Institution: De Montfort University

1. Context and mission

De Montfort University (DMU) was founded in 1870 with the aim of providing skilled workers to the then-booming city of Leicester; it was formerly known as the Leicester College of Art, then City of Leicester Polytechnic in 1969, becoming DMU in 1992.

DMU has approximately 29,000 students and 2,700 staff. This includes about 600 postgraduate research (PGR) students. DMU is organised into four faculties: Arts, Design and Humanities (ADH); Business and Law (BAL); Computing, Engineering and Media Studies (CEM); and Health and Life Sciences (HLS). The richness and diversity of its research today is the result of a journey of strategic investment leading to DMU becoming almost unrecognisable from its origins as a technical teaching establishment. Our research themes are organised within and between research institutes and centres, creating an environment that supports specialisms, but also interdisciplinarity.

As a relatively young University, DMU has striven to steadily increase its research base, and we have achieved that in this submission, with more than 43% of academic staff having significant responsibility for research. The allocation of research time was formally established in 2014 with a view to identifying staff with significant responsibility for research. In REF 2014, 218.2 staff were submitted across 12 Units of Assessments (UOAs). In 2021, 484.05 FTEs are being submitted to 13 UOAs, of whom 33% self-identify as Black and Minority Ethnic (BAME). To date, practice-based disciplines, such as Product Design and Nursing are developing researchers, while others, such as Computer Science, Engineering, English, History and Law have more-established research cultures.

1.1 MISSION AND INSTITUTIONAL IMPACT OBJECTIVES: 2014–2021

The University has always put the community of Leicester at its heart. It views itself as 'a scholarly community that is committed to the public good and driven by an unrivalled ability to challenge convention and create impact'. DMU's mission is to create a world-class and sector-leading environment to develop research that addresses real-world problems.

Central to DMU's ethos is the promotion of equality and diversity. DMU's charter for equality, diversity and inclusion, DMUfreedom, sets out DMU's ambition to be a sector leader in promoting fairness and inclusion. Inclusivity and diversity are at the heart of our research and investment strategy, in both people and infrastructure. One of only 17 Race Equality Charter award holders, we are committed to supporting diversity in research and researchers with increased representation of BAME and female PGR students and early career researchers (ECR). DMU was awarded a Bronze Athena SWAN in 2018, and a Gold TEF (Teaching Excellence Framework) outcome in 2017 that highlighted DMU's 'real-world research'.

Areas of progress against objectives in REF 2014:

1   Developing DMU's research capability through strategic appointment of staff and investment in infrastructure. *Progress: VC2020 recruitment* (2.2, 3.1.1 to 3.1.3, 4.1).

2   Further evolving and advancing our existing research themes. *Progress: themed events and appointments* (2.3,3.1.3).

3   Building on international collaborative research. *Progress: formation of research institutes and cross-disciplinary events supporting SDGs* (2.1).

4   Enhancing the experience of PGRs and ECRs. *Progress: Future Research Leaders' Programmes (2013–), the Next Generation Researchers' Programme and an enhanced training offer for PGRs through to early- and mid-career researchers* (3.1.3, 3.2).

5.   Deepening the positive impact upon society through research outputs and activities. *Progress: investment in public engagement and impact through new initiatives, including DMUlocal, DMUglobal, Sustainable Development Goal (SDG) 16 Hub and the creation of new research institutes and centres* (2.1, 2.3, 4.2).

2. Strategy

DMU's Research Strategy in REF 2014 articulated the desire to achieve 'at a minimum, internationally recognised research in all areas of DMU research activity' and a commitment to 'expanding our research base' and 'deepening our research interventions', goals which have been achieved in 2020.

DMU's current University Research Strategy (2018–2023) is organised around four key areas – **Global**, **People**, **Societal Impact** and **Excellence**. The 2018 strategy reflects our continuing commitment to supporting staff to produce internationally excellent, impactful research, in and beyond REF 2021, while one of the key objectives – that 60% of all academic staff should be research-active by 2023 – reflects our ongoing commitment to growing our research community. Our commitment to **equality, diversity and inclusivity** underpins our growing research culture.

