LOUISIANA WORKFORCE COMMISSION
The Department of Labor

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Electrical Engineering Technicians

Louisiana

Summary of Job Duties

Electrical Engineering Technicians Video - Test or modify developmental or operational electrical machinery or electrical control equipment and circuitry in industrial or commercial plants or laboratories. Usually work under direction of engineers or technologists.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Detailed Job Description

Electrical Engineering Technicians Electrical and electronics engineering technicians help engineers design and develop computers and other electrical and electronic equipment.

Electrical and electronics engineering technicians help electrical and electronics engineers design and develop computers, communications equipment, medical monitoring devices, navigational equipment, and other electrical and electronic equipment. They often work in product evaluation and testing, and use measuring and diagnostic devices to adjust, test, and repair equipment. They are also involved in the manufacture and deployment of equipment for automation.

Duties

Electrical engineering technicians typically do the following:

• Put together electrical and electronic systems and prototypes
• Build, calibrate, and repair electrical instruments or testing equipment
• Visit construction sites to observe conditions affecting design
• Identify solutions to technical design problems that arise during the construction of electrical systems
• Inspect designs for quality control, report findings, and make recommendations
• Draw diagrams and write specifications to clarify design details of experimental electronics units

Electrical engineering technicians install and maintain electrical control systems and equipment, and modify electrical prototypes, parts, and assemblies to correct problems. When testing systems, they set up equipment and evaluate the performance of developmental parts, assemblies, or systems under simulated conditions. They then analyze test information to resolve design-related problems.

Electronics engineering technicians typically do the following:

• Design basic circuitry and draft sketches to clarify details of design documentation, under engineers' direction
• Build prototypes from rough sketches or plans
• Assemble, test, and maintain circuitry or electronic components according to engineering instructions, technical manuals, and knowledge of electronics
• Adjust and replace defective circuitry and electronic components
• Make parts, such as coils and terminal boards, by using bench lathes, drills, or other machine tools

Electronics engineering technicians identify and resolve equipment malfunctions and then work with manufacturers to get replacement parts. They also calibrate and perform preventive maintenance on equipment and systems.

These technicians often need to read blueprints, schematic drawings, and engineering instructions for assembling electronic units. They also write reports and record data on testing techniques, laboratory equipment, and specifications.

Source: U.S. Department of Labor Bureau of Labor Statistics

Job Zone

The section below shows the job zone information for Electrical Engineering Technicians. Job Zone Three: Medium Preparation Needed.

Education	Experience	Training

Education	Experience	Training
Most occupations in this zone require training in vocational schools, related on-the-job experience, or an associate's degree.	Previous work-related skill, knowledge, or experience is required for these occupations. For example, an electrician must have completed three or four years of apprenticeship or several years of vocational training, and often must have passed a licensing exam, in order to perform the job.	Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Jobs Available

This section shows the number of job openings advertised online in Louisiana for Electrical Engineering Technicians and for the related occupational group of Architecture and Engineering Occupations on November 22, 2020 (Jobs De-duplication Level 2).

Occupation	Job Openings
Electrical Engineering Technicians	18
Architecture and Engineering Occupations	734

Source: Online advertised jobs data

Monthly Job Count

This section shows the number of job openings advertised online for Electrical Engineering Technicians in Louisiana October, 2020 (Jobs De-duplication Level 2).

