

Diversity and Inclusion Programme

To find out more, email diversityteam@raeng.org.uk



Diversity and Inclusion (D&I) Programme workplan 2018 to 2019 - invitation to collaborate

This edition of the D&I Programme newsletter gives an overview of what has been delivered in the last year and plans for the next 12 months. As always, the Programme team is actively seeking engagement with engineering employers and professional institutions so please read on to see what might be of interest to your organisation.

The Academy delivers its D&I Programme in collaboration with stakeholders, including engineering employers and employer-led organisations, the professional

engineering institutions (PEIs), and Academy employees and Fellows. Over the last year, it has delivered several key activities, which are outlined in this newsletter. Over the next 12 to 18 months, the D&I Programme will focus on the following five work streams; inclusive cultures, *D&I Progression Framework*, Engineering Engagement Programme (EEP), extending stakeholder engagement, and D&I measurement - see table on page 2 for more information on each work stream.



Dervilla Mitchell CBE FREng, Director at Arup and Academy D&I Committee Chair

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If you are interested in getting involved in any of the work streams above, please email diversityteam@raeng.org.uk by the end of March 2018. For more on the D&I Programme, please visit www.raeng.org.uk/engdiversity

Dervilla Mitchell CBE FREng, Chair of the D&I Committee, said: *"I want to thank the many representatives from engineering companies, professional engineering institutions and third-sector organisations who have given their time and support to drive the equality, diversity and inclusion agenda forward. Your enthusiasm, commitment, expertise, feedback and encouragement has been invaluable - thank you!*

"The business case for diversity has been made time and again: we know that diverse teams come up with better, more innovative solutions. Our profession has more to do to support this agenda and we are committed to broadening our engagement so that engineering

Vision

An inclusive engineering profession that inspires, attracts and retains people from diverse backgrounds and reflects UK society.

Mission

Leading the engineering profession to challenge the status quo, stimulate cultural change, and improve D&I.

Strategic aims

- One: Understand barriers to increasing D&I in engineering employment and professional registration.
- Two: Engage in partnerships to remove barriers to increasing D&I.
- Three: Deliver impact through effective communications.

careers across every sector become widely recognised as fully inclusive and deeply rewarding.

"I urge all organisations to get in touch with the Academy's diversity team to find out how to get involved so that we can make collective progress and continue to be tremendously proud of the achievements of our industry."

The D&I Programme has three strands of work. The two external

strands centre on collaboration with engineering employers and PEIs, while the third internal-facing strand engages with employees and Fellows of the Academy to ensure D&I best practice internally. The diagram below gives an overview of what the programme delivered in the last year, and its plans for the next year beginning April 2018. The Academy's D&I Committee has oversight of all internal and external D&I activity.

Increasing D&I in Engineering Programme

	Employers	Professional Engineering Institutions (PEIs)	Royal Academy of Engineering D&I
2017 - 2018 delivery	<p>Diversity and Inclusion Leadership Group (DILG) <i>Creating cultures where all engineers thrive</i> report</p> <p>Leveraging D&I in procurement</p> <p>Inclusive recruitment toolkit development</p> <p>Communicating the programme</p> <p>D&I Measurement</p>	<p>Progression Framework benchmarking across 20 PEIs and 21 Science Council members</p> <p>Benchmarking reports with recommendations produced for science and engineering</p> <p>Report launched in February 2018</p>	<p>Action planning</p> <p>Progression Framework benchmarking</p>
2018 - 2019 plans	<p>Implementing recommendations from the <i>Creating Cultures</i> report:</p> <ul style="list-style-type: none"> • white and male allies • leveraging the culture of engineering <p>Employer benchmarking survey</p> <p>Develop a progression framework for SMEs</p> <p>EEP refresh and relaunch</p>	<p>Joint engineering and science steering group set up to implement recommendations</p>	<p>Monitor and report on progress</p> <p>Host D&I Leaders' Forum</p>
	<p>Briefings and seminars on key topics - to be decided (eg selection, language of D&I, disability awareness/confidence)</p>		

Employers

Diversity and Inclusion Leadership Group (DILG):

The DILG is a network of over 60 engineering employers and employer-led organisations working collaboratively to share and develop effective approaches to addressing D&I challenges across engineering employment.

