



Technician Commitment Self-Assessment and Action Plan

December 2020

1. Introduction

Brunel University London is a campus-based University, situated in Uxbridge, West London. Our mission is to bring benefit to society through excellence in education, research and knowledge transfer.

We have a broad portfolio of academic programmes that attract almost 15,000 students studying in 16 academic departments. With more than 148 nationalities represented in our staff and student body, we are proud to be an International community, and appreciate the considerable education, professional and cultural contribution it makes to our teaching and research. The University currently employs approximately 2700 academic and professional staff.

Brunel is a research intensive University and we are committed to focusing our research on those areas in which we can integrate academic rigour with the needs of governments, industry and the not-for profit sector, delivering creative solutions to global challenges and bringing economic, social and cultural benefit. In the REF 2014, over 60% of Brunel's research was judged to be world-leading or internationally excellent

Brunel was ranked in the top 100 worldwide in the Times Higher Education University Impact Rankings in recognition of its social and economic impact, and its Innovate UK income is the 13th largest in the country.

Brunel became a signatory to the Technician Commitment in 2019. The Commitment is a sector-wide initiative led by the Science Council, and supported by the Gatsby Foundation, to help address key challenges facing technical staff and the institutions they critically support.

The commitment comes at a key time as the demand for technicians is increasing. More than 1.5 million technicians currently work in the UK, a figure expected to rise by around 70,000 each year. Vice Chancellors and Directors of Research Institutes from across the UK have recognised the need to ensure the sustainability of technical skills by safeguarding and developing people and skills.

The Technician Commitment will ensure greater visibility, recognition, career development and sustainability for technicians across all disciplines at Brunel.

We recognise the significant and valuable contribution that technicians make to our education and research success. Technicians play a key part in maintaining a supportive and enabling academic environment for staff and students and by contributing to a positive student experience.

The 5 Key areas are:

- **Visibility:** Ensure that all technicians within the organisation are identifiable and that the contribution of technicians is visible within and beyond the institution
- **Recognition:** Support technicians to gain recognition through professional registration
- **Career Development:** Enable career progression opportunities for technicians through the provision of clear, documented career pathways
- **Sustainability:** Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised
- **Evaluating Impact:** Regularly assess the impact of actions taken in support of the Commitment to ensure its effectiveness.

The Technician commitment presents an opportunity to recognise and nurture this critical part of Brunel's community.

2. Comments on organisation of technical structures and the internal scope/reach established for the Technician Commitment

2.1. Academic Structure

The University is organised into three academic colleges and the Brunel Centre for Advanced Solidification Technology, an academic research centre focusing on both fundamental and applied research on solidification of metallic materials.

All academic areas report to the Provost.

Table a: Brunel Academic Structure

College of Business, Arts and Social Sciences	Department of Arts and Humanities
	Brunel Business School
	Brunel Law School
	Department of Economics and Finance
	Department of Education
College of Engineering, Design and Physical Sciences	Department of Social and Political Sciences
	Brunel Design School
	Department of Chemical Engineering
	Department of Civil and Environmental Engineering
	Department of Computer Science
	Department of Electronic and Electrical Engineering
	Department of Mathematics
	Department of Mechanical and Aerospace Engineering
	Brunel Experimental Techniques Centre
Brunel Innovation Centre and Brunel Composites Centre	
College of Health, Medicine and Life Sciences	Department of Life Sciences
	Department of Health Sciences
	Brunel Medical School
Brunel Centre for Advanced Solidification Technology	

2.2. Scope of the Technician Commitment at Brunel

The Technician Commitment includes all staff that are directly supporting the core business of delivering teaching and research. These staff are covered by a distinct job family at Brunel.

A total of 83 technical staff are employed supporting the teaching and research activities of Brunel's academic departments. Technical teams are organised through the Colleges and BCAST and often serve multiple disciplinary areas. Although comparatively small in number, the technical team cover a broad range of disciplines including biosciences, performing arts and digital media and numerous engineering disciplines.

Outside the scope of our Technician Commitment Action Plan are technical staff in central professional services divisions, such as Estates and Operations and the University's Central Information Services.

