

Institution: University of Worcester

1. Context and mission

1.1 Context

- 1.1.1 The University of Worcester was founded in 1946 as a teacher training college, gaining University title in 2005 and Research Degree Awarding Powers in 2010. It has grown rapidly in the last 20 years. We now employ approximately 1200 staff of whom 452 are on academic contracts (excluding hourly paid lecturers) and educate just under 10,000 students.
- 1.1.2 The University has physically expanded its estate from a single campus on the edge of the city of Worcester to three campuses and has become an integral part of the city itself, with several of its key facilities functioning for the University and the community. The city then is a major area of focus for the University's activities but also the wider county of Worcestershire and neighbouring counties of Herefordshire and Gloucestershire. This is a predominantly rural area where the majority of businesses are SMEs, with a higher than average proportion in the Agriculture, Forestry & Fishing sector.
- 1.1.3 Our reach extends further into the West Midlands and into the South West, through our educational partnerships, but also nationally and globally through our inclusive approach to education, particularly in the sphere of sport and physical activity, and through our areas of research excellence.
- 1.1.4 The University has nine academic schools organised into three colleges. A tenth school the Three Counties Medical School is currently in development. Schools are further organised into departments (see Figure 1).
- 1.1.5 This structure was put in place in 2018/19, replacing a structure in which there were seven academic institutes. The new College structure was implemented to ensure greater support for Research & Knowledge Exchange and Learning & Teaching in Schools, more consistency of practice and wider sharing of good practice, and increased opportunity for cross and inter-disciplinary activities. College Directors of Research & Knowledge Exchange and of Learning & Teaching were appointed to meet these objectives.

1.2 Mission

- 1.2.1 The University sees education and research as a fundamental to positive societal change. We believe that our educational offer must be underpinned by excellent research, scholarship and professional practice and must engage with and reflect the needs of business, public sector, community and wider society.
- 1.2.2 Reflecting our origins, Teacher Education is a core part of our offer, as is Health and Medical Education (Nursing, Midwifery, Allied Health professions, Physician Associate) with planned expansion to offer Medicine in 2022. We have expanded the portfolio of courses we offer in the Life Sciences over the last 10 years, most notably to include Biomedical Science. We deliver courses across the Social Sciences, Arts and Humanities with longstanding programmes in Psychology, Geography, History, English Literature, Drama, Art & Design, Business & Management and Sport & Exercise Science; more recently we have developed areas such as Law and Criminology.
- 1.2.3 Research is fundamental to the University's mission both underpinning our Learning & Teaching and driving our wider societal impact. We have well-established areas of research excellence in Pollen & Aerobiology and Dementia Care. In both areas, the focus is on strong fundamental research which has application in the real world. This approach has underpinned the development of new areas of excellence in: Mental Health research, in particular severe adult mental illness; Violence Prevention, focused on applied research into intimate partner violence; and Food Security, from the breeding of disease resistant crops, to the early detection and diagnoses of plant diseases, to the ecological intensification of fruit production.



