University of Exeter

Exe-Tech Strategy 2030:

Innovate, Sustain and Nurture

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Exe-Tech Strategy 2030:
Innovate, Sustain and Nurture

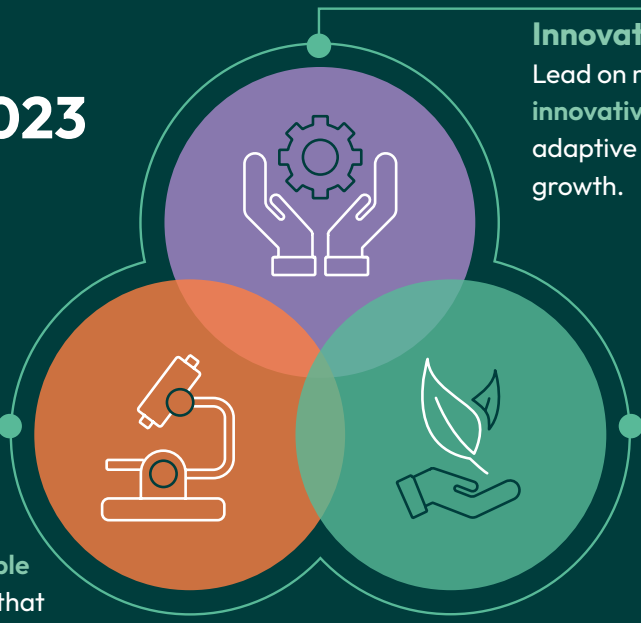
Our Purpose

To provide expertise, equipment, facilities, and spaces that optimize the power of our education and research, through adaptable and sustainable technical capability and capacity.

Our Vision

To achieve this, we will build on our foundations of technical expertise and capacity across the University and within faculties to deliver as the service group, 'Technical Strategy & Operations' in partnership with academics and relevant professional services teams.

Exe Tech Strategy 2023



Innovate
Lead on managing and developing **innovative technical environments** adaptive to digital and technical growth.

Sustain
Future proofed solutions for growth and maintenance of **sustainable facilities and equipment** that delivers for research and education.

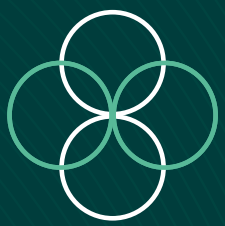
Nurture
Nuture communities of experts to thrive through teaching and skills development.

We will deliver this vision to support education and research by working in **partnership** with academics, professional services and external partners, guided by the University values (Community, Inclusion, Discovery, Excellence and Respect). Cross-cutting across the delivery of our vision we commit to working collaboratively, sustainably and digitally.

Discovery

Respect

Excellence



Inclusion

Community

Innovate

It is critical we adapt our spaces and technical environments to deliver innovative education that contributes to student experience and grows our research power. Technical Strategy and Operations will **lead on the effective and efficient management and development of innovative technical spaces** acting as the expert interface between research and education needs and infrastructure requirements (such as estates, regulators, health and safety, digital and IT) thus supporting faculty decision making in this regard. These environments include:

a) Specialist spaces on our campus sites (including research facilities, physical laboratories, workshops, and studios)

b) Off-site locations including field sites and partner/ commercial sites where we need technical capability and capacity (NHS, HEI and industry partners)

c) Digital laboratory and workshop environments that will change rapidly in the next 10 years

Rapid growth in digital and technological advances and how we deliver teaching and research will impact on these environments. Consequently, physical environments will need to be innovatively designed so they are not only safe and compliant but adaptable and futureproofed as well as taking into consider growing EDI needs. We will also work with faculties to plan spaces and lead on recommendations that are design focused on research, innovation and teaching priorities, and that leveraged funding is maximised.

We will work in partnership with other teams (e.g. Digital) as well as commercial partners to ensure our service adapts to manage and develop, as well as being educators in digital laboratory and workshop spaces. We will also work with colleagues who deliver highly specialised services such as IT and the library who have similar challenges with the adaptability of spaces. Skills development of our service and the ability to provide these skills for teaching and research will be vital to deliver this theme in a landscape of rapid changing digital and technology advances.

