

GENERAL ATOMICS ENERGY GROUP

Innovation. Expertise. Experience.

Since the dawn of the atomic age, innovations developed at General Atomics have advanced the state of the art across the full spectrum of science and technology – from nuclear energy and defense to medicine and high-performance computing. Behind a talented global team of scientists, engineers, and professionals, GA's unique experience and capabilities continue to deliver safe, sustainable, economical, and innovative solutions to meet growing global demands.



POWERING THE FUTURE WITH TODAY'S INNOVATIONS

GA's Energy Group pursues cutting-edge research and development across a broad spectrum of products, services, and program areas that have the potential to transform tomorrow's energy landscape.

ENERGY PROGRAMS



DIII-D National Fusion Facility

Providing a world-leading research facility that is pioneering science and innovative techniques that will enable the development of nuclear fusion as an energy source for the next generation



Advanced Materials Engineering

Performing novel and unique materials research and development for high-precision design, engineering, and fabrication



Supporting the National Nuclear Security Administration's research in Inertial Confinement Fusion and high energy density physics to achieve a safe, secure, and effective nuclear deterrent without underground testing



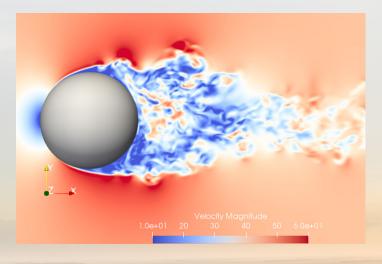
Advanced Diagnostics and Sensors

Engineering, building, and deploying a wide variety of advanced diagnostic systems for magnetic and inertial fusion applications



ITER Manufacturing

Fabricating waveguides, diagnostics, and the world's most powerful pulsed superconducting electromagnet for the international ITER experiment, which will prove the feasibility of fusion energy



Theory and Advanced Computing

Driving innovations in plasma simulation with advanced techniques such as machine learning and quantum computing, as well as improving data acquisition, analysis, visualization, and collaboration for scientific research at large scales

ENERGY PRODUCTS AND SERVICES



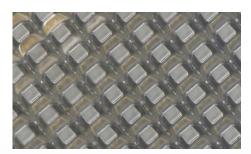
Microwave Technologies

Low-loss microwave transmission technologies for fusion and other applications



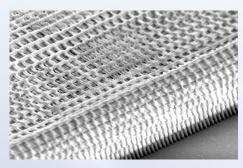
Superconducting Magnets

Innovative low- and high-temperature superconducting magnets from bench scale to the largest applications in the world



Laser Micromachining

Cutting-edge advanced laser machining and manufacturing



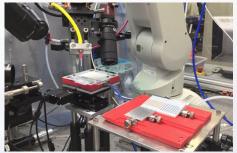
Additive Manufacturing

Micro and nano-scale printing and fabrication using metals, polymers, ceramics, and other materials



Aerogels & Foams

Metal and polymer low-density materials for a wide variety of applications



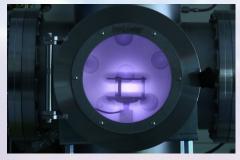
Robotics & Automation

Components for high-repetition-rate laser experiments using up to hundreds of thousands of targets



Metrology & Electron Microscopy

Standard as well as innovative measurement and analysis techniques at the cutting edge of materials science



Coatings

Thin films and coatings of metals, alloys, and ceramics using a variety of techniques



Fusion Technology Systems

Advanced plasma control and scientific collaboration applications for fusion energy and other fields