

Programme Specification 2021-2022

Postgraduate Certificate in Research and Innovation Leadership (Academic Professional Apprenticeship) and Postgraduate Certificate in Research and Innovation Leadership

Awarding body	University of Cambridge
Teaching institution	University of Cambridge, Institute of Continuing Education*
Accreditation details	None
Name of final award	Postgraduate Certificate in Research and Innovation Leadership (Academic Professional Apprenticeship)
	Postgraduate Certificate in Research and Innovation Leadership
Programme title	PgCert in Research and Innovation Leadership
UCAS code	N/A
HECoS code(s)	
Relevant QAA benchmark statement(s)	None
Qualifications framework level	7 (Masters)
Date specification produced	September 2022

* Cognate Faculty endorsement provided by: School of Clinical Medicine

ICE is a General Board, non-School institution whose purpose can be defined in two complementary ways. It is a conduit both for transmission of the University's knowledge and research on the one hand and for enabling members of the public to access higher education courses, whether for personal interest or professional development, on the other. In these ways it contributes significantly to the University's public engagement and widening participation commitments.

Educational aims

The Postgraduate Certificate in Research and Innovation Leadership (Academic Professional Apprenticeship) and the Postgraduate Certificate in Research and Innovation Leadership enhance the career development and skills of the next generation of research leaders. The programme builds on researchers' primary training in developing original contributions to knowledge and the advancement of their specialist discipline. It equips researchers with the skills, knowledge and values necessary to meet wider intellectual, social and economic challenges and have significant impact on the world around them.

The Postgraduate Certificate in Research and Innovation Leadership (Academic Professional Apprenticeship) aligns to the skills, knowledge, behaviour and assessment requirements of

the Academic Professional (Research) standard as detailed by the Institute for Apprenticeships and Technical Education¹.

Learning outcomes

Upon completion of the programme of study participants will have met the following learning outcomes:

Knowledge and understanding

- evidence a comprehensive understanding of how research is conducted, within their own and related disciplines and in inter-disciplinary or trans-disciplinary contexts;
- demonstrate understanding of regulatory, administrative, financial, planning procedures, risk management, quality assurance and quality enhancement, and how they are related to their role in research;
- demonstrate how to effectively engage with relevant professional bodies and other external organisations to support their work;
- demonstrate the principles of reflective practice and the methods for applying reflective practice to their own professional development;
- display an awareness of the theories of leadership, team development and the relevance to their own career progression;
- engage in and critically evaluate innovative approaches to undertaking their work to create interest, understanding and enthusiasm among their students, funders or stakeholders;
- critically evaluate current research and advanced scholarship in their discipline;
- systematically and creatively deal with complex issues relating to their research;
- develop and evaluate methods for determining the effectiveness of academic activities such as the impact of research.

Skills and other attributes

- develop research questions and hypotheses prior to undertaking research in their subject discipline;
- communicate and disseminate their research clearly to specialist and non-specialist audiences using appropriate mediums;
- demonstrate application of ethical, sustainable and inclusive practices and equality of opportunity to a professional standard;
- implement approaches to academic practice that are informed by equality and diversity;
- work collaboratively with others such as, students, peers, policy makers and private and public organisations;
- evidence continuing professional development (CPD), application of inclusive leadership practice, and effective management of people or teams;
- exercise initiative and personal responsibility, especially in areas of academic scholarship and critical thinking;

¹ <https://www.instituteforapprenticeships.org/apprenticeship-standards/academic-professional/>

- demonstrate an understanding of the wider context (policy, economic, societal, technological, legal, cultural and environmental) in which higher education operates, recognising the implications for professional practice;
- act autonomously in planning and implementing opportunities to network, to practise public engagement and to communicate effectively;

Programme structure

The course is made up of four modules and leads to the award of a named Postgraduate Certificate, a nationally recognised qualification which is equivalent to 60 credits at FHEQ level 7. Modules 1 and 2 are each weighted at 1/3 of the award e.g. (i.e. a nominal 20 credits each). Modules 3 and 4 are each weighted at 1/6 of the award (i.e. a nominal 10 credits each). The Modules are taught sequentially.

