

SUCCESS CASE 7.2025

DUAL ENGINEERING APPRENTICESHIP PROGRAM



THE CHALLENGE

The DSO faced the challenge of a mismatch between university education and the practical needs of the company. Many vocational schools and universities do not provide enough hands-on training, leading to graduates who lack the specific, industry-relevant skills required. This misalignment between academic education and the job market's demands results in longer onboarding times, less efficient integration of new employees, and a slower start to productive work. The company struggled to find talent that was well-prepared to meet the evolving needs of the industry, especially in the context of smart grids and energy transition.

THE SOLUTION

To address this gap, the DSO implemented a Dual Engineering Apprenticeship Program. This program allows university students to work with the company during their academic journey, gaining company-specific technical training and hands-on experience in parallel with their studies. The initiative provides a pathway to excellence for young graduates, offering them a privileged entry into the job market while enhancing their academic education. Participants develop advanced skills in network planning, operation, and optimization, focusing on smart grids and innovative energy solutions. The program covers areas such as protection, control, and automation systems, IoT technology integration, remote monitoring, real-time data analysis, cybersecurity, grid flexibility, and sustainable energy management strategies.

MAIN ACHIEVEMENTS

- **Bridging the Education-Industry Gap:** The apprenticeship program helped bridge the gap between academic knowledge and practical industry needs, producing graduates who are already familiar with the company's technology and requirements.
- **Faster Integration and Productivity:** By gaining practical, hands-on experience during their university studies, participants were able to join the company with a much quicker onboarding process and higher productivity.

- **Development of Specialized Skills:** Graduates of the program acquired expertise in cutting-edge technologies such as smart grids, IoT, and cybersecurity, preparing them to handle the challenges of modern energy systems.
- **Aligned with Energy Transition Goals:** The program is aligned with the company's focus on sustainability and the evolving energy landscape, ensuring that participants are well-equipped to contribute to smart grid development and the energy transition.

KEY SUCCESS FACTORS

- **University-Industry Collaboration:** The partnership between the DSO and universities ensured that the curriculum was aligned with real-world job market requirements, enabling students to learn skills directly applicable to their future roles.
- **Comprehensive and Hands-On Learning:** By combining theoretical education with practical training, the program offered students a comprehensive, hands-on approach to learning that was tailored to the company's needs.
- **Focus on Emerging Technologies:** The curriculum emphasized modern technologies such as smart grids, IoT, and cybersecurity, ensuring graduates are prepared for the future of energy distribution and management.
- **Support for Sustainable and Resilient Solutions:** The program provided students with a strong understanding of sustainable energy strategies, helping the company align with broader energy transition and climate goals.

WAY FORWARD

- **Program Expansion:** The DSO plans to expand the Dual Engineering Apprenticeship Program to hire more university students and provide more opportunities for practical learning and technical development.
- **Continuous Curriculum Updates:** The company will continuously review and update the program's curriculum to include new advancements in smart grid technologies, cybersecurity, and sustainable energy solutions.
- **Attracting More Talent:** The DSO will focus on strategies to attract a larger pool of university students into the program, addressing the ongoing challenge of talent attraction and ensuring a steady pipeline of qualified engineers.
- **Enhancing Training Capacity:** The company will invest in enhancing its training capacity and mentorship resources to support the growing number of participants, ensuring they receive the necessary guidance and hands-on experience to succeed in the field.