Access and Participation Statement 2022/2023: Admissions

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C=Contributor, R=Reviewer, A=Authoriser

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1.0 Access and participation

At the Dyson Institute, our mission is to build challenging and enriching educational experiences which are free, student-centric and aligned with the needs of industry. Offering a free education means that those who are able to benefit the most can participate and therefore we are committed to improving access for students from underrepresented backgrounds. This document outlines our approach to fulfilling our ambition.

2.0 Access

As a small provider with a cohort size of around 40 students per year, we must set aspirations that are appropriate to our scale and focus. We are also mindful of the fact that a degree apprenticeship does not suit everyone; our admissions process is designed to recruit candidates who are more likely to thrive in this demanding environment; applicants who are passionate problem solvers and can demonstrate attributes such as resilience, as well as high academic capability. To support access from all backgrounds, the Admissions team provide information and guidance ahead of each admissions stage on what to expect and how to prepare.

The Dyson Institute is focused on three key underrepresented areas for access and participation:
– Students from low socio-economic backgrounds
– Students who identify as female
– Students from minority ethnic groups or backgrounds

2.1 Students from a low socio-economic background

The Higher Education and Research Act 2017 requires HE institutions to address the underrepresentation from socio-economic background in higher education and POLAR4 data is one indication of educational disadvantage. Our ambition is to increase the number of students we recruit from the lowest quintiles:
– 10% of new admissions from POLAR4 Q1
– 20% of new admissions from POLAR4 Q1 + Q2

In 2021 we admitted our highest percentage of Q1 + Q2 applicants to date: 15%. This decreased to 11% in 2022.

2.2 Female students

The Dyson Institute is passionate about increasing the number of female students pursuing engineering. We ensure positive and aspirational role models, such as female engineers, academics, undergraduates and other professionals, are included in both our recruitment activity and our admissions process. According to data from EngineeringUK, only 12% of engineers are female[1]. Whilst our aspiration for 2022 entry was to enrol 40% of female undergraduates, to maintain the progress made in 2021, our intake decreased slightly to 35%. Whilst this is still significantly higher than the female undergraduate engineering population starting at UK universities in 2021/21 (19% according to HESA data), we maintain our aspiration to reach 40% in 2023.

2.3 Students from minority ethnic group or background

Only 9% of engineers in the UK are from ethnic minority groups compared to 12% of the UK's workforce[2]. According to HESA data, 29% of UK undergraduate students enrolled on engineering courses in 2020/2021 were from a minority ethnic group or background. 21% of our 2021 intake are from a minority ethnic group or background, so our ambition is to reach the sector average of 29%.

[1] https://www.engineeringuk.com/media/1691/gender-disparity-in-engineering.pdf

[2] https://raeng.org.uk/blogs/racial-parity-in-engineering-looking-beyond-black-history-month

3.0 Outreach & Partnerships

Outreach events are planned throughout the year with undergraduates playing a vital role, sharing their personal stories from their education and work lives and conveying their passion for engineering.

3.1 Outreach partnerships

As a small, independent institution we are keen to collaborate with organisations who have recognised expertise in widening participation and can support us to achieve our ambition.

3.1.1 The James Dyson Foundation

The James Dyson Foundation (JDF) is a registered charity whose mission is to get young people excited about engineering. It does this by providing free educational resources, delivering engineering workshops in schools and offering bursaries. Through our partnership with the JDF, we can reach out to their network of secondary schools, further education and sixth form colleges. Their outreach activity is prioritised on providers that meet some (or all) of the following criteria:
– Be co-educational or girls' schools
– Be state funded
– Have students from a socially diverse background (based on POLAR4 and ethnicity of local population)

3.1.2 Pathway Careers, Training & Mentoring

Pathway CTM is a social enterprise providing employability training, support and opportunities for schools and students across the UK. Their programmes reach more than 150,000 students in over 500 schools and colleges throughout the UK, helping young people make informed decisions about their next steps post GCSE and A-Level.

Through our partnership with Pathway CTM, the Dyson Institute will run a number of events over the year ahead, tapping into Pathway's database of candidates which is made up of 53% females, 45% from diverse ethnic communities, 25% receiving free school meals and 22% from black heritage. They also track other social mobility indicators such as POLAR4 and first in the family to attend university.

3.1.3 Upskill Me Empowered Females in STEM Programme.

As part of our schools' outreach, we are delighted to establish a new partnership with Upskill Me, a social enterprise with a network of over 3,500 schools which focuses on supporting under-represented and less advantaged young people with the skills, connections and knowledge they need to thrive in the future. Upskill Me believes engaging with students in school is vital to raising aspirations, developing key skills, and influencing life-changing career decisions.