Action groups made up of representatives from engineering employers deliver this strand of work and a member of the DILG steering group chairs each group. If you are interested in getting involved in any of the action groups listed under the 2018-19 Employer section above, please contact the D&I team using the email address above.

Engineering Engagement Programme (EEP):

The Academy collaborates with a steering group of 12 engineering employers and SEO London to increase the flow of undergraduates and recent graduates into engineering work experience and employment. The work centres on providing a vehicle to engage disadvantaged black, Asian, and minority ethnic (BAME) and female students, and students from outside the Russell Group of universities. The EEP's three-year pilot concludes in March 2018, after which more engineering employers will be invited to take part. If you would like to take part, please contact the D&I team using the email address above.

Employer benchmarking survey:

In 2015, the Academy ran a survey to measure and set a baseline for D&I across engineering employment. In 2018, a refreshed version of the survey will be repeated to identify any trends and progress aggregated across as many engineering organisations as possible. The Academy invites all engineering employers to take part in the survey, which it will roll out in summer 2018. If you would like to take part, please contact the D&I team using the email address above.

D&I Progression Framework for SMEs:

Using the *D&I Progression Framework* for professional bodies (see below) as a starting point, the Academy will bring together an action group of SMEs to collaborate in producing and implementing a similar framework to meet their needs.

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PEIs

Engineering and science benchmarking against the D&I Progression Framework:

Launched in December 2016, the *D&I Progression Framework* helps professional bodies track and plan progress on D&I by focusing on eight areas of professional body activity including: governance and leadership; membership and professional registration; meetings, conferences and events; education and training, accreditation and examinations; prizes, awards and grants; communications, marketing, outreach and engagement; and employment, monitoring and measuring.

In 2017, the framework was used to benchmark D&I progress in engineering and science, with 20 PEIs and 21 scientific bodies (SB)

taking part. On 7 February 2018, the Academy and Science Council launched a report on the findings. The joint engineering and science report and a specific PEI report can be found on the Academy website: www.raeng.org.uk/policy/diversity-in-engineering/professional-engineering-institutions

Key findings from the benchmarking exercise show that across engineering and science:

- there is a lot of similarity in patterns of self-assessment
- governance and leadership is highlighted as an area of strength
- D&I performance is weakest in education and training, accreditation and examinations, and in prizes, awards and grants
- women are better represented on boards, as chairs of board

committees and in the membership of SBs than PEIs

- BAME people are better represented on the boards of PEIs than of SBs, although overall most participating professional bodies across engineering and science have no BAME people in senior leadership
- barriers to progress include lack of data, lack of resources and the challenge of the demographic starting point, in terms of gender and ethnicity.

Next steps will be the implementation of recommendations, which will be taken forward by a steering group of PEIs and SB members chaired by Rosemary Cook, Chief Executive of the Institutions of Physics and Engineering in Medicine (IPEM). If you would like to get involved, please email diversityteam@raeng.org.uk

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Royal Academy of Engineering D&I

The Academy continues to focus on increasing D&I across its Fellowship, employees and activities. To assess its progress and inform next steps, it took part in the progression framework benchmarking exercise described above. As a result, all Academy departments have action plans in place to increase D&I. Next steps for the Academy are to put in place consistent monitoring and measuring progress to support reporting on data and narrative on progress. All Academy Fellows are actively invited to get involved with the Academy's D&I aspirations.



Photo: © Institution of Engineering and Technology

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Update on D&I programme activity

Engineering Engagement Programme (EEP)

Last autumn, 200 students took part in Engineering Engagement Programme (EEP) events, at the Academy, Amey in Birmingham, CH2M in London and Siemens in Northampton.

The EEP aims to encourage the transition of diverse engineering graduates into engineering employment to contribute to addressing the engineering skills gap. It brings female, ethnic minority and socially disadvantaged engineering students (with a focus on the newer universities established after 1992) to the



Students attending an EEP event at Amey offices in Birmingham

attention of engineering employers through a series of events and follow-up activities.

The EEP is in the final year of a three-year pilot and it is anticipated that it will continue after the pilot concludes at the end of March 2018. Over the first two years, around 300 students took part in the employer-led events.

