

- ▲ 3D Visual Information
- ▲ Training Delivery
- ▲ Industry



**Customer:** Emirates Simulation Academy, UAE

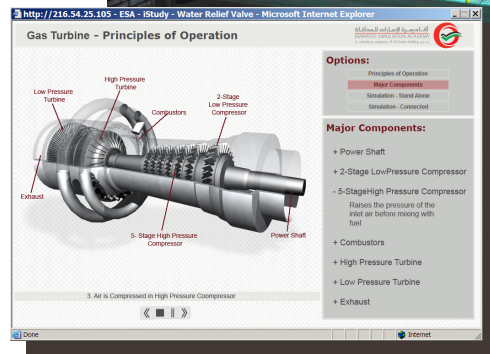
أكاديمية الإمارات للمحاكاة  
EMIRATES SIMULATION ACADEMY  
A subsidiary company of Al Qudra Holding p.j.s.c.

**Project Description:** The Emirates Simulation Academy constructed the most advanced industrial simulation training center in the world, composed of five full-scope simulators and associated training programs to serve the energy and petrochemical industries in the Middle East. To advance the methods of learning beyond the industry norm, they envisioned an integrated 3D computer visualization system coupled to real-time replica computer simulators.

In keeping with the UAE national policy of “best in class” purchases and the desire to do what has never been done before, the Company was contracted to deliver a variety of visualizations for Combined Cycle, Gas Turbine, Desalination, Petrochemical, and Oil Platforms. It was their desire to effectively provide the best available technology and practices to train personnel while revolutionizing those methodologies, leading the industry to an entirely new standard of excellence.



The coupling of these leading edge computer technologies, visualization and simulation, had never been accomplished in the industrial sector. To satisfy this vision, an online Training Delivery Platform (TDP) which included Learning/Content/Management Systems, student and trainer tracking, interactive 3D visualization/simulations for system level (i.e. gas turbine) and component level (i.e. valves, pumps) visualizations utilizing Bridgeworks© was developed.



In simple terms the design intent was to interactively utilize visualization to efficiently understand the internals of “how it works” and to interactively portray with simulation “how it operates”. These two complimentary technologies along with detailed curriculum deployed from the TDP provide the most powerful educational and training environment in the world.

The overarching framework allows for extensibility to include additional content, new systems, integration with simulators of various types and reuse in 70+ languages.