The range of professional expertise is wide and ranges from skilled to expert level staff, such as those holding PhD qualifications. The vast majority of staff are core funded with a small number of staff funded by external grants.

Table b: Distribution of technical staff

Brunel Centre for Advanced Solidification Technology	11
College of Business Arts and Social Sciences	17
College of Engineering, Design and Physical Sciences	37
College of Health, Medicine and Life Sciences	18

Organisational structures are relatively flat with all technical staff reporting to a College Services Manager (CSM), or Director of Operations in BCAST, who is responsible for general line management and development of staff, and the general resourcing of technical areas. There is one management layer below the CSM, which is generally organised along department lines or around a discipline or group of subjects.

Most technical staff work within a matrix structure with formal reporting to a CSM and/or Technical Manager and functional accountability to a Head of Department/ Division or indeed, individual academic staff member.

3. Comments on level of initiatives/programmes/activities that were already in place for the technical community within this organisation prior to them becoming a signatory of the Technician Commitment:

3.1. Visibility

Technical staff have good visibility in relation to their own activities and the stakeholders they directly engage. Visibility within and around academic units is generally good and senior technical staff are expected to contribute to academic management and planning processes and normally attend Departmental Management Boards. Technical staff are represented at College Management Boards through the College Services Managers

Staff contribute to student induction events and processes, often through a face to face briefing and the production of induction materials. In some areas technical managers maintain regular contact with students over the provision of technical services through regular email bulletins and briefings at the beginning of term. Staff are very visible in the delivery of student events across the University, and have a central role for instance the delivery of various degree shows, such as those in engineering, design and digital media, student competitions such as IMechE Formula Student and student-led theatre productions and artistic performances. In some cases technical staff contribute in STEM outreach activities, including school visits and Royal Institution Masterclasses in Engineering.

As part of the Action Plan we would like to give greater prominence to the critical role technical staff have in delivering teaching and research, maintaining a safe environment for staff and students and contributing to an overall positive student experience. At key contact points in the teaching programme, technicians spend a great amount of time with students helping them to understand course material during attendance at labs and supporting them to bring academic projects to completion for both UG and PGT students. Technical support is also essential to lab based doctoral researchers and research activities.

The University has initiatives aimed at all staff, regardless of role or level, to promote visibility of individuals within its community. This usually takes the form of a short feature published on IntraBrunel, the University's internal news pages. There is scope to increase the frequency of these features focussing on technicians. Similarly, the University tends to include a range of staff in external publications and web pages and we would wish to give greater prominence to technical staff in, for example, course prospectuses where possible to do so.

In respect of research publications, acknowledgement is sometimes given to technical staff who have worked on specific projects. We are not able to gauge how widespread this practice is and clearly this is dependent on the research investigator and the nature of the work. However, as part of the action plan we propose to develop fair attribution guidelines to encourage recognition and set out the ways that this might be achieved.

3.2. Recognition

3.2.1. Recognition for Personal Contribution

The STAR (Special Thanks and Recognition) Awards demonstrate the University's appreciation of technical staff members who have made an extra special effort to help make the University a better place. These awards differ from other forms of recognition and reward, such as discretionary increments and promotions, which recognise excellence within the scope of one's job. Individual technical staff and groups can be nominated for a STAR award once a year.

Remuneration is based on an incremental grading structure which technical staff progress through. Each year an incremental rise is awarded until the spinal point of the top of the grade is reached. Where there is opportunity to support staff to take on more responsibility we have an Acting Up and Additional Responsibility Policy. Exceptional performance is recognised through other mechanisms such as accelerated increments and excellence awards.

3.2.2. Professional Registration

There is currently no institution-wide approach to supporting professional recognition for technicians. Practice within the Colleges and BCAST has been to support technical staff wishing to become registered with a relevant professional bodies, particularly where those bodies accredit Brunel academic programmes, or membership is relevant to departmental activities. This is normally initiated by the individual staff member. Across the University as a whole, the uptake of professional registration by technical staff is low as a proportion of the technician cohort. We believe that there are various reasons for a lack of uptake including not being clear as to its benefits, and a lack of support and encouragement to go through the registration process. Staff who are at an earlier stage in their careers appear to be more enthusiastic in exploring the benefits of professional registration. Recently, we have had several technical staff achieve Registered Scientist (RSci) and Chartered Scientist (CSci) status.

