

GE Kuwait Technology Center (GEKTC)



Building a world that works



96

Welcome to the GE Kuwait Technology Center

GEKTC is a flagship facility that will foster localized research, promote hands-on training and build an innovation ecosystem here in Kuwait for the power sector.

Spanning 8,000sqm, the facility has three main components:

- Training Center supporting over 100 students and technical staff on-site
- Testing Center offering repair & performance services
- Engineering Center for testing, repair, research and development

Revolution in Energy Services

Embracing the future of energy services, GEKTC is a testament to the power of innovation and collaboration.

Revolution in Energy Services

Embracing the future of energy services, GEKTC is a testament to the power of innovation and collaboration.

Revolution in Energy Services

Embracing the future of energy services, GEKTC is a testament to the power of innovation and collaboration.



Mariam Al-Rushaid,
Director, GE Kuwait Technology Center

About GE Kuwait Technology Center (GEKTC)

Since the early 1970s, GE has been a strong partner to Kuwait's public and private sectors, supporting the country's infrastructure needs across the aviation, energy, and healthcare sectors.

GEKTC is a flagship, first-of-its-kind facility in Kuwait, which serves power sector customers in the country and abroad, and includes centers for Training, Tooling, and Research & Development (R&D).

When we first started this project, our vision for GEKTC was to bring something unique to the country and to our customers, an initiative sitting at the nexus of skills development, technology, and innovation that would help to further strengthen talent, increase productivity, and support the sustainable development of the power sector.

Thanks to the unwavering support of the Kuwait Direct Investment Promotion Authority (KDIPA), Markaz, the Kuwaiti Ministry of Electricity and Water, and Kuwait University, our vision has been made a reality.

Since the inauguration of GEKTC in 2016 to this day, we have remained focused on upholding our vision and transforming the future of energy in Kuwait and beyond.

Mariam Al-Rushaid

Director, GE Kuwait Technology Center

Building on GE's Strong Presence in Kuwait

Since the early 1970s, GE has been a strong partner to Kuwait's public and private sectors, supporting the country's infrastructure needs across the aviation, energy, and healthcare sectors.

GEKTC serves three core areas in the power sector: training, tooling, and engineering.



GEKTC Training Center:

Offers both theoretical and hands-on training.

900+
Trainees

Can support more than
900 trainees a year



Hands-on training: Gas turbine operation & maintenance, steam turbine operation & maintenance, generator operation & maintenance, control maintenance, excitation and gas power plant operation & maintenance, and aeroderivative gas turbine operation & maintenance



Training facilities:
8 classrooms, 2 control
labs, and 1 large-scale
workshop

35+
Courses offered

2,100 sqm
Workshop area



GEKTC Tooling Center:

Offers repair & maintenance services.
Delivers timely and quick service
support for customers.



Up to **90%** reduction
in shipping time for
customers in Kuwait and
neighboring countries



Up to **10%** reduction
in costs for customers in
Kuwait and neighboring
countries



GEKTC R&D Center:

Offers cutting-edge research and
development including Hot & Harsh
technology.

Equipped with state-of-the-art
technology, GEKTC's R&D Center
enables rapid response and tailored
solutions to customer issues.

Covers four critical technology areas:



1 Failure Analysis
& Material Life
Assessment



2 Oil & Fuel
Testing



3 Controls
Simulation



4 Monitoring &
Diagnostics

Strengthening the Energy Ecosystem

GEKTC is a world-class facility established to provide enriching training programs, a sustainable tooling center, and innovative engineering for decades to come.

GEKTC Training Center

Offering both theoretical and hands-on training, the Training Center can support more than 900 trainees a year. It offers a tailored curriculum for professionals and students, taught by GE experts, on actual heavy duty gas turbines, aeroderivative gas turbines, steam turbines, generators, and more.

The Training Center has been helping customers to better understand and provide the skills needed to further enhance the capabilities of their employees.

GEKTC Tooling Center

Featuring various tools required to support the maintenance and modification of GE and non-GE gas turbines, generators, and steam turbines, the Tooling Center serves as a repair hub, delivering timely and quick service support for customers.

The Tooling Center has been supporting the country's power plants during planned and forced outages and has helped reduce tool delivery time by up to 90%.

In a bid to support the local small and medium enterprises (SME) sector, the Center works with local vendors and suppliers for tooling orders, consumables, and the certification and calibrations of tooling. This enables local suppliers to be part of GE's global supply chain.

GEKTC R&D Center

Addressing four critical technology areas - Failure Analysis & Material Life Assessment, Oil & Fuel Testing, Controls Simulation, and Monitoring & Diagnostics - the R&D Center leverages the skills and facilities of the engineering community in Kuwait and across the region.

The R&D Center co-creates solutions for challenges faced by field engineers and customers. It also offers a troubleshooting and simulation laboratory, enabling GE engineers to proactively provide operation and maintenance advice to improve plant reliability and to respond faster to complex control issues associated with power plant operation and equipment upgrades.

GEKTC also focuses on Hot & Harsh research that evaluates the effect of high temperature, dust, corrosion, erosion, duty cycle, and fuel harshness, which have a critical impact on the reliability and efficiency of power plants. The findings of these studies are applied on turbines and generators, further strengthening their reliability and efficiency.

Driving the Digital Industrial Transformation

**The digital revolution changed the world for tech and consumer businesses.
Now is the time of industry.**

The path-breaking R&D at GEKTC is aimed at driving the productivity and operational efficiency of our customers, including through co-created initiatives on GE's digital industrial technologies.

The GEKTC R&D Center includes a Monitoring & Diagnostics Center for analytics-based remote monitoring of GE turbines and related equipment, as well as a Controls Simulation laboratory. They provide custom software solutions, as well as extensions to GE Digital industrial software applications and the Predix Platform, to help customers gain maximum benefits from the Internet of Things (IoT), analytics, and their digitization initiatives.

Highlighting GE's focus on the digital industrial transformation to achieve unprecedented levels of operational efficiency and productivity, the GEKTC team works with researchers, industry, and software developers to co-create digital industrial solutions for the power sector.





Scan the QR code to learn more about GE Gas Power's latest technologies and presence in Kuwait.

For further information, please contact:

Mariam Al-Rushaid

Director

GE Kuwait Technology Center

Email: Mariam.Alrushaid@ge.com

Dana Alqattan

Sales Manager

GE Kuwait Technology Center

Email: Dana.Alqattan@ge.com