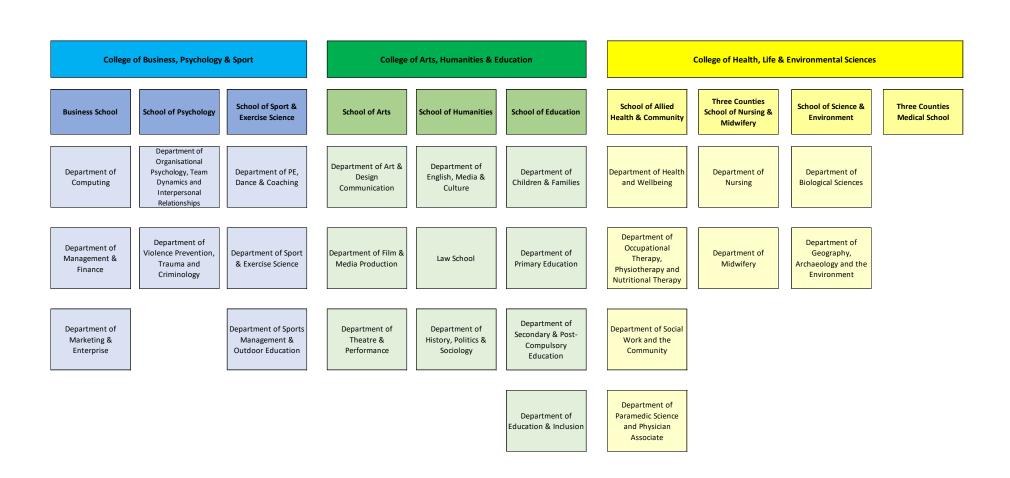


Figure 1: Academic Structure



2. Strategy

2.1 Research Strategy 2014-19

- 2.1.1 The University approved a five-year Research Strategy in October 2014. Its overarching vision flowed from the University's Strategic Plan (2013-18): "to foster and disseminate independent and distinctive scholarship and research to achieve major, beneficial, social impact".
- 2.1.2 The strategy committed to develop its research in four broad "Areas of Distinction" which also flowed out of the strategic plan:
 - Children and Young People
 - Human Health and Well-Being
 - Arts, Culture and Heritage
 - Economic, Social and Environmental Sustainability
- 2.1.3 Underpinning the delivery of the strategy were six core aims as follows:
 - (1) To enhance our research culture
 - (2) To attract, develop, support and retain high quality researchers
 - (3) To increase the proportion of internationally recognised, internationally excellent and world leading research delivered by our researchers
 - (4) To increase income from research, enterprise and consultancy including the commercialisation of our research
 - (5) To ensure our research makes a difference to people's lives locally, regionally, nationally and internationally
 - (6) To further develop our research governance arrangements to ensure that research is undertaken to the highest standards of integrity
- 2.1.4 Each School (then institute) was required to develop its own strategy, feeding out of the University strategy but reflecting its specific culture and local priorities.
- 2.1.5 It should be noted that whilst the University's ambitions in Knowledge Exchange were reflected in the Research Strategy, they were set out in detail in the University's five-year HEIF Strategy 2016-21 which identified four core objectives:
 - To maximise our impact on society and the economy, by aligning our research closely
 with regional and national priorities for growth and development, and national and
 global challenges, such as mental health & wellbeing, social care, and domestic
 violence.
 - To maximise the effectiveness and reach of our partnership working, by developing and strengthening existing partnerships and identifying and nurturing new partnerships.
 - To maximise potential entrepreneurial and developmental opportunities for our students and staff.
 - To maximise effective public engagement.

2.2 Delivery of the 2014-19 Strategy

- 2.2.1 The University has been successful in delivering its strategy. The enrichment of our research culture, particularly through the development and support of Research Groups, our success in attracting and retaining excellent researchers in key strategic areas, the increased support for our researchers through our researcher development programme and internal research funding schemes, the difference our research has made to people's lives, our enhanced governance infrastructures, are each reflected in this institutional narrative, in the unit-level environment narratives and in our impact case studies.
- 2.2.2 In evaluating its success, however, we particularly note the following:
 - We have increased the volume of research outputs: the annual average number of outputs in our publication repository for this REF period is just under 500 compared to 350 for the previous one.



- We have increased the quality of our research measured by annual overall fieldweighted citation impact.
- We have increased our international collaborations evidenced by the proportion of outputs with an international collaborator increasing year on year from 2016 to 2020 from 29.8% to 36.7%.
- We received the HR Excellence in Research Award in 2016.
- We reported only one research misconduct investigation in our Annual Research Integrity Reports.

2.3 Research & Knowledge Exchange Strategy 2020-25

- 2.3.1 The University approved a new 5-year Research and Knowledge Exchange Strategy in Summer 2020. The new strategy recognises what worked and what did not in the 2014-19 research strategy and incorporates key priorities and focus from the HEIF Strategy.
- 2.3.2 The vision set out in the new strategy is as follows: "We will be recognised for delivering excellent Research which extends the boundaries of human knowledge, but which also fundamentally improves people's lives and makes the world in which we live a better place; and for high-quality Knowledge Exchange which meets the needs of our clients, partners and communities and adds value to their organisation. We will be particularly recognised for our Research and Knowledge Exchange in identified Areas of Challenge".
- 2.3.3 The Areas of Challenge, which emerge from global, national and local research priorities (as articulated by transnational organisations such as the WHO, UNESCO, etc.; government; major funders of research (UKRI, NIHR); local authorities; and community groups), are:
 - Human Health and Wellbeing
 - Sustainable Futures
 - Digital Innovation
 - Culture, Identity and Social Exclusion
 - Professional Education
- 2.3.4 The delivery of the strategy is founded on five pillars People, Infrastructure, Culture, Engagement and Collaboration and underpinned by five principles Integrity, Environmental Responsibility, Equality & Diversity, Collaborative & Supportive, Open Research.
- 2.3.5 Schools must establish a strategy implementation plan which will set out how it will interact with the Areas of Challenge and identify school level priorities.