Module 1: Building a research vision & identifying core values

In this module participants analyse the political economy of higher education in the 21st century. They identify their own place in this framework by examining key policies and initiatives that are impacting universities, affecting what research is carried out, how, and by whom. Issues are presented in the context of shifting ethical, social, and political expectations. Crucially, participants explore the values and knowledge – personal, collective, institutional – at play in this complex ecosystem. They create a roadmap for the research they would like to pursue, how to secure funding and approval, and the kind of research team that will be needed to carry it out.

Indicative content includes:

- conceptualisation of the nature and purpose of scientific enquiry, how it relates to understanding what good research looks;
- research in a transdisciplinary and interdisciplinary context;
- developing discipline relevant research questions and hypotheses with reference to current issues and future horizons;
- understanding the shifting research landscape: policies, funding streams and institutions influencing universities and the research environment as a whole;
- personal roadmapping – developing a vision for your research and why it matters;
- creativity – developing and assessing new ideas;
- reflective practice and commitment to lifelong learning as a researcher;
- engaging with funders and other stakeholders to develop and communicate your research vision including to develop compelling grant applications and funding proposals.

Module 2: Managing research projects & leading successful teams

This module enables participants to examine the practical and interpersonal aspects of successfully initiating a research project and seeing it through to completion. Participants explore the ethical and legal requirements of funding, data management, recruitment, HR, inclusive leadership, and open research. Participants are introduced to leadership models

from the recent academic literature, and theories of team dynamics and the factors which allow some teams to thrive when others fail.

Indicative content includes:

- Starting a project – roadmapping, finance and grant management, funder requirements, operational essentials, costing, timelines, project tools, impact and open access;
- leadership theories and team dynamics; how to be the leader you want to be and create the team culture you want
- diverse and successful teams – best practice in recruitment and selection
- people and performance – communicating team expectations, developing an inclusive research environment and developing team members
- cultural intelligence and its importance to team working
- research ethics and integrity
- the significance and implications of open research

Module 3: Using entrepreneurial skills as a research leader

This module explores the shared behaviours of successful innovators in research and other contexts. It uses lessons from entrepreneurial thinking to develop insight into the mindset, knowledge and skills researchers need to identify and act on opportunities, whether to develop research independence in an academic career, pursue a commercial opportunity, achieve a successful policy intervention or other means of producing research that has an impact on the wider world. Participants gain knowledge of research enterprise and innovation and develop skills relevant to creating value from their research through engagement and collaboration with industrial and academic collaborators, consultancy and work across other sectors.

Indicative content includes:

- presenting research and research proposals with relevance to various professional and social contexts;
- understanding how researchers and entrepreneurs share behaviours and how to develop these behaviours successfully in a research context
- entrepreneurial approaches to developing collaborations in academia and beyond;
- creating new research opportunities and securing necessary support and funding;
- identifying key characteristics of researchers valued by collaborators and employers outside academia.

Module 4: Leading engagement and impact in academia and beyond

In this module, participants explore the ‘social contract’ discussed in Module 1 – that is, the duty to share insights and findings with wider society. Participants learn methodologies for developing research ideas in dialogue with research users and stakeholders, maximising the social impact of their research through public and media engagement.

Indicative content includes:

- how research users and other stakeholders, including industry, government, funders, the media and wider public, set priorities and engage with research;
- how to build societal, economic, policy and translational impact into your research;
- evaluating success;
- public and media engagement;
- effective communication with different audiences.

