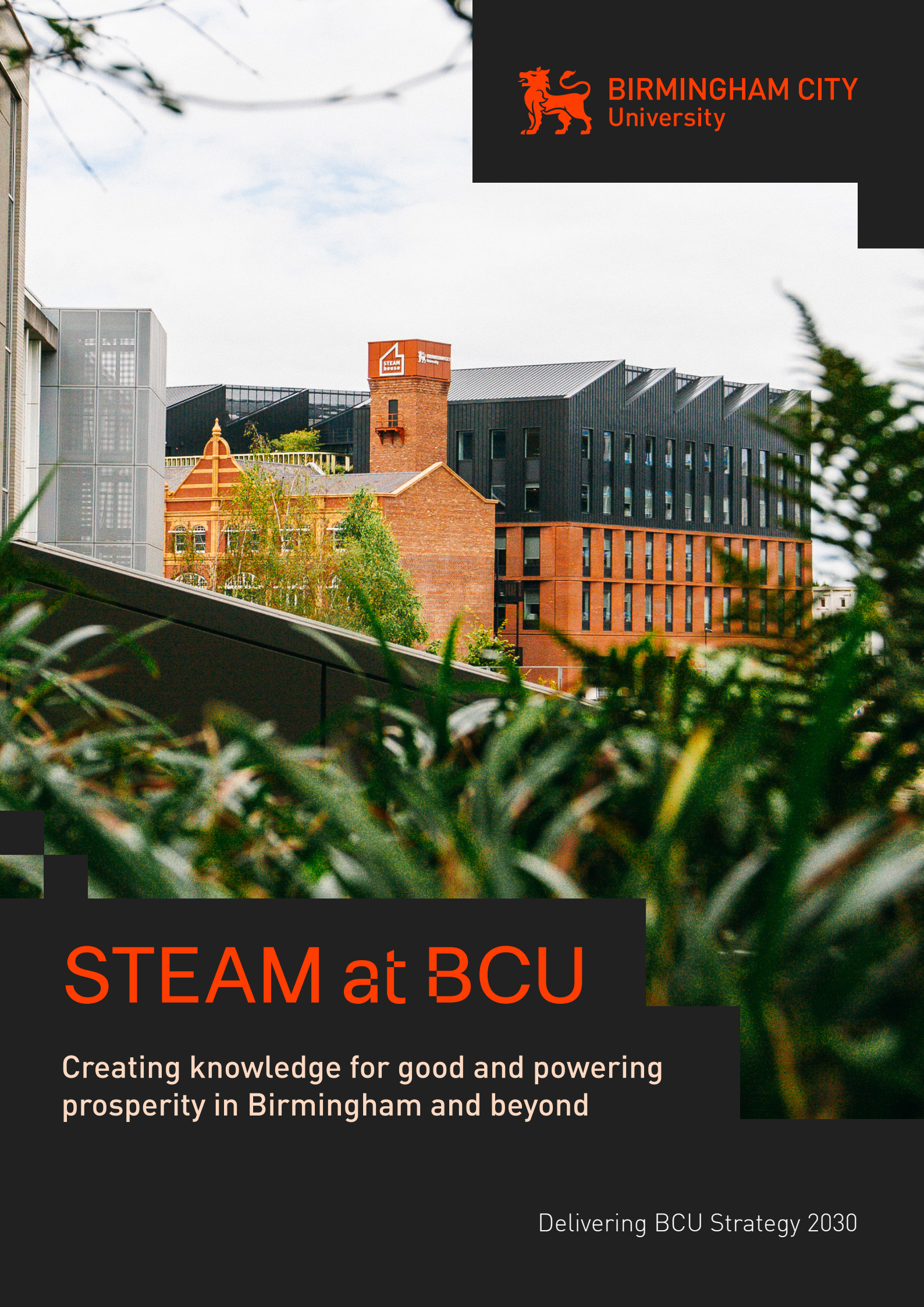




BIRMINGHAM CITY
University



STEAM at BCU

Creating knowledge for good and powering
prosperity in Birmingham and beyond

Delivering BCU Strategy 2030

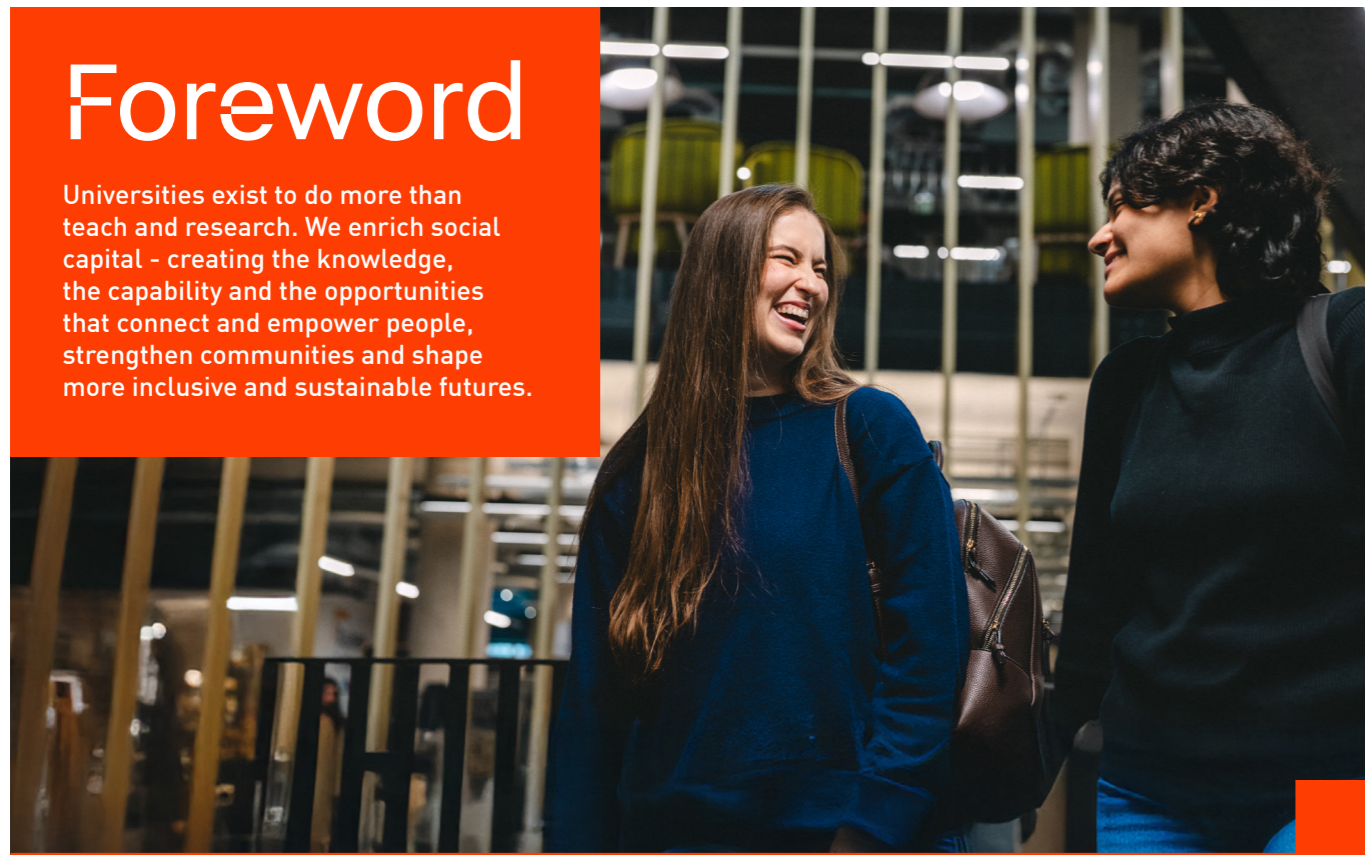


Contents

Foreword	4
Why this strategy, why now	5
Our mission and how it connects to Strategy 2030	6
Priority 1: Transforming the student experience through STEAM	8
Priority 2: STEAMhouse: BCU's front door for innovation	9
Priority 3: STEAM Hubs: aggregating expertise for real-world impact	10
Priority 4: Powering prosperity through partnerships, reputation and global reach	14
Who this strategy serves	16
How we will measure success	18
Get in touch	19

Foreword

Universities exist to do more than teach and research. We enrich social capital - creating the knowledge, the capability and the opportunities that connect and empower people, strengthen communities and shape more inclusive and sustainable futures.



Birmingham City University has a distinctive role to play in that mission. Our STEAM approach - the purposeful blending of science, technology, engineering, arts, humanities and mathematics - is a considered response to the world our students are part of: a world being reshaped by AI, by the climate emergency, by shifting labour markets, and by communities whose needs cannot be met by narrow disciplinary thinking. STEAM is how we equip our graduates with the creativity, the critical judgement, the technical capability and the confidence to thrive in that world and to make it better.

