

New research identifies a clear skills gap and greater need for upskilling and developing the existing workforce in Ireland's electronic sector

- *Upskilling the existing workforce remains critical to future competitiveness*
- *Key challenge is the demand for enhanced graduate skills in areas such as data analytics, machine learning and critical thinking*
- *50 percent of industry members have expanded their R&D activities overseas due to limited talent availability in Ireland*
- *Greater access to talent needed with 30 percent of engineers hired from overseas*

Monday, 25th January 2021

MIDAS Electronic Systems Skillnet, in partnership with MIDAS Ireland and Skillnet Ireland, has today published a research report on the Electronics Sector resources and skills requirements. As the electronics sector continues to evolve and grow globally, so too does it evolve here in Ireland. Today's report aims to prepare the electronics industry for the next step change, which is driven by digital transformation and the extensive adoption of artificial intelligence, robotics and the Internet of Things.

The report found that there is a clear skills development gap in new technology areas such as data analytics, machine learning and artificial intelligence as well as soft skills including critical thinking, problem solving and communication. The need to constantly upskill the existing workforce remains a critical ingredient to future competitiveness. A key recommendation to address this challenge is for businesses to continue offering employees short training courses to support their needs and develop new CPD Modules.

Key report findings also highlight the demand for STEM graduates and the need to increase this supply at Masters and PhD levels in areas such as machine learning and hardware design. Work placements, internships and industry relevant project work are critical components that need to be part of a graduate's learning experience and built on top of the theory learned in the classroom.

The report outlined growth opportunities in several sectors including energy conservation, automotive and healthcare, with over 80 percent of MIDAS member companies predicting that future hiring will increase. However, challenges around limited availability of talent has the potential to constrain this growth. The report identified that 50 percent of industry members have expanded their R&D activities overseas due to talent shortages in Ireland, while up to 30 percent of engineers are hired from outside of Ireland. To support the growth of the sector, the report also recommended increasing hiring from abroad to grow the available talent pool and minimise loss of R&D positions to other countries.

With the electronics sector comprising 20,000 expert jobs, €13.5bn in export revenue and €450m of R&D spend annually, the report also advised companies to promote the Electronics Sector as a great

place for people to build their career. Recent job announcements from global companies such as Microchip and Cadence, along with acquisitions of Irish start-ups, Movidius by Intel and Decawave by Qorvo, demonstrate that the sector remains a vibrant part of the technology industry in Ireland.

Leonard Hobbs, the General Manager at MIDAS Ireland, said *“While a shortage of resources and skills gaps are constantly recurring themes in the electronics sector, a detailed survey and study of precisely which specific areas and skills was long overdue. I warmly welcome this report as it describes what is required for Irish-based electronic systems SMEs to succeed in this globally competitive sector and also to continue successfully attracting and growing the vibrant electronics-based MNCs by providing electronic engineering resources with highly specialised skillsets for this ever-evolving, cutting-edge technology.”*

Mark Jordan, Chief Technologist at Skillnet Ireland, said *“The research report highlights the evident skills and resource gaps within the electronics and technology sector. However, this challenge offers a real opportunity for businesses to adapt and upskill homegrown talent here in Ireland to future-proof the industry in a globally competitive market. Digitalisation, robotics and Artificial Intelligence are driving this transformation of the electronics and tech sectors. Skillnet Ireland supports this research which will enable businesses and talent prepare for the next step change.”*

Leo Clancy, Head of Technology, Consumer and Business Services at IDA Ireland in welcoming the report, said that *“the electronics sector has been an important one for Ireland since the 1970s and has grown to be a large industry in Ireland, spanning manufacturing, design and many activities within global supply chains and having high impact in economic and human capital terms. This is an industry that continues to grow and evolve globally and that demands excellence at all levels in the skill base that supports it. It is a long-term industry with excellent jobs. The work requires incredibly skilled and precise engineering capabilities and this complexity continues to increase, making it a great career choice. In this context I welcome the reports recommendation to increase the applicable graduate base and the workforce expansion from all sources and locations”*

Carol Gibbons, Divisional Manager of ICT at Enterprise Ireland, said that *“Enterprise Ireland welcomes the report which highlights the essential skill needs for the future development of the electronics sector in Ireland, which has been an important sector for Enterprise Ireland client companies for many decades. The sector has proven to be resilient, has adopted to many challenges in the past, and has been successful in accessing opportunities in growth markets. It has a highly-skilled employment base in design, development and manufacturing but future growth will require highly trained graduates, apprentices and workforce expansion. I welcome the ambition to grow this internationally-focused sector by expanding the number of people employed, and enhancing their skillset in areas such as sensor technologies, communications, data analytics and software”*

Please find the full research report published here:

<https://www.skillnetireland.ie/publication/electronics-sector-resources-skills-needs-report/>

[Note: The link will go live at 8am on Monday, 25th January]

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For media queries or further information, please contact MIDAS Ireland: info@midasireland.ie

For any Skillnet Ireland queries or to arrange an interview, please contact: communications@skillnetireland.ie

NOTES TO THE EDITOR:

About MIDAS Ireland:

MIDAS Ireland is an industry led cluster consisting of industry, educational, research and government agencies, working together to assist in the development of the electronics based systems sector in Ireland. MIDAS began in 1999 as the Microelectronics Industry Design Association with a focus mainly on the design of advanced integrated circuits. Today MIDAS aims to represent the entire value chain, as the industry evolves to deliver more complete electronic and software system solutions. This industry cluster consists of 20,000 highly skilled professionals in Ireland who are part of a broader ICT sector. The cluster generates over €13.5 billion in expert revenue annually while typically committing 15% of its revenue to R&D.

MIDAS today has over 60 member organisations from across the island, including multinational companies such as Analog Devices, Intel, Xilinx, Qualcomm, Infineon, ON Semiconductor, ARM, Dell, Huawei, Maxim Integrated, Synopsys and u-blox, along with indigenous enterprises such as Taoglas, Tisalabs, Firecomms and many more. The membership extends to the third level institutes including UL, Carlow IT, UCC, UCD, TU Dublin, Maynooth University, TCD, QUB and many more.

To learn more about Midas Ireland, please visit www.MidasIreland.ie

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About MIDAS Electronic Systems Skillnet:

The MIDAS Electronic Systems Skillnet is a collaboration between Semiconductor & Electronic Systems companies based in Ireland to meet their mutual needs of world class cost effective training courses held locally for skilled employees in this sector. MIDAS Electronics Systems Skillnet is co-funded by Skillnet Ireland and member companies.

To learn more, please visit <https://midasireland.ie/skillnet/>

About Skillnet Ireland (www.skillnetireland.ie)



Skillnet Ireland is a business support agency of the Government of Ireland, with a mandate to advance the competitiveness, productivity, and innovation of Irish businesses through enterprise-led workforce development.

Skillnet Ireland partners with 57 industry bodies and enterprise clusters, supporting over 18,400 businesses and 70,000 trainees annually, through its 73 Skillnet Networks across most sectors and all regions in Ireland. Skillnet Ireland is funded from the National Training Fund through the Department of Further and Higher Education, Research, Innovation and Science.

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