

# The University of Texas at San Antonio

## *Job Description*

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Job Title: Electrician III  
Code: 15211  
Salary Grade: 60  
FLSA Status: Non-Exempt  
Department/Division: Office of Facilities  
Reports To: Maintenance Supervisor (Varies by Assignment)

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## *Summary*

- Function: To provide master level skills and expertise in the maintenance, preventive maintenance, remodeling, repair, servicing and operation of the University's electrical systems from 120 volts up to and including 13,800 volts. Assembles, installs, and repairs circuitry, switchgear, distribution systems and all related components. Plans layout and installs wiring for electrical fixtures, apparatus and control equipment.
- Scope: Responsible for the prompt, skilled and proper operation, installation, maintenance, evaluation, and repair of electrical related systems rated up to 15kV. Frequently responsible for the supervision of semi-skilled or unskilled workers. Works directly in and with other trades in a team environment and performs other duties as required and assigned.

## *Duties*

- Typical:
  1. Accomplishes the following duties: running conduit, pulling wire and installing; installing and repairing electrical circuits, security devices, fire alarms, telephones, audio/video systems, communication trunks, and computer networking systems; and performs electrical work related to air conditioning and refrigeration.
  2. Performs service calls and work orders submitted by students, faculty, staff, and departments within the university to include maintaining records, and performs preventive maintenance work up to and including 480 volts plus trains lesser skilled personnel up to and including 13,800 volts.
  3. Tests continuity of circuit to ensure electrical compatibility and safety of components with testing instruments such as

- ohmmeter, battery and buzzer, and oscilloscope; troubleshoots and diagnoses electric systems to detect and repair functions.
4. Observes functioning of installed equipment or systems to detect hazards and need for adjustments, relocation or replacement.
  5. Assists and consults with outside contractors on electrical specifications and guidance concerning the remodeling, repair, and building of new structures.
  6. Works off of ladders, scaffolding, and rooftops of buildings.
  7. Maintains a clean and safe work environment.
  8. Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes.
  9. Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring; prepares labor and material estimates for new electric projects.
  10. Installs, maintains, repairs, and modifies electrical systems including 13,800 volt primary to 480 volt transformers, 480 volt to 270 volt transformers, and 277 volt to 120 volt transformers.
  11. Installs control and distribution apparatus such as switches, relays, and circuit-breaker panels from 120 volts up to and including 13,800 volts, plus trains lesser skilled personnel on these higher voltage systems.
  12. Keeps current of changes in operational procedures, new equipment, and other related equipment; works in conjunction with other trades, staff personnel in support of daily job tasks; and informs appropriate personnel of unusual conditions, problems, or deficiencies and takes appropriate actions.
  13. Troubleshoots electrical system problems following detailed operational and maintenance procedures; performs installation and maintenance of existing electrical systems, new construction, and special events.
  14. Maintains knowledge of the current National Electrical Code and its application.
  15. Assists in the design and construction of electrical systems.
  16. Leads, performs with, and gives directions to, skilled or unskilled workers and maintenance workers; supervises and coordinates activities in conjunction with and in the absence of the Immediate Supervisor and manages projects and work load assignments as required.
  17. Trains new and current employees engaged in maintenance and operation of electrical systems and power distribution networks.
  18. Installs, maintains, operates, repairs, and modifies electrical systems including, but not limited to, electrical motors, variable

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| <p>frequency drives, electrical control systems, generators, transformers, and laboratory equipment.</p> <p>19. Performs preventive or corrective maintenance and detailed inspection of electrical, mechanical, and related systems.</p> <p>20. Performs work as may relate to fiber optic, alarm and other electrical and electronic systems.</p> <p>21. Operates, performs preventive maintenance, and otherwise maintains 15kV switchgear and distribution, including central substation and primary distribution loops.</p> <p>22. Generates reports and assists in preparing estimates and special projects.</p> <p>• <u>Periodic:</u></p> <ol style="list-style-type: none"> <li>1. Attends safety training, staff meetings and maintenance training courses.</li> <li>2. Creates accurate cost estimates of time and materials required for jobs.</li> <li>3. Provides comprehensive review of construction plans and gives constructive comments.</li> </ol> |
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***Education***

| <b>Required</b>                | <b>Preferred</b>   |
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| High school graduation or GED. | Associate’s degree or equivalent from two-year college or technical school within area of assigned responsibility. |