STEAM at BCU is a fundamentally different proposition in its scale, breadth and ambition - and we are building from real strength. Innovation Fest is a flagship platform for student creativity and employer engagement. The Future Founders Fund is supporting our first cohort of student entrepreneurs. The Henderson Fund is providing scholarships to enable students to take their first steps into Higher Education and beyond. Our knowledge exchange activities are growing, and STEAM Hubs in Smart, Sustainable, Green Cities; Health Innovation and CreaTech are already delivering impact. These are the proof points of a model that works, and they give us the confidence and momentum for what comes next.

This strategy brings together our research, enterprise, engagement and STEAM activity into one coherent engine - and it does so with

the pace, ambition and focus the moment demands. It defines the choices we are making, the areas on which we will focus, and the outcomes by which we will judge success.

Whether you're a student looking for an education that prepares you for the complexity of the world. A member of staff who deserves the infrastructure, culture and support to do your best work. Or, a partner who looks to BCU as a university that is easy to work with, clear about what it offers, and serious about impact. STEAM at BCU is for you. It's also a strategy for Birmingham and the wider region, because as an anchor institution, our success and our city's prosperity are bound together.

I am proud of what BCU has already built. I am even more excited about what we are building now.



Professor Hanifa Shah OBE
Pro-Vice Chancellor, Research, Enterprise, Engagement and STEAM

Why this strategy, why now

The talent for tomorrow

The pace of change in the external world is accelerating. AI is reshaping whole industries and redefining what graduates need to know and be able to do. The climate emergency demands new skills, new research and new forms of partnership between universities, businesses and communities. Employers tell us, loudly and consistently, that they need a workforce that can think across disciplines, work with ambiguity, collaborate across difference, and turn ideas into impact. Meanwhile, the region BCU serves faces real economic pressures and real opportunities and looks to its universities to help unlock both.

Universities that simply do more of the same lose relevance. This strategy defines BCU's response.

BCU's distinctive answer

STEAM is BCU's signature approach. By blending arts, humanities, social sciences, science, technology, engineering and mathematics, we prepare students for the complexity and the opportunities of the future workplace. Arts, humanities and social science graduates become more employable by developing technical and digital confidence; STEM graduates become more employable by developing creative, ethical and broader perspectives. All of our graduates leave with literacy in AI and sustainability and with the ability to apply their learning to real-world challenges.

STEAM is not a slogan. It is an operating model that embeds interdisciplinary, challenge-led, industry-co-created learning into the curriculum; aligns our applied research to the problems that matter; and gives our external partners a clear, visible way to access BCU's expertise.