2.4 Enabling and facilitating impact and engagement

- 2.4.1 The University commits in its current strategy, as in the last, to enabling the impact of its research. Whilst we seek to facilitate impact across our whole research portfolio, we are particularly focused on developing impact in the realm of health and social care, building on close ties with regional NHS trusts and other health bodies and with Worcestershire County Council.
- 2.4.2 We facilitate impact as follows:
 - Impact and Engagement forms a core cluster in the Researcher Development Programme.
 - Our internal funding schemes support research impact development and public engagement activities.
 - Staff in the central Research Office support impact development and evidence collection.
 - Staff are given dedicated time to develop impact case studies.
 - We recognise impact as a core component of Research & Scholarship in our promotion processes.



2.5 Supporting interdisciplinary and collaborative research

- 2.5.1 The College structure was created to increase opportunity and support for cross- and interdisciplinary research. This has manifested itself in the development of interdisciplinary research groups, that cut across not only Schools within Colleges but also across Colleges.
- 2.5.2 The University supports the development and enhancement of collaboration, particularly international collaboration, through:
 - a Visiting Researcher scheme (doctoral and postdoctoral) which supports funded and unfunded research visits to the University for periods ranging from one month to two vears.
 - the appointment of Visiting and Honorary Professors, which normally build upon existing links with senior researchers at the University or with research groups.
 - a Facilitating International Research Collaboration scheme, introduced in 2019. Part
 funded through its QR GCRF funding, this scheme supports projects to develop and
 enhance collaborations with partners from countries on the DAC list of ODA recipients.

2.6 Open Research Environment

- 2.6.1 The University has engaged in significant work to make its research more "open" over the REF period. It has a well-established publication repository, Worcester Research and Publications (WRAP), and has continued to invest in this resource over the period. The repository has a dedicated manager who sits within the Library Services team.
- 2.6.2 In line with the REF/UKRI policy on open access publication, the University's *Open Access Policy* mandates staff to deposit the AAM of their peer-reviewed journal articles and peer-reviewed conference proceedings in WRAP, no later than three months after acceptance for publication. It also strongly encourages staff to deposit other forms of output in WRAP.
- 2.6.3 The University appointed an Open Access Advocacy and Support Officer in 2015 whose role is to provide support, guidance and training for academic staff around Open Access, as well as to report on Open Access compliance to the University's RKE Committee.
- 2.6.4 In 2015/16, the University developed and approved a policy for the Effective Management of Research Data, and alongside this an implementation group led by the Chair of the University's RKE Committee with membership from academic schools, Library Services and IT. The group was focused on developing systems to enable the storage, archiving and effective sharing of data but also to develop effective training and support in this area for staff. As part of its work, the group also mapped the University's practice against the Concordat on Open Research Data in 2017 and updated its policy and its action plan to reflect identified gaps.

2.7 Research Integrity

- 2.7.1 The University is committed to delivering on the principles set out in the *Concordat to Support Research Integrity*. The University's Research Integrity and Governance Committee completed a gap analysis against the Concordat in 2015 and developed an action plan kept under review by the Committee.
- 2.7.2 At the core of the plan where the following actions, each of which have been met:
 - Appoint a Research Integrity champion
 - Develop clear policy and processes for investigation of research misconduct
 - Review and develop guidelines on good practice in research
 - Review and develop the Research Ethics Policy and associated processes
 - Embed research integrity and ethics training in staff and research student induction



3. People

3.1 Staffing strategy

Recruitment

- 3.1.1 The University's overarching academic recruitment strategy is driven by three main imperatives:
 - Effective delivery of its undergraduate and postgraduate programmes
 - Development of new UG and PG programmes
 - Delivery of its RKE strategy
- 3.1.2 In recruiting new staff, normally all three imperatives will be taken account of. The University is fundamentally committed to appointing academic staff whose learning and teaching is underpinned by their own practice as researchers and who can advance the University's research across its subject areas. However, it is important to note that in some areas in particular Teacher Education and Health Education but also other areas such as creative arts, sports coaching and business management the focus is on recruiting staff with direct and immediate experience of practice in these areas. A significant proportion of our staff in these areas are therefore second career academics with limited experience as researchers on appointment. Over recent years, a proportion of staff in these areas have been recruited on to teaching-only contracts.¹
- 3.1.3 In some instances, the primary focus in recruitment is on the delivery of the RKE strategy, through the appointment of Professors to lead research in key areas or research staff (postdoctoral research fellows, research assistants) to develop and deliver research objectives in these areas.