Given the vitality of our research, a more ambitious strategy, developing on these four pillars, is currently under development (2.5).

2.1 GLOBAL

Vital to our Research Strategy is our commitment to research that addresses global challenges.

The University is committed to supporting the United Nations' 17 SDGs through community work and ambitious research under four interdisciplinary research themes established in 2018, of lifelong well-being, social value, urban living and creativity in the digital age. The achievement of research and impact objectives, and the University's investment in public engagement during the assessment period is evidenced in DMU becoming a hub for SDG 16, Peace, Justice and Strong Institutions (2017), the only UK institution to do so. DMU began its three-year tenure in January 2019.

Part of the success in securing **Global Hub** status has been our investment in strategic priority areas around global peace and social justice. DMU also works with the United Nations on projects to highlight the issue of forced migration. Part of the University's remit is to commit to three major research projects every year until 2022 to further SDG 16.

Our global approach is timely as we face the international challenges raised by issues such as Covid-19, Brexit, global economic transformation, well-being for a globally ageing population, changes to the world of work and our security. The objective of the DMU strategy is to foster development-related research that builds on our internationally recognised research into transport, energy, water, cyber security and the creative industries. This will allow us to respond, with our international partners, to the challenges of globalisation, climate change, power structures in flux and the consequent challenges of migration and economic growth.

We have also invested Global Challenges Research Funds in areas that reflect the challenges facing developing countries and supported international networking through different internal funding programmes.

The 17 SDGs are strategically embedded in our research culture, enabling academics 'to answer some of the biggest challenges facing humanity, such as poverty, lack of housing and access to education' ('DMU: Our Economic Impact', commissioned report, 2019). DMU is the lead institution in the United Nations' #JoinTogether campaign – a global network of universities and organisations created to share ideas, projects and strategies on how to welcome refugees and asylum seekers to communities.

2.2 PEOPLE

DMU's aspiration to be a more research-intensive university will entail having a more diverse and more highly qualified research community and our staffing strategy is twofold: increasing diversity and prioritising the next generation of researchers.

1 Since 2014 we have taken a strategic decision to grow our research base through recruiting and nurturing ECRs through our prestigious Early Career Academic Fellows (ECAFs) and VC2020 streams (3.4). As of July 2020, 149 ECRs are in post (76 female

and 73 male, with approximately 42% from BAME backgrounds), are prioritised in applications for funding and research leave (3.2, 3.4).

2   Total staff in this submission include 44% female, 56% male, 33% BAME, 63.2% White (3.7% information withheld or not known), a significant improvement on 2014 (female/ male 31%/69%; BAME/White 15%/83%).

2.3 SOCIETAL IMPACT

Our ambition is to be known for the societal impact of our research, locally, nationally and internationally.

Through ongoing initiatives (4.2) such as DMUlocal (the University's community engagement and outreach arm, supporting students and researchers to engage with groups and communities across the city), HEIF-funded collaborations with businesses and Innovate UK-funded knowledge transfer partnerships (KTPs), we ensure that our research impacts on a wide range of communities and beneficiaries. During the census period, these knowledge exchange interactions have included more than 120 DMUlocal projects, events and activities, working with more than 21,000 people in Leicester, and multiple KTPs with small to large companies, such as lingerie company Curvy Kate Ltd, which was enabled to launch a wider range of products and increase sales through better technical control and flexibility as a result of its KTP with DMU (2013–2015).

Our commitment to the public good is reflected in our focus on research that has societal impact, evidenced by our investment in interdisciplinary projects such as DMUlocal, Local+ (4.2) and Talent25 (4.2). We have invested in areas that reflect the challenges facing the UK in areas such as Artificial Intelligence (AI) (Human Brain project), and future mobility (DMUglobal). DMU and Leicester City Council are working through DMUlocal on a series of joint projects designed to improve life for city residents, to 'build back better', particularly to respond to the Covid-19 pandemic. Academics across DMU are working with the city to utilise their research and expertise to outline a co-produced agenda of ongoing research into health, technology, psychology, design, homelessness and facilitating inclusive economic growth.

