Ravensbourne University London Research Strategy

Ravensbourne
University London

2018–2025

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Ravensbourne University London's
Applied Research Strategy 2018–2025:

01 / Introduction

Ravensbourne University London focuses its research on emerging technologies and interfaces that enable creative innovation and new approaches to learning.

The framework in this Research Strategy sets out the direction for our applied research development.

Ravensbourne University London is building a reputation for research in key areas of the creative industries. As the University develops, it encourages the growth of applied research as an integral part of its academic offering. Excellence in research enables us to build bridges with industrial and academic partners, and strengthens our teaching with innovative new discoveries.

Research underpins our teaching and focuses in specific areas of excellence. The research we support embodies "a process of investigation leading to new insights, effectively shared." (REF 2014). This research strategy aims to sustain and encourage the development of research in all academic departments at Ravensbourne University London.

The Research Office is actively developing the research environment at Ravensbourne in preparation for submission to the Research Excellence Framework (REF) of 2021. We support and coordinate research projects from our academic staff and also mentor in the ways and means of creating successful funding bids with strong outcomes and impact.

We aim to follow the Academic Strategy in delivering "academic excellence in the learning, teaching, research and knowledge exchange of design, media, communication and technology through the development of new educational models for HE and industry." (Academic Strategy, p. 18).

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Context

Research at Ravensbourne University London reflects the institutional emphasis on design and screen media. Our researchers are academic practitioners in key disciplines including Fashion, Architecture, UX/UI, Film and Graphic Design.

Ravensbourne's research offering focuses on existing strengths and aims to develop new specialisms that reflect the priorities of the Industrial Strategy and the Creative Sector Deal. These in turn are informed by the requirements of our partners in the creative industries.

Established in 2013, the Research Office at Ravensbourne oversees research activity at this new university. Everything from postgraduate research projects to multi-partner international consortium bids falls within its remit. The range of research is diverse, like the university itself. Although it has been productive to 'let a thousand flowers bloom', the growth of research activity necessitates a new strategy that sets out our priorities for the next five years.

Key principles of the Ravensbourne Research Office include:

- **Fostering** a new research culture at Ravensbourne amongst staff and students.
- **Embedding** Ravensbourne in sector-wide research and development networks within the creative industries.
- **Encouraging** applied and practice-based research.
- **Enhancing** Ravensbourne's reputation as an originator of new research ideas.
- **Innovating** with technology in society.

Research Relevance: Ravensbourne aims to underpin its academic excellence in design, media, communications and technology with innovative concepts developed by our academics. This will establish the University as a world-leader in the creative exploitation of emerging technologies in order to deliver sustainable, positive, social and economic change. This will enable us to fully engage with new modes and methods of design and media practice linked with the Fourth Industrial Revolution.

Research Environment: Over the past five years, the Research Office has aimed to structure and support academic researchers. We have mentored early career researchers with a view to building their profile and outputs. This includes cover for research time, travel and conferences, along with PhD funding and time allowances.

Staff are encouraged to present at conferences, including those at Ravensbourne; write for significant publications; work in partnership with other collaborators; develop funding proposals; and expand their research portfolios.

Internal funding schemes have produced significant and interesting projects. Applying for internal funds also constitutes a form of training for finding external funding for research. This is especially useful for our early and mid-career researchers in funding applications; and linking with expertise in enterprise to diversify support for research.

Research Outputs: Ravensbourne has strong interdisciplinary and cross-institutional approaches to collaboration. We work closely with industrial and enterprise partners across the creative industries. We aim to connect our staff and students to innovators, professionals and practitioners. Ravensbourne's overall mission is to initiate an applied research and knowledge exchange culture that drives change, prioritises industry collaboration and underpins learning and teaching.

Research Governance: Organisation and Infrastructure includes a Research Committee meeting three times a year; an Ethics Sub-committee that is convened as required, with established procedures; representation on Academic Board; a new IP policy; a dedicated research space for our projects in Mitre Passage; outward-facing research section on the Ravensbourne website; research procedures and documents on Moodle.