Progression

- 3.1.4 The University runs an annual promotion process for Lecturer to Senior Lecturer and Senior Lecturer to Principal Lecturer where staff must present their strengths against three areas Research & Scholarship, Learning & Teaching, Leadership & Management demonstrating excellence appropriate for the level against at least one criterion.
- 3.1.5 It also runs an annual Professorial Title process. All staff who indicate an intention to apply for professorial title are allocated a mentor to support the development of their application.

	% Category A Eligible	% Category A Submitted	Category A submitted as % of Category A Eligible
Lecturer/Research Fellow (K0)	7	10	60
Senior Lecturer/Senior Research Fellow (J0)	61	44	32
Principal Lecturer/Principal Research Fellow/Head of School (I0)	23	28	54
Professor (F1)	8	18	100

Table 1: Proportion of staff by contract level

¹ Please note, no data is provided here on recruitment by age profile. The University only started to routinely report on this data in 2019 and the dataset for the subsequent period is very small, due to low levels of recruitment during the pandemic, such that the data presentation may identify individuals.



- 3.1.6 In developing its application for an Athena SWAN Bronze application in 2017, the University recognised that, while women formed over 60% of the professoriate, they were less likely to apply for promotion through the Professorial Title process. The University thus identified an action to proactively identify and support female staff at the appropriate career stage to apply.
- 3.1.7 Table 1 above shows the proportion of academic and research staff at each contract level both for Category A eligible and Category A submitted staff. It is notable that staff at Senior Lecturer are the only level less well represented in the submitted group than the eligible. This is a consequence of many "second career academics", as described above, being appointed at Senior Lecturer.

Health and wellbeing

- 3.1.8 The University is committed to supporting staff to achieve a positive work-life balance. It does this through its:
 - Flexible Working Policy the University offers a range of flexible working practices: flexitime; annualised and compressed hours; job share (where the duties can be divided practically between two people); and wherever reasonably practicable will support temporary or permanent changes to working arrangements. In preparing its Athena SWAN application in 2017, survey data showed 87% of staff were positive about our flexible working policy, whilst HR Data showed that over 95% of flexible-working requests were approved.
 - Employee Assistance Programme which offers staff confidential counselling and advice on a wide range of work and personal issues.
 - Staff development programme this provides wellbeing at work workshops for staff; supporting staff/student wellbeing for managers and research degree supervisors; mindfulness training and resources.
 - Approach to staff mental health the University made the employer's pledge to Time to Change and is a member of the regional steering group; it runs a Staff Mental Health Network; and has provided Mental Health First Aid training for some staff.
 - Support for Carers as a member of Worcester Association of Carers (WAC), University staff have access to a wide range of workshops, resources and guidance for carers.

3.2 Staff development

- 3.2.1 The University is committed to developing its academic staff as researchers at all career stages.
- 3.2.2 It offers support for doctoral study covering up to 50% of the cost of doctoral study for academic staff. The University also offers a PhD by Published or Creative Work for its staff which can be focused on prior work or on prospective work.
- 3.2.3 The University has long offered research leave for staff enabling them to take a semester's leave to complete a project or body of publications. Research leave is not automatic but is offered through a competitive process. The project leave process was revised and rebranded as the Supporting Research Excellence Scheme in 2016 widening the activities covered by the scheme to include impact and engagement and also allowing more flexibility in the period of leave to reflect the needs of the research but also to fit in more effectively with flexible working patterns. Both the old and new scheme provide not only time but also funding for fieldwork, visits to archives, dissemination costs and other research costs as appropriate.
- 3.2.4 The University runs a Researcher Development Programme for its staff supported by a Research Mentoring Scheme. The programme is organised around the following "clusters": "Getting started in Research"; "Research Integrity"; "Publishing your Research"; "Funding and Delivering your Project"; "Research Supervisor Development"; "Impact & Engagement"; "Research Leadership". Staff are encouraged to self-identify as "New Researchers", "Emerging Researchers", "Future Research Leaders" or "Research Leaders" which suggests how they might engage with the programme.



