

CENSIS Doctoral Research Programme

Call for Projects beginning AY 2019-2020

1. Introduction

CENSIS funds industrially relevant doctoral research activity that supports advancements in sensor and imaging systems and the Internet of Things and brings technology in these spaces closer to market.

In its second phase of funding (2018-2023), CENSIS seeks to support a portfolio of research activity via PhD and EngD (Engineering Doctorate) projects. All project applications will be assessed by way of competition in an annual call.

This call is aimed at PhD and EngD projects commencing autumn 2019. This document sets out the rules, processes and guidelines on how this competition will be operated.

Up to six (6) projects may be awarded in this funding round, with studentships of a maximum of four (4) years in duration able to be supported.

CENSIS reserves the right to alter these processes in order to comply with the imposed timetable. Any changes of process will be notified to all entrants.

2. Criteria for research projects

All projects submitted as part of the call must meet the following criteria:

1. The project must be led by Scottish University Partner (University Partner):
 - Edinburgh Napier University
 - Glasgow Caledonian University
 - Heriot Watt University
 - Robert Gordon University
 - The James Hutton Institute
 - SRUC
 - University of Aberdeen
 - University of Abertay
 - University of Dundee
 - University of Edinburgh
 - University of Glasgow
 - University of the Highlands and Islands
 - University of Stirling
 - University of St Andrews
 - University of Strathclyde
 - University of the West of Scotland

2. PhD studentships are assumed to last 3.5 years. EngD studentships are assumed to last four (4) years. PhD studentships delivered via a Centre for Doctoral Training (CDT) are assumed to last four (4) years.
3. The project should be supported by an industry partner OR clearly demonstrate the potential for industrial relevance by the innovative use, advancement or application of sensing, imaging and/or IoT. Industrial engagement, evidenced through a letter of support, is strongly encouraged as part of a project submission. CENSIS is particularly interested in industrial engagement from organisations with a base in Scotland or where the outcomes of the research project will favourably impact the Scottish economy.
4. The project must align with one or more of CENSIS's major themes:

Sensing

- Sensing and measuring/advanced devices and fabrication, including fabrication and characterisation facilities and expertise.
- Signal processing, communications and networking – particularly low power/high security.
- Advanced data analysis and visualisation, with a focus on data analysis rather than data collection.
- Remote and distributed systems/sensing, addressing challenges in deploying sensors across wide/remote geographic areas.

Imaging

- Imaging and optical measurement techniques, predominantly at wavelengths from the visible, through the infrared to microwave frequencies, and including quantum sensing and imaging and technologies. Includes hyperspectral imaging, remote sensing, surveillance and consumer imaging, medical and ophthalmic imaging.

Internet of Things (IoT)

- IoT systems: The networking of physical objects to enable communication and data exchange with each other, typically without the need for human intervention, with a focus on system-level aspects of IoT.
- IoT cyber security: Addressing security and resilience challenges in the design, manufacture and application of IoT devices and techniques.

3. Value and funding

A maximum of 50% cash funding is available towards the cost of a studentship.

The maximum contribution available will be calculated and fixed at time of application and will be based on published [UKRI guidelines for fees/stipend](#). As assumption of a 2.5% annual increase for inflation is made.

Based on the cost of a studentship for AY 2018-19, the total costs for one studentship for a **maximum of four years** will be assumed to be:

	2018/19 funding levels - UKRI	Est. total costs (assumes 4 years + 2.5% annual increase)
Fees	£4,260 (2018/19)	£18,132
Stipend (based on PhD stipend levels)	£14,777 (2018/19)	£62,896
Total studentship value	£ 81,028	
50% available from CENSIS	£ 40,514	

Based on the cost of a studentship for AY 2018-19, the total costs for one studentship for a **maximum of 3.5 years** will be assumed to be:

	2018/19 funding levels - UKRI	Est. total costs (assumes 3.5 years + 2.5% annual increase)
Fees	£4,260 (2018/19)	£15,781
Stipend (based on PhD stipend levels)	£14,777 (2018/19)	£54,740
Total studentship value	£ 70,521	
50% available from CENSIS	£ 35,261	

The University Partner will be responsible for the remaining costs of the studentship and any other remaining costs to the project. This will include consumables, training, travel and any top-up payments to the student stipend.