Many universities offer interdisciplinary opportunities. BCU's STEAM model goes further by putting interdisciplinarity at the heart of everything we do. By 2030, every BCU student will experience STEAM, not just those who opt in. It will be credit-bearing and curriculum-integrated, not an extracurricular add-on.

Every STEAM experience is externally connected, with projects designed alongside employers, civic organisations or community partners around real-world challenges. STEAM extends beyond teaching: the same model shapes our applied research, enterprise, innovation and external engagement through our STEAM Hubs. And STEAM has a physical and virtual home - STEAMhouse - providing a visible innovation space and front door into BCU for students, staff and partners. Rather than a set of disconnected initiatives, together, these features make STEAM at BCU a whole-institution model.



Our mission and how it connects to Strategy 2030

Our mission
 To enable experiential education, impactful research, and community and business growth through STEAM innovation.

Rooted in Birmingham, reaching beyond

BCU Strategy 2030 is built on three pillars: Developing the Talent of Tomorrow, Creating Knowledge for Good and Powering Prosperity. STEAM at BCU is how we deliver against all three.



Developing the Talent of Tomorrow

We deliver interdisciplinary, real-world experiential learning through STEAM; embed community and business challenges into the curriculum; and provide the venture support, incubation and showcase opportunities that turn student ambition into student success.

Creating Knowledge for Good

We build research strength around priority themes and societal challenges; aggregate academic expertise through STEAM Hubs; and translate applied research into products, services and partnerships that benefit the region and the world. Our academic research expertise is set out in detail in our separate Research Strategy, which sits alongside this document.



Powering Prosperity

We provide a clear front door for partners; scale our engagement with business, community and public sector organisations; grow our global reach; and convert our expertise into local, national and international impact.



Priority 1

Transforming the student experience through STEAM

Outcome: every BCU graduate leaves with STEAM attributes, real-world experience and the confidence to make immediate impact in their chosen field.

Employability is not an add-on to a BCU degree. It is the degree. Our students are entitled to an education that equips them not only with subject knowledge but with the creativity, critical thinking, communication, collaboration, citizenship and change-readiness - the six Cs of the STEAM graduate attributes framework - that employers tell us they need and that a changing world demands. Delivering this means embedding interdisciplinary, challenge-led learning into the curriculum across every department, and doing so in genuine partnership with industry, community and public sector organisations who bring real-world problems to the classroom.

By 2030, every student will benefit from interdisciplinary, challenge and industry-led learning embedded into their course, with the confidence and skills to tackle real-world issues outside the classroom. STEAM projects are designed around live civic and industry challenges aligned to regional, national and international priorities, and are showcased through credit-bearing routes that link directly to employer partners.

The Henderson Family Foundation offers bursaries and scholarships for UK students pursuing an undergraduate degree in Computing, Engineering

or Technology-related subjects. The Future Founders Fund is supporting its first cohort of student entrepreneurs, providing meaningful early-stage support, mentoring and access to networks for those with the ambition to build a business of their own. Innovation Fest, already a university-wide flagship, is scaling further into a STEAM Festival that acts simultaneously as a curriculum platform, an employer showcase, a recruitment engine for prospective students and an open door for learning, connecting and deepening networks. We are building a pipeline of signature STEAM projects - including high-profile challenges such as Formula Student - that give students national-level platforms on which to demonstrate their capability.

We certify STEAM attributes through BCU certifications and STEAM diplomas, offering students additional professional credentials in areas including AI and sustainability literacy. And we extend the reach of these opportunities through the Lifelong Learning Entitlement and targeted continuing professional development, so that the STEAM approach benefits not only our full-time undergraduates but also the working professionals whose careers depend on continuous learning.

Priority 2

STEAMhouse: BCU's front door for innovation

Outcome: a single, visible, accessible entry point - physical and virtual - where students, businesses, communities and partners connect with BCU's expertise, services and opportunities.

