UNLV | ENGINEERING CAREER SERVICES
HOWARD R. HUGHES COLLEGE OF ENGINEERING

ELECTRICAL ENGINEERING INTERN

Posting ID: IN187234F4
Company: Burns & McDonnell
Position Type: Full-Time
College Major(s): Electrical/Computer Engineering (EE/CpE)

Company Website: https://www.burnsmcd.com
Work Location: Various Locations
Salary: DOE
College Level(s): Undergraduate-Freshman, Undergraduate-Sophomore, Undergraduate-Junior, Undergraduate-Senior

OVERVIEW

Burns & McDonnell is making the world a more amazing place with more than 5,000 engineers, architects, construction professionals, scientists and consultants on staff and growing. We strive to create amazing success for our clients and amazing careers for our employee-owners. We take on some of the world’s toughest challenges with the industry’s best thinking.

We have offices and projects spanning the US and the globe. We are proud to rank among FORTUNE magazine’s 100 Best Companies to Work For. Our culture of 100% employee ownership plays a major role in supporting that outcome. Each employee shares in the ownership of the firm, bringing the commitment of an owner to our projects. Clients appreciate that and have rewarded us with a 90% repeat business rate and decades-long partnerships. Pretty cool for a 100 year old firm that grows organically.

Internship Locations:

Roles and Responsibilities
Our Electrical Engineers are responsible for performing tasks requiring the application of standard electrical engineering techniques and procedures. This includes standard design of electrical systems, assisting lead engineers with various project duties, and other duties as assigned.

Opportunities as an Electrical Engineer exist in multiple market segments and locations. Specific assignments and project work varies depending on the market segments and locations. Please see below for information on each market:

Marian Mason | Internship & Career Services Coordinator | coecareer@unlv.edu | https://unlv.edu/engineering/jobs
UNLV, Howard R. Hughes College of Engineering
Aviation & Federal
Project types include military and airport facilities, such as terminals and aircraft maintenance hangars, to fueling distribution systems and microgrids. Design work includes power distribution systems, voice/data networks, fiber optics, modern lighting systems, security/access control systems, and fire alarm systems.

Cyber Security
Provides extensive network security solutions ranging from vulnerability assessments to large security architectures. Includes analyzing complex networks for security vulnerabilities, performing network assessments, network security designs, RFP responses, proposal writing, development of statement of work, and many other consultant functions.

Energy
Performs analysis and design of electrical systems for new power-generating facilities, as well as upgrades to existing facilities. Responsibilities include conceptual design, load flow / short circuit / arc-flash analysis studies, system optimization, equipment specification, electrical infrastructure design, protective relay calculations and settings, configuration, and field commissioning of electrical systems and equipment.

Global Facilities
Project areas include on-site energy, healthcare, manufacturing, food processing & consumer products plants and commercial architecture. Design work includes power distribution systems, instrumentation and controls, voice/data networks, fiber optics, security systems, and fire alarm systems.

Networks, Integration and Automation
Design and planning of telecommunications and wide area networks on various projects for electric utilities. Projects include supervisory control and data acquisition, distribution automation, cyber security, microwave radio, wireless networks, fiber optics, and smart grid.

Oil, Gas, & Chemical
Electrical work includes design of electrical rooms, control rooms, and all aspects of providing power to the industrial clients we serve such as lighting, grounding, lightning protection, cable selection, motor control, uninterruptible power systems, low and high voltage equipment, and cable raceway design in ethanol & biofuels plants, chemical plants, refineries, pipeline & liquid terminals. This group performs power flow & fault analysis, protective relaying studies and equipment purchasing. Instrumentation and controls work includes design for sensing and controlling pressure, temperature, level, flow and other parameters. Complex equipment is purchased for analyzing chemical composition products in the plant. Design of plant instrumented safety systems and computer control of equipment is accomplished by the instrumentation group.

Substations
Design of high voltage (13,000 to 500,000 volt) electrical substations. Areas of design include substation layout, power system analysis and control/relay systems for a variety of clients across the country.
Transmission Planning
Work includes analysis of electrical transmission systems, including running models, simulations and report writing. Projects include generation interconnection studies, load flow analysis, dynamic studies and distribution master plan support

Education and Qualifications
- Pursuit of Bachelor's degree in electrical engineering from an accredited program.
- Minimum of a 3.0 GPA strongly preferred.
- Prior internship and/or related consulting experience preferred.
- Involvement on campus or in the community.
- Excellent verbal and written communication skills.
- Strong problem solving and analytical skills.
- Demonstrated leadership skills.
- Candidates must be legally authorized to work permanently (i.e. without time limitations, without restrictions or without need for work sponsorship) in the country where this position is located.

How to Apply