Research Impact: Through our local research partners (e.g. the Royal Borough of Greenwich), and national and international institutions, our researchers participate in significant projects that have impact within the UK, Europe and overseas. Ravensbourne also hosts conferences, symposia and industry events where organisations such as Cambridge Wireless and ImmerseUK can establish connections with our research teams.

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Funding

The Research Office aims to continue and expand its range of successful research bids.

We will develop new proposals for the structural and enterprise funds that are connected to the Government's Industrial Strategy. We will work closely with agencies including Research England to address the key requirements. In order to prioritise our research specialities, we propose new research centres to focus our research specialisms in areas of excellence.

We will build on the success of our European research projects and utilise innovative concepts they generated. The Learning Technology Research Centre is key to this process and current proposals incorporate its strengths in augmented and virtual reality education. The Horizon 2020 WEKIT project also has significant crossover into industrial applications for augmented reality and provides an example of innovation arising from a funded project.

With the focus of current funding moving towards UK sources, the Research Office is working with its peers in other institutions, including the members of the CREST group (a network of research active small specialist universities), to better comprehend the new funding landscape.

Funding topics that are of particular interest include:

- Virtual and augmented reality.
- Transformative digital technologies.
- Advanced modelling.
- 5G mobile networks.
- Film and broadcast.
- Healthcare technologies.

Funded projects arising from the Industrial Strategy and Creative Sector Deal are particularly relevant to research at Ravensbourne University London. Participants include large creative industries companies, SMEs, local government and regional development organisations. Previously Ravensbourne has been a partner in such bids but we aim to submit large research funding bids as the lead member of such a consortium. We are putting together a four-year proposal for rolling funding applications.

We aim to grow our applied research offer from its current small scale, aligning it closely to our core teaching strengths, delivering increased return on investment, a greater influence of research on our teaching, and purposeful collaborations with industry-leaders and other institutions with complementary skills and industry footprints.

Ravensbourne is connected with several leading funding agencies and networks that are key to the development of creative industries funding in the wake of the Industrial Strategy: Research England, ImmerseUK, Future Cities Catapult, Cambridge Wireless.

Within the Industrial Strategy we have identified these areas as potential for bids – though scale/size of our Research Office will be a factor as well as balance against our REF 2021 priorities.

