

VDE warns of fewer university admissions for electrical engineering

- **Shortage of electrical engineers jeopardizes Germany's role as a business location**
- **The system-relevant field of microelectronics in particular needs more experts**

(Frankfurt am Main, 1/22/2021) According to current admissions figures from Germany's Federal Statistical Office, 14.5 percent fewer first-semester students have registered for programs in electrical engineering and information technology this year compared with the previous year. Student numbers also declined in mechanical engineering (-9.6 percent) and computer engineering (-4.8 percent), although the decrease was not as dramatic here. The impact of disrupted supply chains in the semiconductor industry demonstrates that Germany can by no means afford to have a shortage of electrical engineers. "Our industry is still rapidly hurtling towards an expert shortage. In the face of the demographic shift – thousands of electrical engineers will retire in the next few years – and the digital transformation, which has been accelerated by the pandemic, the gap to be filled by new electrical engineers will only grow larger. COVID-19 is not changing this at all," explains Dr. Michael Schanz, VDE labor market expert and member of the VDE "Study, Work, and Society" committee. In his view, graduates in electrical engineering and information technology still have good career prospects.

Lack of international students

Schanz sees one explanation for the downward trend in the fact that Lower Saxony – a state with almost 10 percent of Germany's population – produced virtually no graduating class in 2020 due to its switch from an eight-year secondary school system to one lasting nine years. "Furthermore, degree programs in electrical engineering and information technology at German universities are very popular among international students – they have the highest share of international students of any subject. For example, there are large numbers of prospective students from China who decide to enter master's programs at German universities," Schanz explains. The VDE "Study, Work, and Society" committee thus surmises that the primary explanation for the low number of first-semester students is the reduction of incoming students

from abroad amid the coronavirus pandemic. The fact that this decline has hit universities (-18.4 percent) more dramatically than universities of applied sciences (-11.5 percent) clearly indicates the credibility of this theory. Encouragingly, the share of female university entrants remained constant at almost 17 percent. “However, our goal must be to get more schoolchildren interested in studying electrical engineering,” declares VDE labor market expert Schanz.

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VDE (Verband der Elektrotechnik Elektronik und Informationstechnik e.V.) is headquartered in Frankfurt am Main, Germany. More information at www.vde.com/en.

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