Through collaborations, networks and partnerships, our Research Strategy sets out to challenge conventional thinking in development-related research and in the creation of new knowledge to transform societies for the better. We utilise our research expertise to develop locally meaningful solutions in partnership with our national and international colleagues, such as Rolls-Royce, Deloitte, British Telecommunications and the Council of Scientific and Industrial Research-National Aerospace Laboratories, India.

2.4 EXCELLENCE

This pursuit of excellence will require us to develop an integral, pervasive and dynamic culture of research, ensuring research integrity across research units. As a signatory to the Concordat to Support Research Integrity, we ensure that all research conducted under the auspices of the University is undertaken with integrity. We have set out our commitment 'to improve accountability, and provide assurances that measures [are] taken to continue to support consistently high standards of research integrity'. We provide bespoke training to instil confidence in the concept and practice of ethics and integrity among our researchers and publish an annual statement outlining our activities to support research integrity; we have processes in place to deal with allegations of misconduct; and declare details of any formal investigations of research misconduct and outcomes.

Our Open Access and Research Data Management policies encourage the deposit and open-access publishing of a wide range of output types and data in DMU institutional repositories – DORA (for text outputs) and DMU Figshare (for data, procured in 2018). To further demonstrate our commitment to the democratisation of data and resources, we are working with the Concordat on Open Research Data and have invested in a Research Development Management infrastructure incorporating a data repository, a research data officer to manage

the repository and promote the concept of Open Data, and training both online and face to face. We have put in motion DMU Press, committed to open-access publications.

2.5 FUTURE RESEARCH

A new Research Strategy is in preparation for the next 5 years with a focus on interdisciplinarity, impact and inclusivity with a thematic structure embracing 5 areas of research (equality and social justice, digital communities, creative and heritage industries, well-being and net zero) which expand our current themes and which further encourage collaborations across disciplines and institutions. The new strategy will align with regional needs to allow support of place-based research opportunities across the East Midlands. We are investing in a Research and Scholarship Support Scheme (which will provide all staff with the opportunity to bid for teaching and research assistants from our PGR population), a new iteration of our peer-review process through a DMU Peer Review College which will provide further mentoring for staff applying for funding and PGR scholarships aligned with the new themes to enable our next generation of researchers to sustain and increase the vitality of our impactful and interdisciplinary research.

3. People

3.1 STAFFING STRATEGY

Recruiting, supporting and prioritising the next generation of researchers and a commitment to equality, diversity and inclusivity underpin our strategy to staffing (2.2).

3.1.1 Research Time

Time is the key to developing researchers' careers. Staff are able to apply for dedicated research time through an annual Research and Innovation Allowance (RIA) exercise. Bands of time are allocated from 320 hours (one day per week) through 480 (one and a half) to 640 hours (two days per week). For those new to research, a Researcher in Training (320 hours) is offered. These allowances are in addition to a base 10% scholarship allocation for all academic staff for teaching or research development activity. Colleagues who successfully attract external grant funds that include staff buyout have this in addition to their RIA allowance.

Since 2014, we have invested £201,391.33 (41 awards) in a competitive **research leave scheme** for colleagues with a specific project for which they need leave from the University for a period of time, or for which they need an additional travel or subsistence budget to undertake international, interdisciplinary fieldwork for research that helps to achieve the SDGs.

3.1.2 Research Mentoring

DMU has mentoring schemes for researchers in every faculty. Our central Researcher Development Team support academic researchers across all career stages. We celebrate ambitious and rigorous research through regular training and reward for excellence, for instance, through our outstanding contribution awards each year for our academic staff and PGRs. Researchers are also provided with media training, and encouraged to share ideas and develop their public engagement activities via digital, print, radio and TV. Workshops on promotions are run each year. Our 2019 action plans to support research career development earned DMU the European Commission's HR Excellence in Research Award.