Environmental sustainability will continue to be a primary driver. Technical Strategy and Operations will take leadership on environmental sustainability in practice to establish exemplar behaviours for the community and taking a proactive role in delivering the University's NetZero targets.

Cross Cutting Activities	Interdependencies	Enablers
Research Environment	Digital Strategy	Digital Skills Development
Research Culture	Library Strategy	Funding and Research Performance
Environmental Sustainability	Science Park Strategy	Partnerships
Student Experience	Faculty plans	Capital plans

What have we achieved so far?

Expert support for **>430** dedicated technical spaces including laboratories, workshops and studios

Support for **national and international** fieldwork trips

>70 **specialist research technicians** supporting the live research portfolio

Responded to over **100 call outs** since 2021 totalling over **76 hours** responding to incidents

Innovative support for over **8 sites** across Devon and Cornwall

83 lab clusters with **LEAF** (Lab Efficiency Assessment Framework) awards with **72** Bronze Awards **25** Silver Awards **4** Gold Awards

Contributing to saving at least **100 tonnes** of CO_2 and **£90k p/a** in **energy costs**

Supported over **20** **major infrastructure projects** since 2015 delivering over **£123M** investment in the University estate

What will Exe Tech 2030 deliver?

- ☑ Coordinated and prioritised strategic plans (across multiple timescales) for supporting all our technical environments.
- ☑ Effective leadership and management of technical environments.
- ☑ Champions in environmental sustainability practices to support our NetZero targets.
- ☑ Innovative agile teaching delivery as educators providing solutions for practical teaching that enhance student experience.
- ☑ Specialist and adaptable laboratory design expertise for research and innovation spaces.
- ☑ Coordinated expert field work provision and support.
- ☑ Digital and emerging technology skills development to technical services staff as well as skills development for new teaching pedagogy and cutting-edge technology development.
- ☑ Horizon scanning for education and research spaces, the needs and the design focus.

How will Exe Tech 2030 be delivered?

Faculty Technical Roadmaps: Lead on the development of strategic plans for all our technical spaces with planned roadmaps, in collaboration with faculties and estates to prioritise activities.

Science, Facility and Innovation spaces: Support the development of the science park strategy (and any commercial or facility spaces) so that those technical environments can be planned and allow for spaces on our campuses.

Education Solutions: Develop concepts and business plans for 'super-labs' across campus to deliver adaptable and effective teaching solutions.

Research and Education Design: Lead on innovative laboratory and space design for teaching and research (including digital solutions) in partnership with external partners.

Digital skills: Working with the Digital Strategy to support skills for teaching and research development programme.

Inform Research and Teaching Design: Lead and be involved in technical aspects of research and education projects to inform the design of studies, experiments and data capture.

Skills Development: Provide and deliver a portfolio of skills programmes to support our education and research community to develop.

HEaTED
Higher Education and Technician Educational Development
CPD Hub
iST

Sustain

Future proofed solutions for growth and maintenance of sustainable facilities and equipment that delivers for research and education. Technical Strategy and Operations will **lead a coordinated strategic approach to sustaining our equipment and facilities** in collaboration with faculties. This is vital to sustain and grow our teaching and research ecosystem as they underpin our research outputs and impact on our student experience. We will also **lead on reproducibility and data quality for our research facilities** providing sector leading approaches.

This theme includes the core facility strategy and broadens the activities to include all of our equipment and facilities. We will lead on ensuring effective horizon scanning and effective mechanisms for sun-setting redundant equipment, critical to ensuring our laboratories continue to run efficiently and effectively. Mechanisms for funding, costing, pricing, resourcing, maintenance and effective asset management are all necessary to ensure that our equipment and facilities are appropriate and financially sustainable and suitable for the commercial market.

To date the approach to facilities and equipment has evolved as we have grown and responsive to individual sources of leveraged funds. This strategy will take a prioritised approach at an institutional level for maintaining all of our equipment and facilities in the most effective way (depending on the funding or cost recovery). We will also ensure that all our facilities are sector leading for our stakeholders and partners including a responsibility for reproducibility and data quality for all of our facilities.

We will also have a cross-cutting activity under this theme linked to environmental sustainability as a key driver to the approach to procurement, usage and maintenance of equipment and facilities.