A group of 13 engineering employers and SEO London have taken part in the programme. Feedback suggests that the pilot is having a positive impact on both employers and

students. A student who attended the Amey event said that it "opened my eyes to the opportunities in the engineering industry and truly made me feel that the firms present want to see me succeed and support me in the future".

Fiona Tabraham, Lead Capability and Development Manager at Network Rail, described it as a "fabulous opportunity to not only meet lots of great potential talent in engineering but also to network with other organisations and learn from them". For more information on EEP, please visit www.raeng.org.uk/EEP



Speed networking during an EEP event at the Academy in London

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Minimising harassment and bullying in engineering

The Academy's D&I team is currently working with representatives from the Women's Engineering Society, the Association For Black and Minority Ethnic Engineers, InterEngineering and Engineering UK to develop a positioning statement on harassment in

engineering. This is in response to external debate on how to tackle harassment.

The statement will reaffirm the Academy's zero tolerance position on harassment and bullying both inside and outside of the workplace.

It will encourage all engineering employers, PEIs and others to take a lead in eradicating harassment and bullying in workplaces by signposting guidance and information. It is expected that the statement will be completed in the spring and shared soon after.

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Gender pay gap reporting across engineering

In June 2017, a group of 15 employers came together at a forum organised by the DILG to understand the implications of gender pay gap (GPG) reporting on the engineering profession.

By 4 April 2018, all employers with more than 250 employees must report on their gender GPG and the DILG initiated the forum

to understand the potential opportunities and threat posed to the engineering profession.

Information from a selection of companies was gathered and reported, and a decision was made to develop a positioning statement that aims to share insights and make recommendations as to how the reporting can

best support gender equality.

One of the recommendations under consideration is to ask government to make engineering sector reporting mandatory to facilitate a clearer view of gender equality across the profession. It is anticipated that the position statement will be available in the spring, for wide circulation shortly after.

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AFBE-UK awards dinner

On 2 November 2017, the Association for Black and Ethnic Minority Engineers (AFBE-UK) held its 10th Anniversary Gala Dinner and Awards at the Institution of Engineering and Technology in London to celebrate its impact on the engineering landscape, and recognise the achievements of BAME engineers. The Academy works with AFBE-UK through its D&I Programme and sponsored the 'Company Recognition Award' category.

Allan Cook CBE FREng presented the award to UK Power Networks (UKPN) in recognition of the work it has done to promote D&I. This includes integrating D&I into organisational strategy, and

actively supporting schemes and programmes to encourage more underrepresented groups, including women, ethnic minorities and those from socioeconomically disadvantaged backgrounds, into more senior roles.

According to UKPN, developing a culture in which all employees feel valued and engaged is critical to its continued success and in consistently delivering the best performance. As part of its Every Matters strategy, UKPN has signed up to the EY National Equality Standard, signalling its commitment to D&I and its desire to get it right.

Allan Cook CBE FREng presents the Company Recognition Award to UK Power Networks



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10th Young Arab Women Leaders conference



Dr Hayaatun Sillem, CEO of the Royal Academy of Engineering, chairs one of the event's panels



Haifa Fahoum Al Kayani, founder and Chair of the Arab International Women's Forum

In December, the Academy hosted the 10th Young Arab Women Leaders conference, focusing on the development of leadership skills in the next generation of young women in STEM.

The event, which was organised by the Arab International Women's Forum in collaboration with the Academy, PwC and the World Bank, involved guests and delegates from 40 different countries, including the UK, the US and the Arab States.

Session topics covered: women-led innovation and new solutions to the global energy, food, water, and climate change crises; women-led innovation in medical technologies and healthcare artificial intelligence; supporting diversity, inclusion and innovation in energy, engineering and infrastructure; and strategies to advance gender diversity in technology entrepreneurship and the digital economy.

The panel sessions were highly interactive and discussion based, with both speakers and delegates sharing valuable personal strategies for success.

ASSET survey report

New research, published in October, shows that women engineers are still underrepresented in senior academic engineering posts.