3.1.3 Early Career Researchers

Since 2014 we have prioritised the recruitment of early career academics, particularly through the flagship **VC2020 Lectureships Scheme**, uniquely designed to nurture the future researchers of tomorrow. Introduced in 2013, the VC2020 Lecturer Scheme has enabled ECRs to have designated time (two and a half days per week, equivalent to 50% FTE) in their first year to develop their research career; they have also had the opportunity to bid for up to £5,000 to amplify a particular project. Some 149 VC2020s and ECAFs (introduced in 2019) are currently in post. From 2019, there have been themed ECAF appointments in Social Value, Creativity in the Digital Age, Urban Living and Lifelong Well-Being, with the opportunity to turn these into permanent lectureships upon successful completion of one year.

The ambition now is to grow research capacity by having 60% of academic staff becoming research-active by the end of our current strategy (2023). We are also nurturing our research talent pipeline with a new **Next Generation Researchers** scheme (which has seen just under 100 participants since its inception in 2019) where time, budget and mentoring are invested in academics who do not yet have significant responsibility for research (Researcher in Training awards, 3.1.1 above).

In keeping with our commitment to the next generation and to research sustainability, a competitive programme was launched in 2013 to develop and nurture research leaders of the future. The **Future Research Leaders Programme** (£120,000 per annum) involves a year-long programme of mentoring, along with a £1,500 stipend. Nominated for a 2017 *THE* Award, the programme's graduates have gone on to senior positions in our own and other universities (including a Pro Vice-Chancellor (Research)), and they have developed external grant-funded projects that have captured international media and academic interest, such as in the emergence of war hotels (UOA 28) and a recognised definition of 'Islamophobia' (UOA 17).

3.2 RESEARCH STUDENTS

The former Graduate School was rebranded and relocated (through a £200,000 investment) as the **Doctoral College** in 2018. The Doctoral Training Programme draws on expertise across the University, delivering face-to-face as well as online sessions. It also provides a variety of opportunities for students to showcase their research in different formats, as well as come together as a research community across disciplines. Employability training and advice are offered during and after completion of research degrees. DMU is part of the Midlands3/4Cities Doctoral Training Partnership (23 awards), and also has 2 EPSRC CDTs (Engineering and Physical Sciences Research Council Centres for Doctoral Training) and 6 AHRC CDTs (Arts and Humanities Research Council Centres for Doctoral Training). During the census period, the Doctoral College has funded 115 full scholarships (fees and stipend) and 98 fees-only awards.

PGR students work within a research centre or institute and are an integral part of that disciplinary community. They have access to workshops and training sessions in those centres and in their home faculty, but they also participate in a rigorous and recently consolidated central Doctoral Training Programme which frames their research training and provides opportunities to meet other PGRs across the University to provoke interdisciplinary thinking and to widen their networks.

DMU has:

- Participated in the Postgraduate Research Experience Survey (PRES). Participation in the 2020 survey was 48% (compared to 23% in 2018). Some 81% (national benchmark: 80%) agreed they were satisfied with their research degree programme; DMU ranked 16th and was positioned in the 2nd quartile.

- Invested in researcher development by creating the new post of a Researcher Development Manager.

- Invested in a PGR lifecycle management system currently being implemented (4.1).

- Provided central and subject-specific doctoral training programmes with an emphasis on employability during and after completion of research degrees for all PGR students; and made funds available of up to £500 for conferences and travel to PGR students without other sources of funding, and up to £2,500 for global opportunities to undertake research at institutions abroad. We have initiated a ten-year destination survey of PGR students in order to maintain support for our graduates and to capture inspiring success stories (for example, a Dean of Faculty in Indonesia, a CEO of a specialist eye hospital in Palestine and a lecturer in Contemporary Slavery at the Wilberforce Institute).

3.3 EQUALITY AND DIVERSITY

The University has created an inclusive environment that was acknowledged by the accolade as the **Sunday Times University of the Year for Social Inclusion 2018** because of the

significantly higher proportion of students from different ethnic and deprived backgrounds at DMU than other universities.