Cross Cutting Activities	Interdependencies	Enablers
Research Environment	Facilities Strategy	Costing and Pricing policies
Research Culture	Faculty plans (E&R)	Effective marketing
Environmental Sustainability	External Funding	Partnerships
Student Experience		Cost recovery approaches
		BEI strategy

What have we achieved so far?

Launch of the
Facilities Strategy
to provide steer and consistent approaches to core teaching and research facilities

Secured **£565k** of funding from Research Capital Investment Fund in 22/23 to replace
36 Freezers
20 drying cabinets for new state-of-the art sustainable models

Developed funding streams for
equipment replacement schemes
with Sustainability team

Launched
LabCup
as chemical assent inventory to support equipment life cycles

£19M funding from our internal **capital equipment fund** since 2016 supporting **125** projects

What will Exe-Tech 2030 Deliver?

- ☑ Coordination of strategic plans for equipment and facilities that match the teaching and research requirements of our faculty.
- ☑ Planned investment and funding supporting a strategic approach to bidding and spending (expenditure) for capital equipment funds and associated resourcing and maintenance.
- ☑ Effective funding mechanisms with linked costing and pricing strategies for the usage and maintenance of all our equipment and facilities leading to more sustainable resourcing of facilities and better cost recovery.
- ☑ Maximising funding opportunities through effective and planned approach to all institutional funding in a strategic way.
- ☑ Improvements in staff retention and skills enabled by effective funding models to reduce reliance on fixed term funding. This will also be achieved through our technicians commitment programme and the Exeter Professional review.
- ☑ Increased external investment from leveraging opportunities for philanthropic and industry/partner facilities and equipment.

How will Exe Tech 2030 be delivered?

Facility Strategy: Implementation of the facility strategy which will be an essential component to developing policies and practices that will incorporate equipment, facilities and laboratories more widely.

Innovation, Science and Facility spaces: Support the strategic development of the science park (and any commercial or facility spaces) so technical environments can be planned and allow for spaces on our campuses.

Review institutional equipment: Equipment will be reveiwed and supported at an institutional level where an institutional approach to purchasing and managing will be beneficial.

Coordination of all institutional capital equipment funding: (internally and externally) to ensure effective management of those funds to maximise usage to build equipment and facilities to match our institutional growth.

Planned priorities and horizon scanning: Informed Horizon scanning for new equipment working with departments and Funder Advisory Networks to prioritise (at an institutional level) capital funding where appropriate.

Data Integrity, compliance and ISO: Drive up the quality and reproducibility of data from our facilities for our stakeholders to improve outcomes ensuring compliant processes and appropriate ISO audit where necessary.

Nurture

We will **nurture our communities of technical experts to ensure capacity** across the University so that their invaluable and exceptional level of achievement can be rewarded and delivered in collaboration with the academic community and other professional services. We will lead, through these experts, on effectively managing and running laboratories and facilities and education in laboratory and field classes. The Technicians will be trained and empowered to focus on appropriate level work so they can play a vital role in the delivery of education and research projects and activities. The recognition of the expertise of the community and our ability to nurture that community in the ecosystem will be critical to the success of the Exe-tech strategy 2030. The community will be nurtured by taking a departmental view to the development of skills, training opportunities and personal development.

A consistent and planned programme of activities with effective communication and equal opportunities to access resources will be a key enabler to the strategy. This will also provide more effective career development through clearer and well-defined pathways working closely with the academic community and external bodies and funders to ensure the hybrid nature of some roles is also supported.

By improving research spaces and environments, we can also nurture our technical experts, which will enhance research culture (as well as teaching) and improve staff wellbeing, which will result in greater retention.

We will also work with national bodies and initiatives to develop recognition for the whole community more broadly and making improvements in EDI

Cross Cutting Activities	Interdependencies	Enablers
Research Environment	Facilities Strategy	HR policies
Research Culture	Faculty plans (E&R)	Career Pathways
Student Experience	Exeter Professional Review	
Technicians commitment		

What have we achieved so far?

