TSYP 12th Technical Challenge Participation

Our IEEE IAS ISI Student Branch Chapter participated in the TSYP 12th Technical Challenge,
organized by the IEEE IAS Tunisia Section Chapter. The challenge focused on designing Smart and
Sustainable Industrial Zones for Tunisia by 2056, integrating IoT, AI, and digital twins to optimize resource
efficiency, promote sustainability, and enhance workforce readiness.

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What we participated with:

We presented Nexora, a comprehensive solution that envisions the future of Tunisia's industrial zones by
integrating:

● Smart Grids & Renewable Energy: AI-driven energy distribution, solar and wind power integration, and smart battery storage systems.

● Autonomous Transportation: IoT-enabled logistics systems and robotic transport prototypes to
improve efficiency and sustainability.

● Waste-to-Energy & Circular Economy: Innovative models to convert industrial waste into energy and promote resource recycling.

● Advanced Connectivity & Digital Twins: 5G-powered networks, real-time monitoring, and predictive analytics for industrial optimization.

● Workforce Development & Inclusivity: Upskilling programs to train employees in Industry 5.0
technologies and ensure broad workforce participation.

● Nexora Mobile App: A smart platform for industrial monitoring, sustainability tracking, and operational efficiency improvement