- 3.2.5 The University is committed to supporting its Early Career Researchers. 8% of eligible staff meet the REF definition of ECR (whilst making up 10% of submitted staff). These are split between traditional ECRs, normally recently postdoctoral academics, and new "Second Career Academics", as described above. However, a much larger proportion of staff, again often Second Career Academics, who do not meet the ECR definition, think of themselves as "early career". The University has therefore developed the concept of "Emerging Researcher", described in its REF 2021 Code of Practice, for staff who did not meet the criteria for Significant Responsibility for Research or Independent Researcher, but who are actively developing their research. Those identified as such through the CoP processes receive specific support outlined in the CoP. More traditional ECRs are encouraged to identify as "Future Research Leaders" in our development programme.
- 3.2.6 Our commitment to supporting the development of researchers is reflected by our HR Excellence in Research award, first granted in 2016, renewed in 2018 and now due for a 4-year review in 2021.

3.3 Research Students

- 3.3.1 The University has increased its total PGR numbers over the REF period from 110 to 200:
 - It has expanded its doctoral programmes, introducing new professional doctorates.
 - It has invested significantly in PhD studentships.
 - It has extended its supervisory capacity.
- 3.3.2 The University has a well-established graduate school (the Research School) that oversees its research degree programmes, having responsibility, in partnership with academic schools, for ensuring the quality and standards of these programmes.
- 3.3.3 Each academic School has a PhD Course Leader (and in some instance also an MRes or Professional Doctorate Course Leader) who leads on recruitment to the programmes and works closely with the Research School to support student progress and to address any issues that arise. Student progress is overseen by the Research Degrees Board, which is chaired by a senior researcher.

Research Student Development

- 3.3.4 The Research School leads the University's *Research Student Development Programme* with significant input from senior academic staff across the University.
- 3.3.5 Students are required to complete a training needs analysis at the beginning of their programme in concert with their supervisors which identifies how they will engage with the University programme and wider opportunities. This analysis is revisited over the course of the programme.
- 3.3.6 It is worth noting that in the University's most recent engagement with the Postgraduate Experience Survey (PRES) in 2019, the University came 2nd on overall satisfaction out of 103 participating HEIs. Further, it was 1st on progression, 14th on professional development, 22nd on research skills and 27th on resources.

Research Supervision

- 3.3.7 The Research School is also responsible for ensuring the quality of our supervision. It maintains a Register of Approved Supervisors, membership of which requires the supervisor to evidence that they are an active researcher and to engage with the University's Research Supervisor Development Programme.
- 3.3.8 The University also supports staff to engage with external opportunities, particularly those offered by UKCGE. Indeed, the training and support offered to supervisors is closely aligned with UKCGE's Good Supervisory Practice Framework and the University is actively supporting its supervisors to engage with its recognition programme.



3.4 Equality and Diversity

- 3.4.1 The University is committed to ensuring equality of opportunity for all staff and students and a fair and equal working environment. It achieves this through:
 - Promoting a culture of inclusion for example, by supporting staff networks for protected characteristics; its LGBTQ+ allies scheme; engaging proactively with and directly supporting external events such as Worcestershire Pride.
 - Development and review of all policies and processes taking account of equality and diversity principles – this is achieved through the consistent use of EIAs.
 - Providing staff development on equality and diversity both general and specific (e.g. a Transgender Education programme).
 - Ensuring that all staff involved in recruitment, appraisal, promotion, supervision and mentoring receive the appropriate, focused support and training on equality and diversity matters relevant to the role.

