

Neurodiversity in Engineering and Technology

How to build a more inclusive profession

Our new research released November 2023 reveals an urgent need to make engineering and technology more accessible to neurodivergent people. Our report identifies several key areas where change is needed with specific recommendations for action.

Main Findings

- Existing data is limited and most likely underestimates the number of neurodivergent people working in the sector.
- Many neurodiverse engineers and technicians are reluctant to be open at work due to stigma and say they face a range of challenges.
- Being part of an under-represented group magnifies the challenges.
- Employers within the sector and beyond often miss the opportunity to benefit from specific strengths associated with neurodiversity.
- There are clear actions that can be taken to improve the situation.

There are several reasons why engineering employers should take note of our findings:

- There are likely to be many more neurodivergent engineers and technicians in the workplace than is currently reported.
- Neurodivergent engineers and technicians do not generally experience their workplaces as inclusive.
- There is some evidence that engineering employers perform worse than other sectors in terms of neuroinclusion.
- Many of the changes required to create a more inclusive environment for neurodivergent people will also enhance the employment experience – and performance – of their neurotypical colleagues.

What is neurodiversity?

'Neurodiversity' is used to describe the concept that "all humans vary in terms of our neurocognitive ability."

In this report we use the term 'neurodivergent' to describe specific neurotypes including ADHD, autism, dyslexia, dyspraxia, dyscalculia and Tourette syndrome.



Exploring the current landscape

A 2022 survey found that almost one in five people from across the IET Volunteer community who responded (19%) identified as definitely or possibly neurodivergent.

Focus groups involving neurodivergent engineers and technicians sought to build greater understanding of their lived experiences, and the steps they believe would help to create a more inclusive environment.

Not all of the engineers and technicians involved in the study chose to disclose their neurotype, but of those who did, all identified as having singular or co-occurring ADHD, autism or dyslexia.

I'm 100% open with everyone I meet on the basis that it enables things to go more smoothly.

For more information and to explore the full report please visit theiet.org/neurodiversity-in-engineering-and-technology

What we learned

The current situation is not, in general, positive. Whether or not formally diagnosed, many hesitate to be open at work because:

- they anticipate or experience a lack of awareness and understanding from colleagues and managers
- they recognise risks in speaking up that appear to outweigh the benefits
- they believe the many varied strengths they bring to their work are not recognised or appreciated

Not all of the workplace challenges that neurodivergent engineers and technicians face are related to the specifics of their neurotype.

Challenges can result from a range of other factors:

- lack of awareness and understanding
- neurotypical approaches and expectations being the standard for workplace behaviour
- distracting and noisy working environments
- accessing workplace adaptations
- and the impact of all these on sustaining good mental health and well-being.

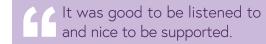
Identifying as a member of an under-represented group within the sector, such as being a woman or minoritised ethnicity, often magnifies these challenges.

People often think that autistic people are less empathetic or not as good at communication... but I help people understand each other better.

What needs to change?

The good news is that it is clear what needs to be done to build a more neuroinclusive environment. Participants identified seven key areas where change is needed:

- **1.** Treating neurodivergent engineers and technicians as individuals
- 2. Raising awareness and shifting attitudes
- **3.** Training line managers to support neurodivergent team members
- 4. Integrating neurodiversity into working practices and culture
- 5. Making it easier to access workplace adjustments
- 6. Offering targeted career support where it is wanted
- **7.** Enabling neurodivergent engineers and technicians to access and build support.



Recommendations

The report concludes with specific recommendations for action for:

- managers and colleagues of neurodivergent engineers and technicians
- employers
- external partners
- and neurodiverse engineers and technicians themselves.

My current boss is good. He knows when I get a bit wonky. If I tell him I need a sick day he gives me time off.

Our commitments

There are seven specific commitments the IET is making in support of creating a more neuroinclusive sector. We are committing to:

- **1.** Enhancing neuroinclusion across the IET through improved organisational practices.
- **2.** Ensuring accessibility in our governance processes for increased representation of neurodiverse professionals in leadership roles.
- **3.** Delivering a practical toolkit by Q2 2024 to help foster safe working environments for neurodiverse engineering employees and employers.
- **4.** Offering professional development opportunities to raise awareness of the strengths of neurodiversity within the STEM community.
- Growing, developing, and supporting our IET neurodiversity network.
- **6.** Advocating for the needs of neurodivergent engineers and technicians; engaging with government and key industry forums to do so.
- Collaborating with other professional engineering institutions to create a more neuroinclusive profession.

To explore the full report and details on what we will do to make a difference, go to **theiet.org/neurodiversity-in-engineering-and-technology**



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