News story: Prime Minister announces £20 million Institute of Coding

The next generation of digital specialists will be created through the new Institute of Coding, a consortium of more than 60 universities, businesses and industry experts set to receive £20 million to tackle the UK's digital skills gap.

Speaking at the World Economic Forum 2018 in Davos, Prime Minister Theresa May spoke about how the Institute of Coding, a key part of the government's efforts to drive up digital skills through the Industrial Strategy, will equip people of all ages with the skills they need.

The consortium is formed of businesses including IBM, Cisco, BT and Microsoft, small and medium-sized enterprises (SMEs), 25 universities, and professional bodies such as the British Computer Society and CREST.

The 25 universities involved, led by the University of Bath, range from sector leaders in business and computer science (UCL and Newcastle University) to experts in arts and design (University of the Arts) to specialists in widening participation and outreach (Open University and Birkbeck, University of London).

Universities Minister Sam Gyimah said:

A world-class pipeline of digital skills are essential to the UK's ability to shape our future. By working together, universities, employers and industry leaders can help graduates build the right skills, in fields from cybersecurity to artificial intelligence to industrial design.

The Institute of Coding will play a central role in this. Employers will have a tangible input to the curriculum, working hand-in-hand with universities to develop specialist skills in areas where they are needed most. As we have outlined in the Industrial Strategy, this is part of our ambition to embrace technological change and give us a more competitive edge in the future.

The Prime Minister also spoke about the £10 million investment in free and subsidised training courses to help adults retrain and learn new skills.

Launched as part of the Industrial Strategy, the pilot programmes, located in Leeds, Devon and Somerset, Lincolnshire, Stoke-on-Trent and the West Midlands, will test how to reach out and support people with the cost of retraining. The Government has also invested £30million to test the use of artificial intelligence and edtech in online digital skills courses.

The award follows a nationwide competition, run by the Higher Education

Funding Council for England (HEFCE), to improve the way universities train people for digital careers.

The government's £20 million investment will be matched by a further £20 million from industry, including in-kind contributions such as training and equipment.

The Institute of Coding is centred around five core themes:

- 1. University learners (led by the Open University) To boost graduate employability through a new industry standard targeted at degree level qualifications. IoC programmes will incorporate learning which solves real-world business problems and develops business, technical and interpersonal skills in equal measure.
- 2. The digital workforce (led by Aston University) To develop specialist skills training in areas of strategic importance.
- 3. Digitalising the professions (led by Coventry University) To transform professions undergoing digital transformation (e.g. helping learners retrain via new digital training programmes provided through online and face-to-face learning)
- 4. Widening participation (led by Queen Mary University of London) To boost equality and diversity in technology-related education and careers (e.g. tailored workshops, bootcamps, innovative learning facilities and other outreach activities). In 2017, female programmers and software developers made up just 3.9 per cent of tech and telco professionals in the UK.
- 5. Knowledge sharing and sustainability (led by the University of Bath) To share outcomes and good practice, ensuring long-term sustainability of the IoC. This will include building up an evidence base of research, analysis and intelligence to anticipate future skills gaps.

Dr Rachid Hourizi, Director of the Institute of Coding, said:

The strength of the Institute of Coding lies in the fact that it brings together educators, employers and outreach groups to codevelop digital skills education at undergraduate and masters level for learners in universities, at work and in previously undersupported groups across the country.

In addition, we'll work with our partners to target underrepresented talent through outreach activities, tailored and inclusive curricula, flexible delivery and removal of barriers to working in the industry.

BT, among others, will provide staff and training for the Institute of Coding's undergraduate and masters programmes.

Gavin Patterson, BT Group Chief Executive, said:

Digital skills are crucial to BT's current and future success, but no company can fix the UK's digital skills shortage on its own. By working together across industry and academia, the Institute of Coding will unlock access to a bigger and more diverse workforce, and support skills development for people at different stages of their careers.

We are particularly pleased that industry will have the opportunity to build on its work within the Tech Partnership and our existing degree apprenticeship schemes, setting standards and promoting degrees that are aligned to employer needs.

Professor Madeleine Atkins, Chief Executive of HEFCE, said:

The benefits to students from the Institute of Coding are clear: exciting courses designed to meet the needs of employers; exposure to leading research; and increased work experience to support the development of their employability skills and transition to work.

I am delighted that the Institute also aims to encourage more women into the digital sector.

Kathryn Parsons, Founder of Decoded and Chair of the DfE Advisory Board, said:

I strongly believe the UK can be the best place for technology education in the world. This month London was named the top European city for tech investment and the UK's digital sector is creating jobs twice as fast as the rest of the economy.

We are a nation of entrepreneurs, problem-solvers; of collaborators, and the Institute of Coding marks a further investment in this heritage. It has the power to bring together education and business to ensure we have the skills to drive innovation and be a global leader in the fourth industrial revolution.

Improving digital skills is a central part of the government's new Industrial Strategy, which sets out a long-term vision for how Britain can build on its economic strengths, address its productivity performance, embrace technological change and boost the earning power of people across the UK.

Please see below for the full list of employers and universities involved in

the Institute of Coding.

University partners

Aston University • Birkbeck, University of London • University of Birmingham • Birmingham City University • Cardiff University • Coventry University • University of Exeter • University of Gloucestershire • Lancaster University • University of Manchester • Manchester Metropolitan University • Newcastle University • Northumbria University • Open University • Queen Mary University of London • University of Bath • University of Sheffield • University of Southampton • University of Sunderland • Swansea University • University College London • University of the Arts • University of the West of England • University of Warwick • University of York

Industry partners

British Telecom • Accenture • Cisco • IBM UK Limited • Sky Betting & Gaming • QinetiQ • QA Limited • Tin Smart Social (employer group) • Unipart Manufacturing • Warwick Arts Centre • WANdisco • Waterstons Limited • Youmee • Target Information Systems • West of England combined authority • Sunderland Software City • Office for National Statistics • Orchard Information Systems • Printed.com • Proctor & Gamble • Parametric Technology (UK) Limited • Razor Ltd • Redemption Media • Sheffield Digital • Siemens • The Floow • FutureLearn • gfirstLEP • Gradbase Limited • High Tech Bristol & Bath • Hive IT • HMA Designed Solutions Ltd • Horiba MIRA • In2Science UK • IndigoBlue Consulting Limited • Information Risk Management (IRM) Information • JP Morgan • Kollider • Lightwork Design Ltd • Microsoft Limited • The National Cyber Skills Centre • Nissan Motor Manufacturing UK Limited • 02 • Institute for Advanced Manufacturing and Engineering • Arts Council England • BAE Systems • Bohemia Interactive • British Chambers of Commerce • Business West • Capgemini • CompTIA • Creative Sheffield • CREST (International) • Deloitte • Dynamo North East CIC • Emerald Business Communications • Evoluted New Media • FDM Group