Upskill Me's flagship programme, Empowered Females in STEM, matches over 400 passionate students with female or non-binary mentors for an immersive 6-month programme, which includes in-person events, STEM challenges, masterclasses and group mentoring sessions.

4.0 Success and Progression

4.1 Success

Two cohorts (72 students) have graduated from the programme. Two students left the programme to follow different (non-engineering) studies, and two dropped back a year due to personal circumstances. All graduates achieved an honours degree, and all have moved into full time employment. The Dyson Institute will continue to monitor student success and provide support to ensure all learners can achieve their best.

4.2 Progression

Dyson Institute students are also Dyson Technology Ltd employees, and work in the company's Research and Development (R&D) department for three days a week during their degree apprenticeship, putting academic theory into practice in the workplace. They participate in rotations across electrical, mechanical and software teams, allowing them to experience a range of engineering disciplines and develop the skills they need to be effective in the workplace.

Upon graduation, Dyson Technology offers a permanent role to all Institute graduates who achieve a satisfactory level of performance. All 2021 and 2022 graduates received a permanent job offer at Dyson Technology Ltd.

5.0 Student support

We are committed to offering our undergraduates a supportive and stretching environment in which they can thrive personally as well as academically, as they prepare to become the engineering leaders of the future.

5.1 Academic Support

Our small class sizes allow us to provide individual support to every student. Undergraduates are assigned an Academic Tutor who checks on their academic progress, provides advice when needed and can guide undergraduates when the time comes to choose a stream. The academic team provides study skill seminars, facilitating the transition to higher level study.

5.2 Student Support Advisors (SSAs)

Each cohort has a dedicated Student Support Advisor (SSA), who is the first port of call for support. SSAs hold individual monthly meetings with the undergraduates in their cohorts, supporting and coaching them to become resilient, confident individuals supporting their effectiveness as both a student and employee. SSAs also support undergraduates who may face difficulties such as stress management to mitigating circumstances.

5.3 Mental Health Support

We all face challenges in our lives, and that is perfectly normal, however, we sometimes struggle with facing those challenges. We therefore partner with four key mental health support providers for our undergraduates to support them in responding to these challenges whilst maintaining their wellbeing.

- Online talking therapy in partnership with ProblemShared
- Online Text Support in partnership with SHOUT
- In-person talking therapy with a clinical psychologist

5.4 Disability Support Advisor (DSA).

The DSA liaise with academic and workplace staff in order to ensure the necessary reasonable adjustments are made. The DSA provides advice and support to both current and prospective students on the availability and provision of different adjustments available in both academic teaching and workplace learning, helping our undergraduates to achieve their full potential. The Dyson Institute provides a wide range of assistive technology to further support for those with disabilities and/or learning differences.

5.5 Year One Induction

Fully aware of the challenges this important life transition poses, we provide a comprehensive two-week induction programme that supports undergraduate to transition into employment and higher education. The induction period also includes a social programme, designed to facilitate the cohort in building a community,

Appendix 1

The make-up of the new student body is broken down below. These statistics provide a benchmark against which to improve access and participation at The Dyson Institute.

	Characteristic	% of Cohort 1 2017	% of Cohort 2 2018	% of Cohort 3 2019	% of Cohort 4 2020	% of Cohort 5 2021	% of Cohort 6 2022
Gender	Male	73%	60%	67%	76%	59%	65%
	Female (proportion of female undergraduate students studying Engineering & Technology in UK HE, based on HESA data from 2020/21 entry for 2020)	27%	40%	33%	24% (20%)	41% (20%)	35% (19%)
Ethnicity	From a BAME background (proportion of BAME undergraduate students studying Engineering & Technology in UK HE, based on HESA data from 2019/20 entry for 2020 onwards)	21% (25%)	20% (26%)	24% (28%)	27% (29%)	21% (29%)	21% (31%)
Disability	Specific disability or learning difference	9%	5%	9%	9%	36%	19%
Education	State educated (State selective)	82% (42%)	78% (30%)	84% (33%)	80% (24%)	79% (38%)	81% (23%)
	Educated at an English school with more than the mean average of students eligible for free school meals (mean of year)	6% (12.6%)	7%* *only held data for 64% of pop. (12.6%)	0% (14.3%)	24% (16.2%)	5% (19.7%)	5% (27.5%)
	Educated at a school achieving higher than the average A level result (for 2018/19 C+)	85%	77%	49%	53%	74%	70%
POLAR4	POLAR4 Q1	3%	0%	5%	3%	5%	2%
	POLAR4 Q1+2	12%	13%	12%	9%	15%	12%
Parental Education	Parents completed higher education	58%	45%	79%	62%	62%	79%
	Unsure if parents completed higher education	18%	32%	0%	3%	2%	2%
	Parents did not complete higher education	24%	23%	21%	35%	36%	19%