		% Category A Eligible	% Category A Submitted
Mode of	Full-time	74	74
employment	Part-time	26	26
Contract type	Fixed Term	2	2
	Permanent	98	98
Gender	Female	63	55
	Male	37	45
Disability	Disabled	11	8
	Not disabled	86	88
	Unknown	3	4
Ethnicity	Asian	2	2
	Black	1	2
	Other	3	2
	Unknown	1	1
	White	93	93
Sexual Orientation	Heterosexual	41	73
	LGBTQ+	5	5
	Unknown	54	22

Table 2: % Category A eligible and submitted by contract type, mode of employment and protected characteristic

3.4.2 Evidence of our commitment includes:

- Our Athena SWAN institutional Bronze Award received in 2018
- Our Gender Pay Gap in 2019, the mean gap was 3.8% and the median 2.8%, one of the very lowest in the sector.
- Stonewall Diversity Champion accreditation
- Disability Confident accreditation
- 3.4.3 Table 2 above presents data on the profile for four of the protected characteristics as well as mode of employment and contract type for Category A Eligible and Submitted staff. Initial analysis suggests the processes for identifying staff with significant responsibility for research have not impacted significantly on any one group.
- 3.4.4 Table 3 below presents data on the same four protected characteristics for professors and senior managers. Whilst these figures broadly mirror those for Category A staff, as identified in its Athena SWAN action plan, BME under-representation is an area of priority for the University.



		% Professors and Senior Staff by protected characteristic	
Gender	Female		54
	Male		46
Disability	Disabled		7
	Not disabled		93
	Unknown		0
Ethnicity	Asian		2
	Black		0
	Other		2
	Unknown		0
	White		96
Sexual Orientation	Heterosexual		80
	LGBTQ+		7
	Unknown		13

Table 3: % Professors and Senior Staff by protected characteristic

4. Income, infrastructure and facilities

4.1 Income & Infrastructure

- 4.1.1 The University has invested significantly in its research support infrastructure over this REF period. At the beginning of the period, its research support infrastructure consisted of five staff (3.8 FTE) to support the work of the Research School and the University's wider research activity. It now has 15 staff (13.8 FTE) based in its RKE Directorate with a further full-time staff member, based in Library Services, supporting Open Access.
- 4.1.2 It has expanded its Research School team, increasing the School's administrative support to reflect the growth in research student numbers but has also invested in staffing to support researcher development.
- 4.1.3 It has established a Research Office whose primary role is to support researchers through the research process: finding funding, developing bids, assuring quality of submitted bids, gaining relevant ethical and other approvals, internally and externally, delivering projects in a timely and effective manner, working effectively with partners and collaborators, delivering impact and collecting impact data.
- 4.1.4 The University appointed a Deputy Pro Vice Chancellor for Research in 2016, a new role, who leads on University RKE strategy and oversees the RKE directorate. This directorate was expanded in 2017/18 alongside the academic restructure described in Section 1. A Director of RKE was appointed for each College, who reports to the DPVC Research, with the express aim of driving forward RKE in the Colleges and enabling more cross- and interdisciplinary research. Directors are supported by a College RKE Facilitator whose role is to enable researchers in the College to develop and enhance their RKE and to support research activity across the College, including impact development.
- 4.1.5 Alongside the people, the University has also invested in research support infrastructure: investing further in its publication repository; in research funding databases; and research information systems.
- 4.1.6 The University offers central research support schemes designed collectively to allow staff to extend existing research, to pilot new projects, to develop collaborations, to publish and otherwise disseminate their research and to enable impact. In addition to those already highlighted:



- a) Vacation Research Assistantship Scheme (2011-18) –Staff were invited to bid to the scheme on an annual basis. The scheme supported a research assistant recruited from the University's own student body, to work on a project over the summer vacation. It was primarily utilised to support small pilot projects, extensions of funded work and discrete activities in research groups. An evaluation of the scheme in 2016 showed its dual benefits for staff and students. Students appointed to VRAs routinely progressed into PGT and PGR study but also into research-focused roles. In total, £100k was invested in in 90 RAs.
- b) Research Support Scheme the above scheme was repurposed in 2019/20, in response to staff feedback, to allow larger scale projects and for the projects to take place across the year, still allowing for the recruitment of student researchers.

4.2 Facilities

- 4.2.1 The University has invested in specialist research facilities and equipment across the assessment period. This includes investment in new laboratories in Life Sciences, refurbishment of sports science laboratories, equipment to support our environmental science researchers, such as UAVs.
- 4.2.2 Its wider facilities also provide support and opportunities for researchers. The Hive, a joint University and Public library, opened in 2012, provides an ideal space for public and community engagement, as well as a location for research with the public. The Art House, opened in 2018, is an innovative and experimental teaching and exhibition space, which offers opportunities for researchers in the arts.