A coordinated, institution-wide approach to professional registration for technicians will be addressed as part of the Action Plan.

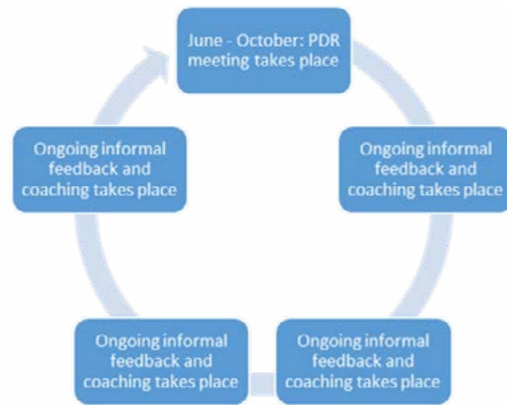
3.3. Career Development

3.3.1. Career Pathways

The University did not until recently have any technician specific career pathway. Since becoming a signatory, we have established a career framework based on 9 generic technical roles and new job descriptions have now been issued to all technicians. We will continue this work as part of the Action Plan.

3.3.2. Annual Reviews

The University operates an annual Performance Development Review (PDR) process for all University employees. All technicians are involved with this process which is as follows:



During the PDR discussion the University is able to identify areas for growth and improvement and inform suitable development plans to support further career progression. Staff are encouraged to reflect on future development needs

3.3.3. Training and Development

The majority of training and development is provided through the University's Staff Development Unit and is open to all employees of Brunel. Staff Development offer workshops in 14 generic themes, including leadership and management, health and safety, personal effectiveness, communication skills and equality and diversity. Technical staff are encouraged to access these.

Currently there are no Brunel development programmes focussed specifically on technical careers and technical staff are encouraged to attend broader generic programmes in areas such as leadership and management, personal effectiveness and specific skills such as IT.

Specialised training in topics such as laser safety, radiation safety and COSHH are provided through the University's Health and Safety Office, who also deliver external health and safety qualifications. Several technical managers have completed the NEBOSH General Certificate in Occupational Health and Safety and IOSH Managing Safely within the past two years.

Technicians with significant and continuing commitments in teaching and supporting learning are encouraged to engage in the University's Learning and Teaching in Higher Education programme, which runs annually. As part of the Action Plan we will encourage more staff to develop in this area where appropriate to their role.

3.3.4. Externally Provided Training and Development

Significant expenditure takes place annually outside Staff Development and all Colleges and BCAST have funds to support technical staff attendance on general training courses or conferences to support the development of their careers. This includes formal H.E. qualifications which can be taken at Brunel or elsewhere.

As part of the Plan we intend to raise awareness of external events relevant to technicians, such as the HETS conference and Technician Commitment seminars. Furthermore, we will develop an institution-wide policy to address enabling factors such as funding and reasonable time off for external activities.

3.3.5. Training in Specialist Topics

Training in specialist technical topics are usually supported through a staff member's College (or BCAST) in discussion with line managers. Development needs are usually identified through the PDR process or precipitated by organisational or technical changes (such as the establishment of a new technical facility). Brunel has, in the past, made use of external technical training providers such as HEaTED.

3.3.6. Mentoring

The University has a well-established cross-institutional mentoring network that is available to all staff. There is scope to encourage mentoring as a professional developmental activity for technicians across the University, both as mentees and mentors. Mentoring might be particularly helpful for those seeking to move into technical management roles and those contemplating working towards professional membership. Currently, there are currently no registered mentors from within the technical community and we will seek to address this, and also encourage wider engagement by technical staff, as part of our Action Plan.

3.3.7. Leadership Development

We encourage technical staff to attend management and leadership training and a good number have completed the Institute of Leadership and Management Level 3 programme, hosted by Staff Development. Furthermore, several female staff have recently completed Aurora, Advance HE's leadership development initiative for women.

The University delivers its own 6-month leadership development programme, ASPIRE, which is open to all University staff. Although the programme is popular, take-up from among technical staff is fairly low and this is an area to be address as part of the Action Plan.