Projects where the CENSIS contribution requested is less than 50% of the total studentship value may be considered more favourably than projects of equivalent quality.

Studentship monies will be transferred directly to the University Partner by CENSIS in a single payment made annually in arrears.

4. Recruitment

With regards recruitment, applicants can be from the UK, EU or International. However, at application stage, fees are assumed to be that of a UK student and any additional fees relating to international recruitment must be met by the University Partner.

The student must be in place no later than 31 December 2019 otherwise the offer will be withdrawn, and the studentship will no longer be funded by CENSIS.

5. Interaction with CENSIS

The student shall provide CENSIS with a six-monthly report using a template provided by CENSIS to include a summary of progress and achievements relating to the studentship.

The University Partner and the student shall acknowledge CENSIS as a funder of the project in all publications and other forms of communication such as posters, presentations and at conferences.

CENSIS shall invite the student to attend relevant events and workshops delivered or organised by CENSIS, including the annual CENSIS conference, the Technology Summit.

6. Project submissions

Submissions should be made on the CENSIS PGR Project Proposal Form and returned along with supporting documentation. The call will open on 11 October 2018 and the closing date will be 22 November 2018.

7. Maximum number of project submissions

A maximum number of five (5) projects may be submitted in an annual call by any single EngD Centre or CDT programme.

8. Timings

Process	Timing	Action
Call opens	11 Oct 2018	Call publicised by CENSIS.
Call closes	22 Nov 2018 (17:00)	Applications must be received by CENSIS.
Review process begins	23 Nov 2018	Applications to be checked and passed for review.
Proposals reviewed	26 -30 Nov 2018	Applications reviewed by at least three assessors.
Projects approved	4 Dec 2018	Funded projects approved.
Applicants notified	From 5 Dec 2018	Applicants notified of outcome.
Letters of award issued/contracts finalised	Jan - March 2019	Letters of award signed. Agreements concluded and signed as necessary.
Student recruitment	Jan - Sept 2019	University Partner to advertise studentship and undertake recruitment procedure.
Project begins	Sept – Dec 2019	Student named and in place by 31 December 2019.

9. Project selection criteria

Decisions are based on the technical merit of the proposal, the relevance of the project to the strategic priorities of CENSIS, and the alignment of the proposal with industry challenges.

Proposals will be reviewed by at least three assessors from CENSIS using a point system, selected from the following pool:

- CENSIS Academic Lead/PI or a nominee with specific expertise in the subject areas
- CENSIS CEO
- CENSIS Technical Director, or a member of the CENSIS Engineering Team as appointed by the Technical Director
- CENSIS Business Development Director, or a member of the CENSIS Business Development Team as appointed by the Business Development Director

The assessors will meet to set a threshold. Projects scoring above the threshold will be eligible for funding. Funding will be awarded to projects scoring above the threshold and in descending order from the highest score until studentships are filled.

Weighting for assessment:

Technical feasibility and ambition	40 points	Demonstrate a good likelihood of technical success and include details of methods used to support the work undertaken. Demonstrate the project is novel.
Industrial relevance, ambition and vision	40 points	Provide evidence of industrial relevance, or the potential for industrial relevance, and include information on research impacts and potential routes to market.
Industry letter of support	20 points	A letter of support should come from a partner with an integral role in the proposed research. Please outline why the partner supports the proposal, the expected benefits of the collaboration, and the potential impact for Scotland or the Scottish economy. In-kind or cash contributions from the partner should also be provided.

The decision of CENSIS is final and there will be no appeal process. The decisions taken by CENSIS shall be minuted and made available on request.