STEAMhouse is the place where BCU's offer comes to life. It is where students, businesses, communities and partners connect with the full range of our expertise, services and opportunities- and where the STEAM approach becomes something you can see, walk into, and work within. As both a physical building and a coherent set of virtual services, STEAMhouse gives every audience a clear, welcoming and easy route into BCU, and gives BCU a recognisable identity as a place of innovation, collaboration and ambition.

The STEAMhouse building is a visible, accessible hub bringing together student enterprise support, careers services, STEAM project and maker spaces, specialist facilities in future technology, professional certification, and dedicated workshop and collaboration environments. It is the place where students, staff and external partners come to work on STEAM challenges together - and where the STEAM approach is tangible, not theoretical.

Alongside the physical building, our virtual front door makes BCU easy to find, easy to engage with and easy to work with. Our offers, products and services are visible online; enquiries and

engagement are managed with care and at pace; and partners experience BCU as a single, coherent organisation rather than a collection of separate parts.

Sitting at the top of BCU's City Centre Campus, STEAMhouse is at the heart of the emerging Birmingham Knowledge Quarter, the Mayoral Development Corporation and Mayoral Development Zone, and a short walk from the wider city centre. STEAMhouse makes visible the links between BCU and the wider Birmingham and West Midlands innovation ecosystem - including Birmingham City Council and the networks of business, community and public sector partners that matter most to our mission as an anchor institution. From inside BCU looking out, and from outside BCU looking in, STEAMhouse is where connections are made.



Priority 3

STEAM Hubs: aggregating expertise for real-world impact

Outcome: world-class interdisciplinary initiatives that unite BCU academics, students and external partners around major challenges, delivering impact, income and influence at a scale we cannot achieve working discipline by discipline.

BCU's academic expertise is organised, within our academic units, around research themes that provide the intellectual foundation for everything we do. These themes are set out in detail in our Research Strategy. But BCU's impact on the world depends on more than academic expertise in isolation. It depends on our ability to bring expertise together across disciplines, to combine it with the knowledge and needs of external partners, and to focus it on real problems at a scale that matters. STEAM Hubs are how we do that.

A STEAM Hub brings together staff from multiple academic departments alongside external partners from industry, the public sector and community organisations to respond to challenge-type opportunities that are multi-disciplinary in nature. The number of Hubs is not fixed: new Hubs form, and existing ones evolve, as external priorities and funding opportunities change.

Live examples

BCU already has four working STEAM Hubs delivering external impact. Each demonstrates the same underlying pattern: BCU researchers, drawn from multiple disciplines, brought together around a significant external opportunity, delivering outcomes that no single discipline could achieve alone.



CreaTech - Creative and Cultural Industries and Technologies

BCU's £6.75 million CreaTech Frontiers project, led by BCU and funded by the Arts and Humanities Research Council on behalf of UK Research and Innovation, brings together four universities and key industry partners to advance cutting-edge technologies in visual effects, video games, immersive experiences and animation across film, theatre and gaming. It has the potential to generate £65 million for the region's economy by 2030 and create over 1,500 jobs in the creative industries cluster of the West Midlands. CreaTech Frontiers is a direct product of sustained development of interdisciplinary research - combining BCU's established strengths in AI, immersive and visualisation technologies, games, computing and digital innovation with our deep and established strengths in the creative and performing arts, design, media production and cultural practice.



SSG - Smart, Sustainable, Green Cities and Communities

SSG is BCU's most established STEAM Hub - an outward-facing, partner-mobilising capability that has been operating for some years, drawing on academics from across multiple departments. Its members work across technology, the built environment, sustainability, social innovation, urban planning and community engagement, brought together by shared purpose and sustained coordination.