Our research student and staff base is diverse. We regularly monitor gender and ethnicity data (from those staff who provide data) and address inequalities as they arise. Below is data on our PGR population, as at July 2020:

TABLE 1: PGR Students by Ethnicity (July 2020)

Ethnicity	No. of Students
Asian, Asian British or Mixed	132
Black, Black British or Mixed	106
Mixed - White and Black African	7
Not Known/Information refused	23
Other	56
White	273
Total	**597**

On our prestigious ECAF and VC2020 streams, there are 76 female and 73 male candidates. About 42% of participants are from BAME backgrounds. Further, among our senior research professoriate, we have 70 men and 23 women, and just under a fifth are from BAME backgrounds.

We have endeavoured to ensure diversity in the selection of our impact case studies (ICSs). Our ICSs are authored by 57% male and 43% female staff. Of the male authors, 82% are white, 18% BAME. Of the female authors, 91% are white, 9% are BAME. We recognise that while we have largely achieved gender balance in our ICSs, we are not there yet in BAME representation and we are working with our University Equality, Diversity and Inclusion Committee to develop a strategy to increase this representation in the future.

We biannually monitor progress against the actions set out in our Race Equality Charter and Athena SWAN action plans, which are designed to increase the diversity and progression of research-active staff. All our staff are required to undertake mandatory equality and diversity training, and there is further mandatory unconscious bias training for all those involved in REF preparation (see Code of Practice 13d).

In allocating a streamlined panel-led process for research time allocation, panels have additional mandatory equality and diversity training (delivered by Advance HE and DMU's Head of Equality) and seek to be gender- and BAME-diverse. Results of the research time allocation processes have been impact assessed and display marginally more favourable outcomes for women and BAME staff.

DMU's Flexible Working Policy (2014) enables 'work practices and policies that support work–life balance'. The University is supportive of employees who need time off; and has established a policy (2017) setting how such requests should be dealt with, ranging from bereavement, domestic emergencies, illness and long-term caring responsibilities. As a measure of our commitment to equality and diversity, we were ranked the 31st most inclusive employer in Britain by lesbian, gay, bi and trans equality charity Stonewall in its Top 100 Employers list for 2019 and 40th in 2020.

4. Income, infrastructure and facilities

The focus on ECRs and investment in future research sustainability has resulted in a reduction of external research grant income from 2014 to just over £28,000,000 over the census period. DMU has invested substantially in new research opportunities.

4.1 INVESTMENT IN RESEARCH FACILITIES

In the census period, our research vision has been achieved in a progressive investment of a £136,000,000 **Campus Transformation Project** providing a world-class teaching, learning and

research space for students and academics. The project includes the restoration of the Great Hall of Leicester Castle and the towering Vijay Patel Building which includes designated postgraduate spaces and a new DMU Gallery.

Our researchers are supported by **Research Services,** committed to consolidating existing, and developing new, collaborations. The service has expanded since 2014 from two teams (funding and research policy) into four teams – research support (for bid development), research governance, researcher development and the Doctoral College.

Research is underpinned by a substantial and expanding archive, with the University's Kimberlin Library at its heart – open every day, 24 hours a day. **The Library and Learning Services** has held the award of Customer Service Excellence since 2011 and at its latest assessment, the library and its staff were described as demonstrating 'a very positive focused culture'. As part of the University's continuing investment, plans are now being drawn to rebuild a state-of-the-art library and archive.

The Library and Learning Service supports open access to research through: DORA, our **open-access institutional repository** for research; the recently established DMU Press; Figshare where users can make all of their research outputs available in a citable, shareable and discoverable manner; copyright advice and information support; our Wellcome-funded archival collections on sport; advice and services to provide citation data for research analysis; and a joint application with University of Leicester and Loughborough University that allows researchers to work with sensitive data through the Economic and Social Research Council (ESRC) Safepod.