3.4. Sustainability

3.4.1. Entry to Technical Careers

Historically, most technicians at Brunel have been recruited directly into vacant positions and many of these staff will have gained experience and might have completed technical training at a previous employer. To date there has been no formal trainee technician route into the organisation, although some departments do recruit to more junior posts and then seek to promote when required competencies can be demonstrated.

Recruiting from other organisations is a viable approach in some instances but a more holistic approach is required in the long-term if we are to avoid recruitment difficulties in some discipline areas. Anecdotally, there appear to be fewer candidates for vacancies in some areas. Managers cite a smaller pool of available recruits and competition as the main reasons. Business sectors who once trained the technicians we recruit in large numbers (such as in manufacturing) have moved production overseas and have much smaller trainee intakes. This is also observed in traditional engineering and craft areas. Furthermore, there is strong demand for technicians from the private sector, who are able to offer structured career paths and benefits to those seeking technical careers. Being a London-based university with its associated cost of living exacerbates this problem.

Long term sustainability is likely to depend on attracting junior technical staff and retaining, developing and promoting them through the organisation. We have a good record in promoting technical staff and a good number of those currently in technical management grades have progressed from more junior positions in the organisation. We continue to encourage staff to develop their skills and seek promotions and this is underpinned by training and development opportunities. Recruitment and development at more junior levels appears to be an important long-term strategy for sustainability.

Brunel has an established apprentice scheme and has trainees in departments across the institution. A health and science technician apprenticeship programme is now available but we do not as yet have an active technician apprentice programme in other areas, such as engineering and technical design. Development of these alongside other entry routes would be a useful element in our strategy for long-term workforce sustainability. Discussions are currently ongoing with potential partners for an engineering technician programme and we will progress this as part of our Action Plan.

3.4.2. Developing Insight

Since becoming a signatory to the Technician Commitment, conversations have begun to focus on technicians as a distinct group among the body of professional staff at Brunel. Management information needs to be aligned to develop an understanding of sustainability and to inform us how we are making progress with our Action Plan. A dashboard of information in areas such as career stage profile, staff turnover, career progression and uptake of development opportunities will be beneficial to succession planning. Currently

many data sets treat professional services staff as a homogenous grouping and do not focus specifically on technicians.

We also need to develop an institution-wide approach to engaging key stakeholders to understand the long term requirement for technicians and technical services. Stakeholders would include the technicians themselves, students, heads of academic departments and services managers, research investigators and those with specific interest in the technical environment, such as health and safety staff. Both qualitative and quantitative information gleaned from stakeholder engagement will inform future planning and help to highlight emerging themes for technician training and development, such as information and digital literacy, and skills centred on communication and pedagogy.

3.4.3. Workload allocation

We currently lack a formal, institution-wide approach to the management and analysis of technician workloads. Going forward, better planning and information will be essential to inform focused conversations on sustainability and make the best use of staff capabilities.

Technician workloads are not uniform across all areas through the academic year and are influenced by a number of factors, such as the balance between teaching and research activities, the breadth of skills of individuals and the popularity among students of certain technical topics. Aside from the need to utilise our staff fully, it is also critical to be able to establish balanced workloads so that staff can engage in University activities and can pursue career development activities, such as training, secondments and offsite events.

The University has an established Workload Management System which is in use across all academic departments. We will investigate the use of this, and alternative systems to manage, technician workloads.

4. Comments on initiatives this organisation has put in place to address the themes of the Technician Commitment since becoming a signatory

4.1. Visibility

We have developed a communications plan to raise awareness of the Brunel Technician Commitment both within and outside the institution, and to support visibility actions as part of the plan.

We have established a technical network group (Brunel TechNet) to help strengthen the technical community and to organise events envisaged in the plan

4.2. Recognition

We have agreed that the Brunel Teaching Awards, which provide an opportunity for Colleges to nominate outstanding contributions to learning, teaching and student support, will have an award category for professional staff, and this has enabled technicians to be nominated for awards. The University's Student-Led Teaching Awards, which is organised by the Union of Brunel Students and makes awards based on the nominations of students now includes a 'Technician of the Year' category.