***Other Requirements***

| <b>Required</b>  | <b>Preferred</b>  |
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| Must have been licensed by the State of Texas as a Master Electrician for at least the last previous two years. This license must be current at the time of hire and maintained throughout the period of employment. | Commercial Electrical Inspector Certification and Thermograph Operator Certification. |
| Proficient in reading and interpreting construction drawings, specifications and submittals.   |   |
| Candidate must satisfactorily complete the required Criminal Background Check (CBC), Motor Vehicle Record (MVR) Check and must be approved by the Hiring Manager.  |   |

***Experience***

| <b>Required</b>   | <b>Preferred</b>  |
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| <p>Ten years of journeyman level commercial/ industrial electrical experience including at least two years since earning the required State of Texas Master Electrician License and including a minimum of two years journeyman or master level experience in terminating and troubleshooting and repairing 13,800 volt distribution systems.</p> <p>In the event that an employee desires to become an Electrician III, employee must meet all the requirements herein to be qualified for an Electrician III. Should an employee lack 13.8 KV distribution experience that is unique to the Campus, specific training will be provided by qualified electricians that oversee the maintenance and repair of 13.8 KV gear and equipment. Training will be provided for a two year period and employee must meet all the requirements of the program to become qualified.</p> | <p>Five or more years of licensed Master Electrician experience in commercial or industrial work.</p>                     |
| <p>Must have some demonstrated communication, coordination, organization, and leadership skills.</p>  | <p>A minimum of one year or more supervisory experience in a similar commercial/ industrial environment is preferred.</p> |

***Equipment***

| <b>Required</b>  | <b>Preferred</b>   |
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| <p>Skilled in the use of hand tools, power tools, meters, and other test equipment common to the electrical trade.</p> | <p>Familiarity in the use of high-potential test equipment and related high voltage tools.</p> |

***Other***

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| <p>Alertness and careful attention is required to avoid injury to self and others.</p> |
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***Working Conditions***

| <b>Usual</b> | <b>Special</b> |
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| <p>Exposure to variable Texas weather conditions and/or physical hazards common to a physical plant and construction environment such as elevated and confined spaces. Works in attics, subfloors, trenches, machine rooms and other occupational areas. Also exposed to mechanical, electrical, plumbing or other hazards common to the trade. Exposure to potential occupational hazards including biological and chemical hazards within laboratory spaces. Selected applicant must wear and properly maintain uniforms, protective gear and identification to be provided. Selected candidate must respond to after-hours emergency calls.</p> | <p>Currently anticipated to typically be Monday-Friday, 7:00AM – 4:00PM, however, flexible hours will be required in order to satisfy University needs and may include overtime, evenings, odd hours, shift work, weekends, and/or holidays. Required to be on stand-by call status, carrying pager, cell phone or two-way radio as assigned and respond to after-hours emergency calls.</p> |
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***Supervision***

| <b>Received</b>   | <b>Given</b>   |
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| <p>General supervision from immediate supervisor. May be written or oral.</p> | <p>Frequently gives general supervision and training to skilled, semi-skilled and unskilled workers.</p> |

***Physical Demands***

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| <p>While performing the duties of this job, the employee is regularly required to stand ; walk; use hands to feel; reach with hands and arms; and talk or hear. The employee is occasionally required to sit; climb or balance; and stoop, kneel, crouch, or crawl. The employee must regularly lift up to 35 pounds and occasionally up to 50 pounds with or without accommodations. Special vision requirements include close vision, distance vision, color vision, peripheral vision, depth perception, and ability to adjust focus. May be required to wear Personal Protective Equipment to include; Steel toe or Non-slippery shoes, eye protection, hardhat, back belt, body harness, biological protective gear and arc flash protection.</p> |
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***Accuracy***

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| <p>Accuracy in the use of tools and layout of jobs. All electrical work must be performed according to the National Electrical Code and other established industry or regulatory standards, codes or requirements.</p> |
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***Internal Control***

Within the scope of position duties, responsible for seeing that operations are effective and efficient, assets are safeguarded, reliable financial data is maintained, and applicable laws, regulations, policies and procedures are complied with. Must comply with all University policies.

***Security Sensitive***

Specific job requirements or physical location of some positions allocated to this classification may render the position security sensitive, and thereby subject to the provisions of section 51.215 Texas Education Code.