations not be considered. This call is restricted to Irish HEI master's graduates as described in the individual opportunities (See Appendix II and visit the [call webpage](#) for full training opportunities details).

V. Selection of nominees

Nominees must pass a staged selection procedure. Following HEI nomination, an independent panel will shortlist individuals for an interview. Nominees must be available for face-to-face interviews on **24 July 2019**. It is not possible to be reimbursed for any travel in relation to the interviews. Shortlisted nominees will be sent forward by the Council for review by ESA nominated tutors, who make the final decision.

VI. Commencement of the traineeship

Offers will be conditional upon receipt of all required documentation, including evidence of nationality, completion of degree and residency. Trainees must also comply with the ESA agreement sent to them upon offer. Trainees are also expected to have; or have applied for a European Health Insurance Card and international health insurance cover by the commencement of the traineeship.

Queries

For reasons of fairness to all nominees, queries must be submitted to the research office at the nominee's HEI. Frequently asked questions will be regularly updated on the Irish Research Council website. Nominees are asked not to contact the Irish Research Council directly unless there is a technical issue with the online system.

VII. Eligible Higher Education Institutions (HEIs)

A recognised higher education institution in Ireland must be:

- a) Within the meaning of Section One of the Higher Education Authority Act, 1971;
- b) And/or approved by the Minister of Education and Science for the purposes of the Free Fees Initiative;
- c) And/or in receipt of some other form of public funding from the Department of Education and Skills.

For the full list of eligible HEIs, please click [here](#)

APPENDIX I

ADVICE IN PREPARING FOR NOMINATION

Statement of Motivation

Graduates nominated by the Research Office should upload, together with the two-page curriculum vitae, a statement of motivation outlining why they wish to go forward for this opportunity and how it fits into their developmental plans. They might wish to outline any specific accomplishments in scientific, professional work or community service. In the statement of motivation field, please include:

- The first and second (if relevant) traineeship preference;
- Reference to the relevant master's degree, overall result and completion date. If the result is not known at the time of nomination, please enter the overall grade to date, which needs to correspond with the attached transcripts.

Academic references

Please bear in mind that the academic reference is an important factor in the evaluation process. The nominee should ensure that the Academic Referee is aware of the Nomination and that the Academic Reference form is completed in the online system by the appointed deadline. The Academic reference may:

- point out any specific accomplishments of the candidate in scientific, professional work or community service;
- provide observations on the characteristics and achievements of the nominee and comment on their suitability for a traineeship with the ESA.
- referees/nominating institutions might wish to consider academic 'fit', experience to date, cultural sensitivity and adaptability to a new country.

Research Office Declaration

Once the relevant online forms are submitted by both Nominee and Academic Referee, Research Offices may endorse the Nomination by agreeing to the Research Office Declaration on the online system. **Only** nominations endorsed by Research Offices will be considered for the IRC-ESA Traineeship Scheme assessment process.

APPENDIX II

TRAINING OPPORTUNITIES

Reference	Title	ESA Station
IE-2019-EOP-SDE	- EO for Marine and Coastal Environment Monitoring	ESRIN
IE-2019-EOP-SDD	- Leveraging IT advance for EO	ESRIN
IE-2019-SCI-ODS	- Prototype a scheduling tool for instrument operations of the Solar Orbiter Mission	ESAC
IE-2019-OPS-SC	- System Engineer in the Clean Space Office	ESTEC
IE-2019-TEC-MMO	- Optical Performance Analysis	ESTEC
IE-2019-TEC-QEC	- Component Lab Engineer	ESTEC
IE-2019-TEC-QEE(1)	- Quality and reliability of commercial off-the-shelf passive optical components for space applications	ESTEC
IE-2019-TEC-QEE(2)	- 4D Printing Reversibility & Space Evaluation	ESTEC
IE-2019-TEC-QEE(3)	- Effects of contamination on the performance of space optics and detectors	ESTEC
IE-2019-TEC-QEE(4)	- Advanced Thermal Analysis of Space Materials	ESTEC
IE-2019-OPS-OS(1)	- Artificial Intelligence and Data Analytics for space operations	ESOC
IE-2019-OPS-OS(2)	- Innovative web applications for AI powered spacecraft operations	ESOC
IE-2019-HRE-OM	- Spaceship EAC Project - Future Missions at EAC	EAC

ESA Stations Acronyms

ESA HQ - Paris, France

ESTEC - Noordwijk, The Netherlands

ESOC - Darmstadt, Germany

ESRIN - Frascati, Italy

ESAC - Villanueva de la Cañada, Spain

ECSAT - Harwell, United Kingdom

EAC - Cologne, Germany

ESA Member States

ESA's 22 Member States: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Spain, Sweden, Switzerland and the United Kingdom.