

# **Institution of Mechanical Engineers**

## **Education and Skills Strategy, 2030**

### **Welcome from the Chair**

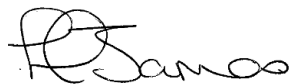
I would like to thank members and staff who gave up their time, shared expertise and insights, over the past year, without which the development of this strategy would not have been possible.

The strategy takes the form of a high-level road map and is cognisance of the current resource challenges and strategic projects.

It is first important to acknowledge the 'framework' style of the IMechE's Corporate Strategy providing pointers, hooks and some examples of what is expected. We have adopted a similar style for the Education and Skills Strategy, 2025-2030.

The Education and Skills Strategy Board (ESSB), leads the Education and Skills Strategy on behalf of the organisation. The Education and Skills Strategy, 2030 provides the framework for all parts of the organisation to 'see' how they might align with it, support its delivery and use it to inform their strategies and plans. It is not an ESSB strategy. Nor is it a plan of all activities although there is some identification of priority programmes. These distinctions are important.

ESSB is pleased to present the institution's inaugural Education and Skills Strategy, 2030.



Professor Helen James OBE CEng FIMechE BSc (Hons) MA DBA PhD (Hon)  
Chair Education and Skills Strategy Board

Approved. 2025

## **IMechE Education and Skills Strategy, 2030**

### **IMechE Purpose**

*To provide opportunities for members, and others in the wider engineering community to develop their knowledge, skills, expertise and professional practice. This may be, for example, through continuous professional development, mentoring others, networking and sharing best practice, meetings and publications and professional registration*

*To maintain and enhance the professional status of mechanical engineers by assessing applications for registration, accrediting educational courses and by encouraging professional practice and behaviour.*

*To develop the pipeline of talent for the future of the engineering profession by informing, motivating and supporting the success of children, young people and engineering students/apprentices.*

*To engage with industry, governments and society so that informed decisions can be made and to identify areas where engineering innovation can improve the world through sustainable economic development.*

### **IMechE Strategic Goals, 2030**

Membership Development, 2030: Developing, registering and supporting our members to be their best for a more inclusive and sustainable world.

Impact, 2030: Maximising the impact of our members to promote engineering, inform opinion, and stimulate innovation for the benefit of society.

## **IMechE Education and Skills Strategy, 2030**

### **Delivering Membership Development, 2030**

***Enable and support members to effectively promote engineering, inform opinion, and stimulate innovation for the benefit of society***

#### **How we will deliver:**

Increase and diversify our STEM Ambassador pool by supporting and developing members including by partnering with STEM Learning

Deliver engineering outreach and engagement into schools/communities, collaborating with expert partners, such as Primary Engineer, employers, other PEIs utilising good practice of what works in outreach.

Deliver engineering apprentice and student challenges to inspire, motivate and enhance skills, technical competence and preparedness for the world of work.

Support engineers into teaching utilising the Engineers Teach Physics (DfE funded) programme and the Design & Technology Association support for the placement of teachers into engineering environments.

Support engineers to become school governors and in doing so promote engineering and inform opinion (teachers, pupils, stakeholder and parents).

***Provide opportunities for members, and others in the wider engineering community to develop their knowledge, skills, expertise and professional practice***

### **How we will deliver:**

Establish a new Education and Skills membership community for those employed in, and/or who support the education of engineers and its pipelines e.g curriculum content, pedagogy, assessment, learning and teaching, what works in STEM/Engineering outreach.

Maintain and where appropriate enhance the professional status of mechanical engineers by assessing applications for registration, accrediting education and skills courses and apprenticeships, encouraging CPD and extending our reach as an End Point Assessor.

Share best practice, insights and experiences of education and skills in and across the Regions and Groups/Divisions drawing on mechanisms such as the Regions' Education and Skills Subgroup.

Provide opportunities for members to engage in technical and education and skills related policy developments, consultations, reviews and plans and in doing so empower members and staff with important messaging for industry, government, education and the press.

Identify education, training and skills development needs across all areas of IMechE and our operations and establish mechanism to satisfy them, e.g Learning and Development, in-house workshops, webinars.

### **Delivering Impact, 2030**

***Expand and harness the expertise of our members and employees for the good of society and promote engineering as a means for addressing the major challenges faced by our planet.***

### **How we will deliver:**

Identify and develop impartial advice and expertise in relation to education and skills of engineers, engineering students, young people and teachers.

Contribute strongly to the National Engineering Policy Centre, Royal Academy of Engineering, Engineering UK, Engineers without Borders and the PEI community.

***To develop the pipeline of talent for the future of the engineering profession by informing, motivating and supporting the success of children, young people and engineering students/apprentices.***

### **How we will deliver:**

Support the development of 'engineering' in the curriculum, teaching and learning in schools, drawing on the collaborative work underpinning the 'Engineering Kids' Futures' report, research literature and best practice reports.

Develop teachers and careers staff to be confident in talking about 'engineering' and delivering engineering in the curriculum utilising expert partners, and where appropriate develop our own bespoke resources.

Develop a range of digital and physical materials to support our future engineers and their influencers.

Deliver collaborative, high quality, inclusive, relevant and sustained outreach activities across all key stages of compulsory education in UK regions and internationally, as appropriate.

Deliver and enhance our Virtual Work Experience offer for young people, drawing on our membership for inspiring content, and maintain engagement with Engineering UK for a Physical Work Experience offering.

Provide leadership, expertise and assessors to support strategic partnership programmes such as Primary Engineer's 'If I were an engineer what would I do?' and the Baker Award for Technical Education.

Provide leadership, expertise and assessors for our engineering student/apprenticeship Challenges and Competitions and Prizes and Awards.

***Be the authoritative voice for mechanical engineering policy makers across industry and government when impartial technical expertise is considered essential in informing key nation and local decisions.***

**How we will deliver:**

Engage with senior government officials and sector stakeholders to provide engineering education and skills policy and advice to governments, industry and education.

Produce policy and technical [education and skills] outputs that are independent, have strong engagement and draw on our diverse range of people and expertise.

***Communicate the education and skills related outputs of IMechE across multiple platforms including webinars, in-person events, and social, broadcast and print media.***

**How we will deliver:**

Research and understand what works well, drawing on it to improve activity and sharing best practice within and outside the Institution.

Promote the Education and Skills activity from our strategic programmes, groups, regions and members through policy reports, social media, PE Magazine etc.

Drive engineering outreach and recognition of technical education schemes across the Institution and into schools.

END

February 2025.