2 rounds of
Technician Commitment
action plans completed

Over **£20k** invested in **training and development** opportunities in22/23

Recognition of **13** staff through
Technical Service Awards

30 members of the TS staff progressed gardes, **17** of whom went into management positions (June 2022 – June 2023)

7 staff supported to attend the **Herschel Programme** for Women Technical Leaders in 2023

Annual conferences now welcoming over **125** attendees across the South-West

4 trained
Professional Registration Mentors
supporting staff in achieving recognition

Recognition of the work of technicians seen the **biggest improvement** over the last 3 years

2 leadership and management
apprenticeships in 22-23

What will Exe-Tech 2030 Deliver?

- ☑ Consistent technical staffing provision with a stable staffing profile within the technical services community providing consistent provision to faculties for teaching and research.
- ☑ Improved retention of experts critical to supporting student experience and improving research power.
- ☑ Improved wellbeing as staff are provided with greater support both by the institution and the sector creating a more effective team.
- ☑ The University strives to have an exceptional culture and reputation as a great place to work and the strategy will support this ambition for championing an outstanding research culture as well as a leading student experience.
- ☑ Better Equality, Diversity & Inclusion in a sector with poor EDI representation, the University will aim to lead for the technical community to celebrate and support EDI to enrich teams and outputs.

How will Exe Tech 2030 be delivered?

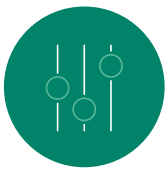
Technicians Commitment Programme: Delivery of programmes of support for technicians providing better career pathways, greater levels of recognition and support for the community.

Culture Plans: Work with faculties and departments to ensure that the technical community is represented and included in cultural reviews and activities and wider community activities.

Promotion of EDI: Deveop initiatives that promote EDI within the teams as well as working with external bodies to support EDI activities on a national level.

Wellbeing Support: Develop an inclusive, diverse and rich programme of support for wellbeing within the service and in partnership wider University initiatives.

Sector wide initiatives and policies: The challenges faced by technical experts as a community is being recognised at a national scale. We will work with external bodies and funders to influence and adopt changes in policy and practice to support and nurture our experts.



Resource allocation and funding: Review funding models and resource allocation for technical provision to reduce the number of fixed term contracts and seek mechanisms to provide more stable and sustainable funding models.

Objectives and Key Results

Objective	Short Term (23/24)	Medium Term (Until July 27)	Longer term (2030)
1 Strategic efficient technical roadmaps and action plans (for education and research) which is adaptable and aligned to need. Innovate Sustain 	• Establish framework for roadmaps in line with faculty planning processes and start to build high level strategic faculty and facility plans that recognise growth and drive efficiencies.	• Technical roadmaps in place for faculties, departments and individual technical spaces with a process in place for review, monitor and adjustment because of changes in need, technological or digital developments.	• Delivery against the technical roadmaps and a process to monitor and review is built into annual planning.
2 Readiness to adopt, develop and share expertise on new technologies and digital laboratory and workshop spaces. Innovate 	• Design of digital skills training programme and mechanisms to Horizon scan new technologies gloablly in collaboration with academics. • Establish new technical teaching insights champions. • Work closely with the learning environments steering group to ensure alignment of activities/ recommendations. • Establish and prioritise mechanisms for retaining research technicians. • Establish mechanisms for Horizon Scanning. • Identify global partners for effective strategic Horzion scanning. • Review Technicians contribution to teaching and skills sharing, identifying any gaps	• Delivery of digital skills training programme and mechanisms to Horizon scan new technologies. • Establish expert group to inform of new technical teaching insights. • A coordinated resource allocation for teaching from technicians with a clear plan of technicians contributions to fill skills gaps.	• Ensure digital skills training programme and mechanisms to Horizon scan new technologies is reviewed and refreshed annually. • Expertise in new technical teaching insights responding to changes in teaching pedagogy. • A strategic and prioritised approach to equipment and facilities. • Expert teaching and upskilling provision from technical staff.
3 Improvements in cost recovery, commercialisation of facilities and financial sustainability of equipment. Sustain 	• Develop governance of the facilities strategy and implement any recommendations of the advisory and management committees. • Develop a model to enable commercial opportunities. • Establish framework for planning financial sustainability of facilities and equipment. • Establish mechanism for institutional oversight of the University's equipment and facilities.	• Continue to Implement the recommendations from the facilities strategy governance. • Implement a model for commercial opportunities demonstrating a growth in commercial income from University facilities. • Improved cost recovery of research facilities. • Clear process and models in place for financial stability of equipment. • Lead a coordinated plan for new equipment and facilities.	• Facility strategy delivering improvements on cost recovery, commercialisation and financial sustainability in line with other Russell Group University's. • Clear commercial routes for facilities and equipment. • Delivery of coordinated plans for new equipment and facilities.