SSG has contributed to national policy through BCU's work with Natural England and Defra on the Green Infrastructure Framework for England. It supports the DIATOMIC Digital Accelerator working with SMEs in the Birmingham Knowledge Quarter and Wolverhampton's Green Innovation Corridor, and operates a network of air and traffic quality sensors monitoring Birmingham's Clean Air Zone, while also leading the £2.6 million SMART-SIP+ project on clean energy and sustainable agriculture in rural Bangladesh. It also supports the housing industry with robust, scalable and sustainable solutions through the Centre for Future Homes, as well as several other collaborative funded projects, such as the UK-India SSG-Bridge project strengthening BCU's global profile in smart, sustainable and green city development, capacity building, and knowledge exchange. STEAM Hub projects such as this have a significant strategic impact through international reach, future funding pathways, and long-term institutional partnerships.

Most significantly, SSG is currently helping to shape the Birmingham Knowledge Quarter and other Mayoral Development Zone initiatives - bringing systems thinking, digital innovation and community-centred design to a once-in-a-generation opportunity to position east Birmingham as a global innovation district.



HI - Health Innovation

BCU's sustained contribution to health technology innovation across the West Midlands is most visible through our key partner role in the £14 million West Midlands Health Tech Innovation Accelerator (WMHTIA), the region's flagship government-funded health tech programme led by the University of Birmingham and uniting 21 partners across academia, industry and the NHS. BCU delivers specialist support to health tech businesses in computing, cyber security, AI, data science and digital communications. Alongside WMHTIA we convene NHS Trust leaders, host health tech hackathons, and work directly with clinicians and health innovators on the challenges the region most needs to solve. In its first two years, WMHTIA exceeded its targets, attracting nearly £50 million in private co-investment, supporting over 100 health tech enterprises, and creating more than 100 jobs across the region.



BI - Business Innovation

Our fourth STEAM Hub, Business Innovation, extends the same model to opportunities for enterprise creation, growth and transformation - building on BCU's established work with businesses and helping them to grow.



Priority 4

Powering prosperity through partnerships, reputation and global reach

Outcome: BCU recognised as a trusted, influential partner - locally, nationally and globally - with a growing reputation built on demonstrable impact and a deepening set of strategic relationships.

BCU's role as an anchor institution means our impact is measured not only by what we teach and what we research but by the prosperity, influence and opportunity we generate for Birmingham, the wider region and beyond. This priority brings together the things that turn BCU's expertise into sustained external impact: our partnerships with business and community, our reputation, our alumni, and our global reach.

Deepening regional and community partnerships

BCU is engaged with Birmingham's major innovation and regeneration platforms, including the Birmingham Knowledge Quarter and the emerging Mayoral Development Corporation and its wider Mayoral Development Zone, positioning

BCU to contribute to the city's and the region's growth ambitions as these initiatives take shape. We continue to leverage SuperTech, our regional cluster body for the professional services sector, and ABBE, our successful Ofqual-regulated awarding body, as strategic initiatives that generate value both for BCU and for the communities they serve. We are expanding apprenticeship opportunities in partnership with employers, and growing the portfolio of student volunteering, mentoring and placement activity that uses BCU's role as an anchor institution to create measurable socio-economic impact.

Building reputation through storytelling

BCU has a powerful story to tell, and this strategy commits us to telling it well. We systematically share our research, enterprise and STEAM proof points, communicating impact and influence through consistent reputation-building activity, thought leadership, sector recognition and engagement with media, policymakers and funders. The STEAM story resonates with students, with employers, with communities and with the sector; this strategy ensures it reaches every audience it should.

Turning alumni into a strategic asset

Our alumni community is one of BCU's most valuable strategic assets. We are repositioning alumni engagement around a compelling offer that creates genuine value for our graduates - employer networks, mentorship, influence, global opportunities - and that in turn generates engagement, advocacy, fundraising and philanthropic giving for BCU. The potential of this approach is already demonstrated through long-term alumni relationships that have grown, through sustained engagement, into transformative gifts supporting access to BCU education for students from non-traditional backgrounds.