Success in the REF submission will ensure annual QR funding that will also serve to strengthen our research activities and provide Ravensbourne with new resources to develop its other funding proposals.
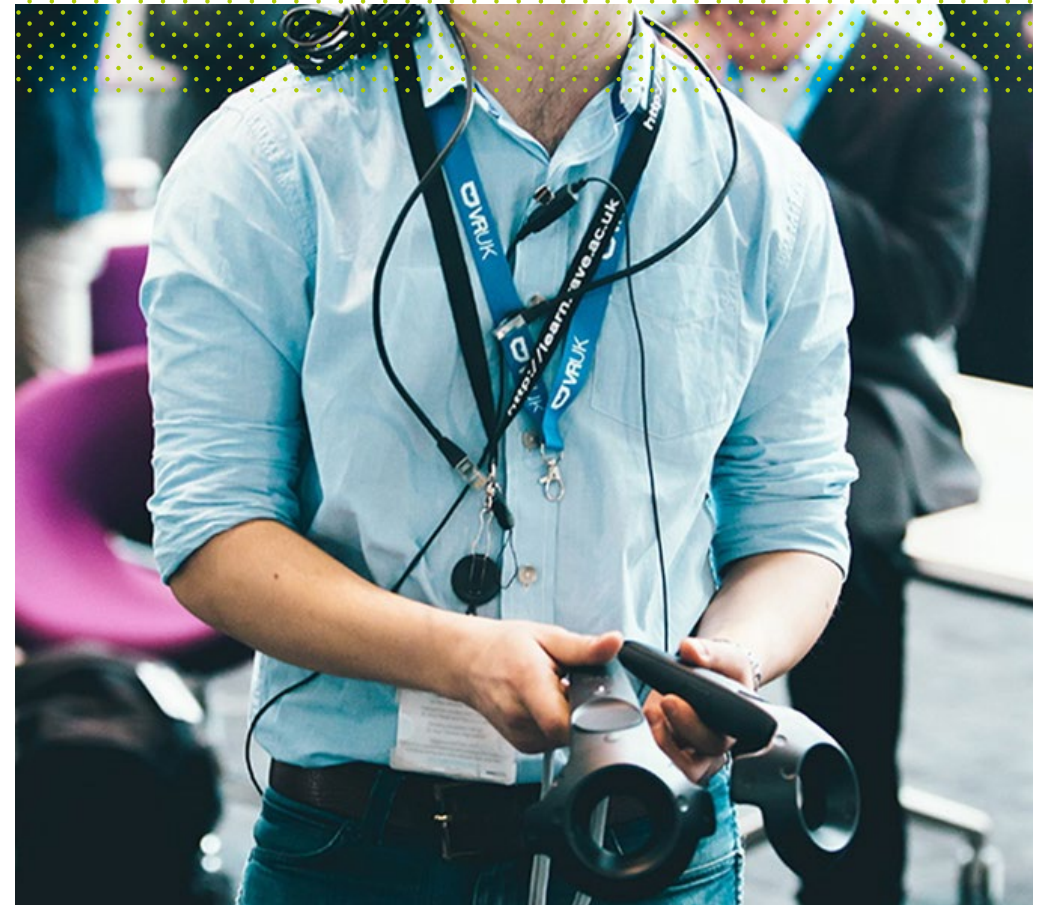
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Impact & Outreach

Ravensbourne University London emphasises the impact of its innovative projects in terms of technology, culture and society.

Ravensbourne aims to lead discussions about research themes in design and media in network forums including CREST, CHEAD, London Higher, other universities, and the Knowledge Transfer Network (KTN). These peer-level debates inform policy at Research England and within government departments. Further impact can be achieved through continued involvement with international projects.

The Research Office will further develop existing partnerships between academics, the private sector and the third sector. These will link curricula, research and commercial activity to roadmap emerging fields, including the wearable technology, making and hacking. Our expertise in augmented and mixed reality collaboration with SMEs such as DoubleMe will be applied to a broader range of partners.

The areas we focus on will include the following:

• Smart cities.
• Immersive film and narrative.
• Virtual and augmented reality.
• Wearables.
• Digital pedagogy.

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Aspirations

Key aspects of our Research Strategy include: the development of new postgraduate degrees; PhDs in partnership with another London HEI; a Creativity & Technology Institute; and closer links between Research and Enterprise.

Ravensbourne's key strength is its connection to industry. The Research Office aims to significantly increase collaborations and interactions with industry, both at the level of large corporations such as Amazon and BT; and that of emerging local businesses in North Greenwich and Woolwich.

Alongside that more local engagement, we are laying the groundwork for an Institute of Creativity & Technology at a new site near to Ravensbourne. We envisage this will contain a centre for applied research that can engage directly with companies and the public sector, and connect to the IT and communications industries. This will also house the Learning Technology Research Centre and the proposed Design Innovation Centre. As the main Ravensbourne building integrated advanced technology and architectural design when it opened (2010), so the Institute of Creativity & Technology has the potential to provide a locus for creative industries innovation in 2020.

Now the University has taught degree awarding powers, the Research Office will connect more closely to expanded postgraduate provision. This includes new MA courses with industry specialisms in technological innovation and creative computing; industry-funded PhDs to work on specific problems in applied research; and the Masters in Design course. Under the rubric of 'Design and Innovation', postgraduate students would benefit from exposure to new virtual and material technologies provided at the Institute. These might be partly funded by industry and the MA course would be remodelled to respond to industry.