Teaching methods

The course is delivered and facilitated by subject experts in a blended manner through a mixture of face-to-face and online delivery along with self-directed learning. A variety of teaching methods are used and these may include, amongst others: interactive lectures, webinars, practical demonstrations and workshops, problem based learning and small group working. Teaching sessions integrate academic theory, practical application, discussion and critical appraisal. Online resources, provided through a Virtual Learning Environment, support the course teaching and facilitate the exploration of appropriate resources and the provision of formative and summative assessment. For apprentices the knowledge and skills delivered during the 20% off the job training are directly applicable to the 80% on the job learning.

Assessment methods

All units on the course use discipline relevant summative assessment approaches. These may include, but are not limited to: critical analysis of case-studies, assessment of evidencebased portfolios, discipline-specific report and application preparation, assessment of presentations and projects, short answer questions, essays, data handling and analysis, and research evaluation.

The scheme of examination for the Postgraduate Certificate in Research and Innovation Leadership (Apprenticeship) requires:

- i) Submission of work of 9,000–15,000 words or the equivalent;
- ii) An End Point Assessment as specified in the Level 7 Academic Professional Apprenticeship Standard and consisting of
 - a. An Academic Professional Practice Assessment
 - b. A Professional Conversation
 - c. A Written Submission

Students who are not apprentices and therefore studying for the Postgraduate Certificate in Research and Innovation do not complete the End Point Assessment.

Students receive continual formative feedback throughout the course using a variety of strategies and techniques including regular reflection.

Entry and/or progression requirements

1. Applicants are expected to have English and Maths at Level 2 or equivalent.
2. Applicants are normally expected to hold a 2i degree or higher from a UK university or an equivalent from an overseas university in a relevant subject.

3. Applicants to the programme are expected to demonstrate proficiency in the English language; students whose first language is not English must be able to satisfy the current English Language Competence requirements of the University's Board of Graduate Studies in the year in which they apply for admission to the course.
4. Applicants require the support of their host Institute/Department and may require a minimum of 18 months remaining on their contract of employment.

Student support

All students are members the Institute of Continuing Education and have access to learning support via the Institute of Continuing Education, along with comprehensive details of the programme, contact details and academic and general advice. The course VLE holds generic and subject specific learning resources. All students, as employees of a host University, have access to staff training resources and wider support services, including those focused on staff wellbeing.

Management of teaching quality and standards

The University is a registered provider of Level 7 Apprenticeships and complies with the reporting requirements of Apprenticeship provision. The University ensures high standards of teaching and learning in the following ways:

- The completion of Annual Programme Reviews by each Faculty and Department, to enable central overview of provision and assist in dissemination of good practice
- Scrutiny of the reports of External Examiners for all teaching programmes
- Encouraging student engagement at both the local level, through involvement in Faculty and Departmental Committees, and at a central level by participation in nationally-benchmarked surveys
- Holding reflective, centrally-coordinated, Learning and Teaching Reviews for all teaching institutions every six years to explore provision and suggest constructive courses of action
- Mentoring, appraisal, and peer review of staff, and encouraging staff participation in personal development programmes
- The Institute of Continuing Education collects regular informal and formal feedback on course teaching and maintains an active and ongoing Quality Assurance process overseen by its Academic Policy and Operations Committee and its Strategic Committee.

Graduate employability and career destinations

Students on this course are likely to be in the employment of a host University and are expected to use the skills and knowledge from the programme to further their careers in research and innovation. The skills, knowledge and behaviours embedded in the programme align to the Academic Professional Apprenticeship standard and are specifically relevant to academic researchers.

Every effort has been made to ensure the accuracy of the information in this programme specification. At the time of publication, the programme specification has been approved by the relevant Faculty Board (or equivalent). Programme specifications are reviewed annually, however, during the course of the academical year, any approved changes to the programme will be communicated to enrolled students through email notification or publication in the <i>Reporter</i> . The relevant faculty or department

will endeavour to update the programme specification accordingly, and prior to the start of the next academical year.

Further information about specifications and an archive of programme specifications for all awards of the University is available online at: <https://www.camdata.admin.cam.ac.uk/>