The Athena Swan Survey looked at experiences surrounding gender equality in engineering, and their intersections with ethnicity and disability. It was a follow-up to the report published in spring 2017.

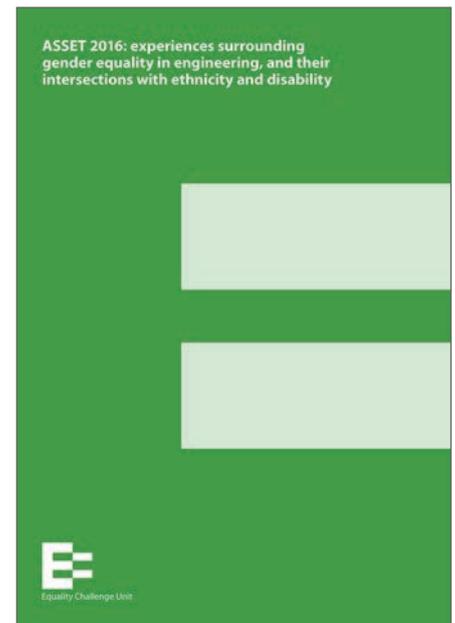
The research, delivered by the Equality Challenge Unit (ECU) with funding from the Academy and other professional bodies, confirmed ongoing disadvantages for women engineers in academia, with women underrepresented in senior posts and less likely to be invited to apply for promotion.

The research draws on findings from a survey of academics working across science, engineering and technology disciplines with a focus on biosciences and medicine, engineering, and physical sciences. It found that, across all three disciplines, women experience consistent disadvantages

in multiple aspects of their working lives. For engineering, specifically, it showed that:

- Women are underrepresented in senior positions and overrepresented in early-career posts.
- The largest gender gap reported was in engineering, where 7.5% of women had gained their current position via formal promotion compared with 15.6% of men.
- Men were also more likely to say that they had been invited or encouraged to apply for promotion - 55.1% of women compared with 60% of men.
- Larger proportions of women, compared to men, report that constraints block access to the training they need or want.
- Disabled women in engineering academia are much less likely to have obtained leadership training.

Professor Nilay Shah FEng, Director of the Centre for Process Systems Engineering at Imperial College London and a member of the Academy's Diversity and Inclusion Committee said: "Increasing gender equality among academic staff is



extremely important because it could help stimulate an increase in the representation of female engineers across universities from the current 15%, and have a positive impact on UK innovation and creativity."

To read full findings, please see [here](#).

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D&I inside the Academy



Dr Hayaatun Sillem, CEO and Diversity Champion at the Royal Academy of Engineering

The Academy's D&I team has recently undergone some changes. Bola Fatimilehin is now the Head of D&I and Gill Thomas has joined the team as Senior Manager, D&I. Elena Fatisi, Diversity Officer, and Hemant Mistry, Diversity Manager, both left their posts at the Academy in February 2018. The Academy is now recruiting, please see [here](#) for job openings.

On 1 January, Dr Hayaatun Sillem, the Academy Deputy CEO and Diversity Champion, was appointed as the Academy's new Chief Executive - and continues to be the Academy Diversity Champion.

To find out more about any aspect of the Academy's D&I work, please visit www.raeng.org.uk/engdiversity or email diversityteam@raeng.org.uk.

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Diversity events calendar and notable dates

Royal Academy of Engineering events

FEBRUARY 2018

LGBT History Month

LGBT History Month is celebrated in February in the UK and aims to increase the visibility of LGBT people and their experiences, and to raise awareness of matters affecting the LGBT community. For more information, visit www.lgbthistorymonth.org.uk

8 February 2018

Fellows' Day

Fellows' Day is a dedicated event for Academy Fellows, partners and guests. It is an informal and social occasion that provides the perfect opportunity for Fellows to hear the latest updates on the Academy's work and to find out how they can get involved.

13 February 2018

Academy and SEO Advance event

This is an engineering insight day that SEO London is organising in partnership with the Royal Academy of Engineering.

The event will welcome 50 Year 11 students to the Academy, all of whom are high-attaining and come from low socioeconomic backgrounds, drawn from a network of state schools across London. It is intended to give students an introduction to a range of possible careers and disciplines within the engineering sector, including the skills required to excel in the industry and routes into various profession.