We also envisage closer links between Research and Incubation, to enable more research input into the SMEs and more industry-funded projects and bids to funds such as InnovateUK and structural funds accessed by the Mayor's Office and local LEPs.

We look forward to the establishment of a doctoral degree programme in partnership with a local university. Taking on research students will enable us to engage with emerging innovations and develop a core research group in the area of applied creative solutions.

Academic staff including Course Leaders will be encouraged to develop research specialisms and new appointments seek to engage those with significant research expertise as well as teaching. This will also be reflected in some contracts. Attracting more research active staff will also support Ravensbourne's emerging innovation culture and provide a more diverse base for grant applications and projects with industry. In the short term (until 2020) it would also benefit our REF submission.

The Research Office will contribute to the development of the Creative Technology Institute and connect it with the sectors mentioned above. Our current IP policy development is aimed at supporting commercial research and possible spinout companies that could be based at the Institute. This facility will catalyse innovation in creativity and technology and add value to our core education provision, applied research activity and industry interactions.

We also intend to enhance the staffing and capability of the Research Office. This can be seen in the integration of the Learning Technology Research Centre, which has been successful in bringing in European funding. LTRC's knowledge of immersive and augmented reality to projects will be invaluable for future Creative Sector funding projects.

Internal collaborations with departments brings valuable insights from students and practitioners, and helps to showcase the most innovative projects produced by our staff members. These could be displayed on

our website for companies and the general public to explore, leading to external research opportunities.

At the same time, increased international collaborations will develop our profile as a university, with greater appeal to overseas partners. We are actively exploring joint projects with institutions in Canada and the United States; whilst our European partners engaged through EU funded bids is significant and increasing.

We aim to create a world-leading environment that allows us and our partners to exploit interconnectivity and collaboration between industry and practice-based research.

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Future Directions

The channels by which research is sustained include innovative ideas, consistent funding sources and outlets into the public sphere. Therefore this Research Strategy aims to prime and support our innovators; find appropriate funding for their ideas; provide a community of peers and experts to improve their concepts; and help them develop the impact from their work.

With these simple steps, the research culture at Ravensbourne University London will flourish.

The Research Office is committed to:

- **Ensuring** an increasing volume of significant research that will be internationally recognised and reputationally significant in key sectors.
- **Supporting** current and future courses at undergraduate and postgraduate level with insights derived from Ravensbourne's research culture.
- **Collaborating** with a wider range of public, private and academic organisations and stakeholders, including Enterprise.
- **Delivering** a REF outcome that recognises our level of research development and brings us new QR funding.
- **Growing** the amount of external funding brought in by research active staff.
- **Attracting** new researchers at all stages of their careers to Ravensbourne on the basis of its research offering.
- **Investing** in research resources including staff, libraries, equipment and infrastructure.
- **Mentoring** staff and students to realise their potential as researchers and innovators.
- **Raising** the visibility of research projects and outcomes at Ravensbourne.

Research Strategy
Aims & Targets / Links to Objectives

Aims & Targets

Increase funded research income

Develop applied research income

Identify Research Excellence Framework (REF) staff participants

Build a research degree partnership

Links to Institutional Strategy Objectives

1.5. Develop forward-looking creative and technological portfolio opportunities as the creative industries evolve

1.7. Grow our applied research offer from its current small scale, aligning it closely to our core teaching strengths, delivering increased return on investment, a greater influence of research on our teaching, and purposeful collaborations with industry-leaders and other institutions with complementary skills and industry footprints

1.8. Create a facility to catalyse innovation in creativity and technology and add value to our core education provision, applied research activity and industry interactions

4.1. Implement a partnerships strategy so that partnerships and alliances complement our strategic direction, increase and diversify our revenue, and improve our capacity to leverage funding – including work with other education institutions, industry players, private sources, sponsorship, and philanthropy

4.5. Develop our international profile as a new university, with greater appeal to overseas partners and students

5.2. Contribute to developing a local community which is creative, innovative, diverse and prosperous, including as a key partner in the Design District