Growing global reach

BCU's global ambitions are central, not peripheral, to this strategy. We are extending BCU's educational reach and impact through high-quality partnerships in strategic overseas markets, growing and diversifying through a focus on sustainable, high-value opportunities. And we are developing a network of supported special projects, backed by government sponsors and private investors, that position BCU as a serious global player with a clear proposition.





Who this strategy serves

This strategy is written for, and accountable to, a set of communities whose interests sit at the heart of everything we do.

For our students

A transformed educational experience rooted in real employer links, real-world briefs and meaningful professional networks. Access to the Future Founders Fund and the full ecosystem of support for student enterprise and start-ups. Showcase opportunities through Innovation Fest and other national platforms. Clear pathways into postgraduate study, employment and entrepreneurship - with students treated as partners in their own success.

For our academic colleagues

Meaningful opportunities to collaborate across disciplines and with external partners on work that matters. Access to external funding pathways through strengthened bid support and Hub infrastructure. A research and enterprise environment designed to enable high-quality, impactful work. Leadership development through STEAM Champion roles, visiting professoriate networks and other vehicles that recognise and reward ambition.

For business and industry

A clear front door and a coherent offer. Access to BCU's research and technical expertise through Knowledge Transfer Partnerships, consultancy, contract research, CPD and spin-out activity.

A pipeline of talented graduates with the STEAM attributes employers need. Upskilling and training for existing workforces through our LLE and CPD offer. Commercial development support that helps turn ideas into products and services.

For communities

Access to BCU expertise for the challenges that matter in our neighbourhoods. Genuine co-creation of ideas and solutions rather than top-down delivery. Community enrichment through public engagement, events and sustained partnerships. Skills and training opportunities, including targeted pathways that raise aspiration for higher education among groups currently under-represented at BCU and across the sector.

For government, local and national

BCU as a serious contributor to the UK's innovation capacity - generating new ideas, informing policy, and providing innovation pathways aligned to the UK Industrial Strategy and regional growth priorities. An engaged partner in Birmingham's flagship regeneration and innovation platforms, including the Birmingham Knowledge Quarter and the emerging Mayoral Development Corporation and Mayoral Development Zone. A steady flow of graduate skills into the labour markets that need them most, and a partner for public sector organisations facing the complex challenges of modern governance.





How we will measure success

We will judge success by a clear and consistent set of measures, reviewed annually and reported transparently. Our institutional scorecard tracks:

Graduate employability and progression outcomes; student participation in STEAM learning and certifications; external enterprise and research income; the number and depth of strategic partnerships; collaborative grant and Knowledge Transfer Partnership performance; student and graduate start-up performance; reputation

and thought leadership indicators; international income and global partnerships; research and knowledge exchange performance; and the sustainability impact of our work.

Each strategic priority has a named executive owner and an annual delivery plan. We measure what matters, share what we find, and adjust course where the evidence tells us we should.

Get in touch

This strategy is an invitation as much as it is a plan. If you are a student looking for opportunity, a business looking for a partner, a community organisation looking for support, a researcher looking for collaboration, or a funder looking for impact - we want to hear from you.

STEAMhouse is our front door, physical and virtual, and is being built to make every route in as clear as possible. This strategy should be read alongside our Research Strategy, which sets out the academic research themes and arrangements

that provide the intellectual foundation for the STEAM Hubs and BCU's wider mission to create knowledge for good and power prosperity.

Email: Steam@bcu.ac.uk

Visit: bcu.ac.uk/business
bcu.ac.uk/research
steamhouse.org.uk

Beyond

[be-yon-der] (noun)

A person who doesn't settle, follow or fit the mould. Someone who chooses to go further.

A beyonder is a builder. A problem solver.
A door opener. A 'first-in-family'. A career
-shifter. A changemaker.

The kind of thinking needed by Birmingham
and the world. **BCU thinking.**

Be inspired by a community that goes beyond
- watch our film www.bcu.ac.uk/beyond

Rooted in
Birmingham

Reaching Beyond