Our archive collection has been expanded with the creation of the **DMU Heritage Centre** to collect and preserve the University's archive as well as securing other valuable archives that will have a significant impact on future research, such as the papers of Andrew Davies, Hammer, Peter Whitehead and Norman Wisdom.

An **IT infrastructure** provides world-class facilities for all researchers. A recently procured management system (over £550,000) will enable standardised development processes for external research and commercial applications and a standardised ethics process, allowing the simplification of review and authorisation for projects. We have also invested in a new system for PGR management (over £250,000) to be launched in 2021.

4.2 INITIATIVES

DMU continues to make significant investment in its research infrastructure, including a £500,000 National Magnetic Resonance machine, a first of its kind in a UK university. In the census period, DMU established a cyber risk Research Security Operations Centre, costing £150,000, that allows the threat gauged by a cyber-attack to be assessed and investigated: £357,000 in a flight simulator and wind tunnel laboratory, and £1,500,000 in new rapid prototype and textile laboratories.

A sample of our sector-leading research projects and external recognition illustrate the University's commitment to challenging conventional disciplinary boundaries and establishing interdisciplinary research themes that address key societal challenges:

- The Cyber Technology Institute is recognised as a National Cyber Security Centre (NCSC) Academic Centre of Excellence in Cyber Security Research (ACE-CSR), one of only 19 awarded to higher education institutions in the country.

- **Talent25** is a £2,800,000 ground-breaking project, jointly funded by DMU and Arts Council England (both contributing £1,400,000), aimed at studying the impact of exposing arts and culture to early-years children and seeing how that affects their development. The programme aims to run for 25 years until 2044 when the true impact on those babies exposed to the arts more than 20 years earlier can be assessed in adulthood.

- The University is playing a leading role in continuing public debates and research relating to issues of race and institutional racism, through two initiatives: **Decolonising DMU**, a programme, with a team of 13, that aims to directly tackle racial disadvantage and

discrimination within the sector; and the new **Stephen Lawrence Research Centre**. Inspired by the loan of archival materials by Baroness Doreen Lawrence, documenting the Lawrence family's fight for justice in the wake of their son's tragic murder, the centre (opened in 2019 with a £240,000 investment and a team of 7) has a mission to become a hub of world-leading and innovative research on race and social justice.

- **Local+** is a joint initiative between the University and the local authority (£100,000, per annum, split between the two) that sees academics across the faculties working with Leicester City Council on four research projects trying to bring solutions to problems affecting thousands in the community, including improving poor health outcomes for those in deprived communities; helping develop a Smart City programme for Leicester; improving the urban environment as part of a redevelopment programme on a city estate and to improve the economic outlook for people in the most deprived areas of the city.

- The innovative and award-winning **Square Mile India** project (winner of the International strategy award at the *THE* Leadership and Management Awards in 2019) funded at £46,000 per annum to support our India partners and students, contributes to our vision to contribute to the public good.

The University's commitment to the public good is also demonstrated by a **public engagement** budget of around £1,000,000 a year to support 11 staff to manage over 100 projects, mainly in the local community but also offering opportunities abroad including India, the United States, Thailand and a host of European countries.

The **research institutes and centres**, formed after REF 2014, bring together academics from different disciplines to enhance research capability, consolidate expertise, build capacity and bolster collaborations. These units are all committed to embedding the United Nations' 17 SDGs in their strategies to facilitate, encourage and reward future research impact.

Many of DMU's research institutes have international academic partners, established relationships with world-leading businesses, including Airbus, BT and Rolls-Royce, whilst also providing consultancy services to industry.

An international journal is being established by DMU that brings together research that informs policy and practice to create impacts in the United Nations targets for SDG 16. DMU is investing a further £25,000 in the project's first year, and aims that by 2028 the journal will be the foremost authority for research and information into SDG 16.

Over the census period, a shift in focus to supporting the next generation researchers has been complemented through a programme of investment in future research and to the creation of a research environment that supports and develops equality, diversity and inclusivity.