20 February 2018

D&I Committee meeting (by invitation only)

The D&I Committee has the oversight of Academy D&I Programme and internal work. The Committee meets on a quarterly basis to discuss progress of activities and projects. If you are Fellow and would like to be involved, please contact diversityteam@raeng.org.uk

26 February 2018

Roundtable to discuss employer strategies to engage with Refugee Engineering, Architecture & Business Services talent

This meeting is for senior managers who are looking into developing returners pathways for graduate Engineering professional returners, in particular Refugee engineers. Contact Transitions directly to find out more or book a place. Sheila.heard@transitions-london.co.uk

MARCH 2018

8 March 2018

International Women's Day (IWD)

The campaign theme for 2018's IWD is 'Press for Progress'. IWD is a global day that celebrates the social, economic, cultural and political achievements of women. The day also marks a call to action for accelerating gender parity. For more information, visit www.internationalwomensday.com

14 to 17 March 2018

Big Bang Fair

The Big Bang Fair is the largest celebration of STEM for young people in the UK. For more information, visit www.thebigbangfair.co.uk

21 March 2018

DILG Steering Group meeting (by invitation only)

Meeting of engineering employers and employer-led organisations that steers the employer strand of the D&I Programme. Participation is by invitation but if you would like to know more, please email diversityteam@raeng.org.uk

JUNE 2018

6 June 2018

Engineering Engagement Programme Relaunch

An event to relaunch a refreshed programme along with the learning from the three-year pilot project that informs it. The event will focus on sharing insights from employers and students involved in the pilot and communicating next steps, including a call for more employer involvement. For more information contact diversityteam@raeng.org.uk

12 June 2018

D&I Committee meeting (by invitation only)

The D&I Committee has the oversight of all Academy D&I Programme work. It meets three times a year to lead strategy and discuss progress across all three strands of the programme. If you are Fellow and would like to be involved, please contact diversityteam@raeng.org.uk

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Diversity events calendar and notable dates *continued*

13 June 2018

DILG Steering Group meeting (by invitation only)

Meeting of engineering employers and employer-led organisations that steers the employer strand of the D&I Programme. Participation is by invitation but if you would like to know more, please email diversityteam@raeng.org.uk

23 June 2018

International Women in Engineering Day

Held on 23 June each year, International Women in Engineering Day celebrates the achievements of women in engineering and encourages more girls to consider engineering careers. This year's theme is 'Raising the bar'. To get involved, visit www.inwed.org.uk

OCTOBER 2018

October 2018

Black History Month

Since 1987, Black History Month has been celebrated every October in the United Kingdom. The event is formally recognised by the government and highlights the contributions Africa and African people make to the economic, social and political landscape of London and the wider UK. For more information, visit www.blackhistorymonth.org.uk

NOVEMBER 2018

27 November 2018

Diversity and Inclusion Programme plenary event

Annual networking event to engage and consult with stakeholders about D&I Programme activities and outputs. For more information, please email diversityteam@raeng.org.uk

For more information on any aspect of the work mentioned in this newsletter, please contact diversityteam@raeng.org.uk



ROYAL
ACADEMY OF
ENGINEERING

DIVERSITY AND INCLUSION
PROGRAMME

Royal Academy of Engineering

As the UK's national academy for engineering, we bring together the most successful and talented engineers for a shared purpose: to advance and promote excellence in engineering.

We have four strategic challenges: make the UK the leading nation for engineering innovation; address the engineering skills crisis; position engineering at the heart of society; and lead the profession.

Diversity and Inclusion Programme Strategy 2016-2020

The Royal Academy of Engineering is running a programme to increase diversity and inclusion across the engineering profession.

Vision: An inclusive engineering profession that inspires, attracts and retains people from diverse backgrounds and reflects UK society.

Mission: Leading the engineering profession to challenge the status quo, stimulate cultural change, and improve diversity and inclusion.

The programme has three strategic aims:

1. Understand barriers to increasing D&I in engineering, employment, and professional registration.
2. Engage in partnerships to remove barriers to increasing D&I.
3. Deliver impact through effective communications.

The Academy is a member or supporter of the following organisations:

