



FNGINFFRING SFRVICES

ELECTRICAL ENGINEERING







BSA's Electrical Engineering team provides design solutions that support and enhance mission-critical environments.

Our work focuses on healthcare, higher education, and research and discovery facilities, spaces that demand uninterrupted operation, advanced technology integration, and meticulous attention to safety and maintainability. Leveraging our firm's multidisciplinary design capabilities, we deliver seamless, fully integrated solutions that support each facility's mission. From new construction to renovations and system upgrades, we bring a deep understanding of the operational demands, regulatory standards, and long-term performance requirements unique to these complex environments.

In healthcare, we design mission-critical electrical infrastructure that supports the latest advanced imaging suites, surgical spaces, patient rooms, and support areas. Our systems prioritize safety, resilience, efficiency, and the patient experience, helping protect uptime, streamline staff workflows, and enhance comfort and satisfaction, all while meeting NFPA, NEC, and facility accreditation standards.

For **higher education**, we deliver energy-efficient, adaptable electrical systems that support diverse learning styles, flexible use, and emerging technology. Our designs enhance classrooms, laboratories, student life spaces, and public gathering areas, aligned with long-term facility planning and focused on performance and user experience.

In **laboratory and research**, we provide electrical systems that ensure precise environmental control, specialized equipment power, maximized uptime, and

flexibility, closely coordinated with mechanical and process systems. Our designs support current research needs while accommodating future growth, ensuring operational safety, regulatory compliance, and high reliability in sensitive, high-stakes settings.

ELECTRICAL SYSTEM DESIGN

- Power distribution systems (medium and low voltage)
- Emergency and standby power infrastructure, including UPS systems and generators
- Lighting design, controls, and daylighting integration
- System redundancy, resiliency, and power quality planning
- Code and standards compliance reviews
- Fire alarm systems

ELECTRICAL ENGINEERING SERVICES

- Master planning and design of new power systems
- Facility survey and electrical system assessment reports
- Collaborative owner's standards development
- Construction documentation, specifications and administration
- Fault current, arc flash, coordination studies, and system modeling