Objective	Short Term (23/24)	Medium Term (Until July 27)	Longer term (2030)
4 Contributing to University NetZero targets and sector leading in lab sustainability. Innovate Sustain	• Establish programme of sustainability initiatives within laboratories and research spaces as part of the University's broader sustainability programmes. • Formalise a group of sustainability champions and advocates within laboratories and research spaces. • Establish mechanisms for supporting behavioural change within technical spaces. • Undergo an institutional freezer review.	• Review and evidence sustainability initiatives and roll out effective interventions across technical spaces. • Expansion of sustainability champions and advocates. • Begin engagement of sustainable practices with technicians, academic and student lab users to support behavioural changes. • Establish mechanisms for quantifying contribution to University NetZero targets within technical spaces. • Identify equipment for review at an institutional level. • Implement outcomes of freezer review and freezer management policy.	• Adoption of effective sustainability initiatives within technical spaces. • An engaged and active group of environmental champions in technical spaces. • Adoption of initiatives across academic, technical and student groups. • A clear plan of equipment review with an environmental sustainability lens. • Review outcomes of freezer review and monitor implantation of freezer management policy.
5 Increase Regional, National and International reputation for technicians. Nurture	• Active membership of relevant networks and a clear understanding of the size and breadth of reputation. • Establish plan for expanding networks. • Actively contribute to the GW4 networks for technicians and infrastructure. • Promote leadership on funding body boards and panels from technicians. • Establish recognition of Technicians on relevant research outputs and as research investigators. • Review international opportunities/ networks for the technical community. • Identify global partners who can support Horzion scanning and to share best practice.	• A reputation for active engagement in relevant networks nationally. • Deliver plan for expanding networks. • Lead on delivering initiatives in GW4 networks. • Increase representation on funding body boards and panels for technicians. • Promote recognition of technicians on relevant research outputs and have examples of more research investigators from the technical community. • Develop plan for expansion of international networks and opportunities for the technical community. • Build global partner network to share resources and facilities as well as best practice.	• Established an active network across the University technical community nationally. • Demonstrable growth in networks. • Outputs from relevant GW4 networks. • Clear representation on funding body boards and panels for University of Exeter technicians. • Evidence of increased recognition of technicians on relevant research outputs and a community of research investigators as research leaders. • A footprint internationally in relevant networks.
6 Improvements in staff well-being, culture, retention of skills and expertise, EDI, recognition and reputation for high quality outputs. Nurture	• Review and roll out the 3rd Technician Commitment programme. • Be a leading service for taking forward the outcomes of the Exeter Professional review. • Establish benchmarking for recognition and capturing outputs. • Establish benchmark for culture index, retention levels and EDI and key areas for focus for improvements. • Build leadership programme across technical community. • Continue to deliver opportunities for career development. • Establish data quality and reproducibility working group focussed on mechanisms for ensuring high quality outputs.	• Deliver and review a rolling programme supporting the Technician Commitment. • Established support programme as a result of the Exeter Professional Review. • Measurable evidence of improvements in recognition and outputs for technicians. • Improvements in culture index, retention levels and EDI for key areas. • Delivery of leadership programme. • Increases in career development opportunities. • Deliver on ensuring high quality outputs and increased reproducibility for our research facilities and equipment.	• Evidenced improvements from the rolling Technician Commitment programme. • Evidenced improvements as a result of the Exeter Professional Review group in place. • Technicians appropriately recognised for contributions. • Embedded changes that support culture index, retention levels and EDI for key areas. • Ongoing leadership programme across the technical community. • Established career development opportunities. • Embedded mechanisms for ensuring high quality outputs and increased reproducibility for our research facilities and equipment.

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