4.3. Career Development

We have recently developed a technical job family for technical roles that provides a career pathway for technical staff, and articulates more fully the responsibilities, skills and behaviours required of technicians at each level. We have created 9 new generic technical roles ranging from assistant/trainee technician to principal technical manager/specialist and all technical staff have been transferred to new job descriptions.

Table c: Brunel Technical Job Family

Grade	Roles	
H3	Principal Technical Manager	Principal Technical Specialist
H2	Technical Manager	Technical Specialist
S6	Senior Technician	
S5	Technician	
S4	Assistant Technician	
S3	Assistant Technician	
S2	Technical Assistant/Trainee Technician	

We have now started to develop a skills matrix mapping out core skills and competencies required at each level and this will inform the conversation on supporting career development for technicians and the extent and nature of training/development interventions to (a) help staff perform well in their roles and (b) prepare them and increase their chances of being promoted to the next level.

Thought needs to be given as to the career progression that might take place from the top two grades (NB. H2 is equivalent to Associate Lecturer and H3 is Lecturer grade). Staff on these grades can pursue a 'management route' promotion to College Services Manager but routes into academic or research posts are less well articulated.

5. Please provide a 24-month action plan, detailing future plans to ensure your organisations addresses the themes of the Technician Commitment

Visibility		
Ensure that all technicians within the organisation are identifiable and that the contribution of technicians is visible within and beyond the institution		
	Action	Evidence
Development of Technician Network (Brunel TechNet)	<p>Seminar Programme. Aimed at giving technical staff a greater appreciation of the University's operating context and key operational challenges for decision makers. To be delivered by University senior managers and external contributors.</p> <p>Deliver a Technical Staff Conference in 2021</p> <p>Support and facilitate formal and informal network meetings for technical staff to share ideas and problems.</p> <p>Support the network through a dedicated web base for staff to share information and be kept informed of new developments arising from the Action Plan.</p>	Evidenced by published programme of events. We will record attendance at events as part of individual development records.
Communications initiative to highlight contribution of technical staff	<p>Regular IntraBrunel feature, focussing on an individual member of technical staff and their contribution to the academic mission of the University.</p> <p>Publish staff profiles in departmental student handbooks highlighting their contribution to departmental activities.</p>	Technical staff will have greater visibility on internal and external facing web pages. Staff will be increasingly visible to staff, visitors and prospective students.

Engagement at Departmental/ College/Institute Level	Ensure that Technical Staff are members of relevant staff meetings, including departmental meetings and Student Experience Committee Meetings	Revised terms of reference for relevant committees. Attendance at meetings.
Engagement across the University	Facilitate involvement in project teams and working groups on issues that may affect the technical community, including estates, environmental, campus issues and student experience.	Maintain a register of technical staff involvement in working groups and projects.
Visibility in external publications and submissions	Acknowledge technical staff contribution in REF 2021 environment statement Reference to technical staff contribution in TEF submissions Publish staff profiles, where appropriate, in University prospectus, research brochures and external programme web pages	REF 2021 environment statement TEF submissions Evidenced in University publicity material
Visibility of Technical Staff contribution to Research papers	To recognise the importance of technical staff in research Brunel will have Fair Attribution guidelines	Published guidelines

Recognition		
Support technicians to gain recognition through professional registration and external awards schemes		
	Action	Evidence
Support professional recognition	Establish scheme to support (financial/developmental) and encourage technical staff to access accreditation from relevant professional body BUL will showcase staff gaining professional registration through IntraBrunel news articles.	Development and publication of BUL policy statement Maintain register of professional registrations
University award and recognition routes.	Include technical staff in annual teaching awards Encourage managers to identify exceptional contributions through STAR Awards and other recognition routes. Consider establishing College-based awards for technical staff.	Monitoring of awards and nominations
External awards for excellence	Work with academic staff and senior managers to identify exceptional contribution and nominate technical staff for external prizes, such as the Papin Prize, IOM3 Technician of the Year Award and IST awards]	Monitoring of nominations and awards through HR.

Career Development		
Enable career progression opportunities for technicians through the provision of clear, documented career pathways		
	Action	Evidence
New technical staff Career Structure	Development of technical job family for staff from entry-level to principal technical manager or specialist. Issue revised technical job descriptions across Colleges and BCAST	Publications of technical job family and generic job descriptions on Technician intranet pages.
Establishment of generic skills/competences and creation of a Technical Staff Development Framework	Establishment of generic skills/competences for each technical level of job family. Develop induction and training framework that (1) Allows staff to fulfil the range of expectations across a given grade (2) Prepares staff for promotion to the next grade	Publication of technician generic skills matrix and technician development framework.
Engagement in STEM and outreach Activities	Encourage the contribution of Technical Staff to the University's outreach and widening participation work, such as Royal Institution Masterclasses and STEM taster days.	Engagement of staff in STEM to be recorded on staff development record
Mentoring	Increase profile of current mentoring scheme to technical staff. Encourage technical staff to join the University mentoring scheme as mentors.	Technical staff joining the BUL scheme as mentors and mentees.
Networking opportunities and Conference Attendance	Provide opportunities for staff to network outside the institution with organisations who are signed up to the Technician Commitment and attendance at Professional Body and technician networking events. Where appropriate, and financially possible, encourage technical staff to attend conferences	Attendance at events recorded through Staff Development.
Leadership Development	Encourage and support more technical staff to access Brunel's ASPIRE Leadership Programme.	ASPIRE Programme registrations

Sustainability		
Ensure the future sustainability of technical skills across the organisation and that technical expertise is fully utilised		
	Action	Evidence
Succession planning/Entry to technical Careers	Articulate and develop routes into Technical careers at Brunel such as (1) Engineering Technician Apprenticeship Scheme (2) Technician Graduate Trainee Scheme.	Published Technician Apprenticeship Schemes
Evaluating Impact	Establish Technician Commitment Steering Board. In addition to oversight of the Technician Commitment action plan, the Board will evaluate the impact of its constituent elements, proposing adjustments where appropriate.	Regular meetings
Developing Insight	Develop an 'establishment' for technical staff. Develop a dashboard of measures to inform sustainability, covering employment, progression and development technical workforce. Develop focus groups of key stakeholders to inform the long term sustainability of the technical workforce.	Published data and qualitative information will be presented to Technician Commitment Steering Board for discussion
Technician Workload Management	Develop a workload model or Include technical staff in the Brunel Academic Workload Allocation model	Published workload data

6. Please evidence how the ‘technician voice’ was present in the development and formation of the institutional action plan:

The Action Plan was developed under the oversight of the University’s Technical Services Development and Modernisation (TSDM) Steering Board, chaired by the Vice-Provost and Dean of the College of Engineering, Design and Physical Sciences.

Membership of the TSDM Steering Boards was as follows;

- Vice-Provost and Dean of the College of Engineering, Design and Physical Sciences
- Deputy Director of Human Resources
- Directors of College Operations (CBASS, CEDPS, CHMLS)
- Chief Information Officer
- Director of Operations, Brunel Centre for Solidification Technology
- Head of Staff Development
- Union Representatives (UCU and Unite)

Following the approval of the Plan, the project will be overseen by a newly formed **Technician Commitment Steering Board**, which will include College Services Managers and additional technical staff.

The Technician Commitment Steering Board will provide regular reports to the University’s Executive Board on progress in implementing the Action Plan.

It is the intention to deliver the strands of the Plan through several working groups and we intend to invite technicians from all areas and levels to be part of these groups.

Technicians have been involved in the development of the Action Plan in a number of ways. A number of consultation events on the draft plan were held during the academic year 2019/2020 by the Technician Commitment Institutional Lead covering all Colleges and BCAST. The final draft plan was then presented by Technical Managers at staff meetings for discussion and feedback.

College Services Managers and BCAST Director of Operations - who have overall responsibility for the delivery of technical services in their respective area - have been engaged in discussions at various stages during the formulation of the Action Plan.

7. Please confirm that your Technician Commitment status and action plan is published on your organisation website and provide the relevant URL here:

www.brunel.ac.uk/technicians



Signed:

(Technician Commitment Nominated Institutional Lead)

Date: 01 December 2020



Signed:

(Technician Commitment Signatory – Leader of Institution)

Date: 01 December 2020