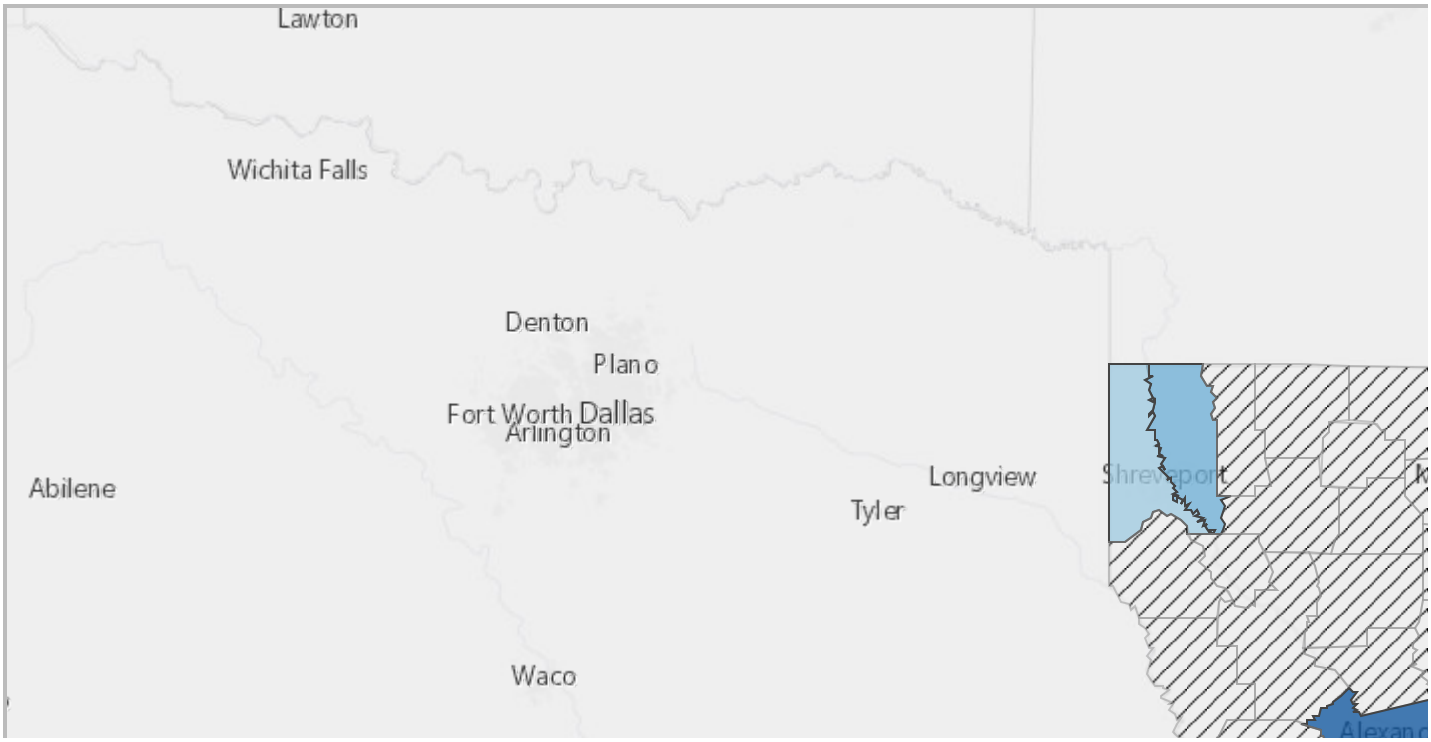
Occupation	Job Openings
Electrical Engineering Technicians	26

GREEN OCCUPATIONS

Source: Online advertised jobs data

Jobs Area Distribution

This section shows the distribution of number of job openings advertised online for Electrical Engineering Technicians in Louisiana by parishes on November 22, 2020 (Jobs De-duplication Level 2).



Job Openings

0	1	2	3	5	N/A

Job Source: Online advertised jobs data
Wage Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

Jobs in Related Occupations

This section shows the number of job openings advertised online in Louisiana for occupations related to Electrical Engineering Technicians on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Occupation	Median Wage	Job Openings	*Related By
1	Medical and Clinical Laboratory Technologists	N/A	190	O*NET
2	Computer User Support Specialists	N/A	88	O*NET
3	Electronics Engineering Technicians	$57,589	19	O*NET
4	Electrical Engineering Technicians	$57,589	18	N/A

Rank	Occupation	Median Wage	Job Openings	*Related By
5	Electrical and Electronics Repairers, Commercial and Industrial Equipment	$62,553	18	O*NET
6	Surveying Technicians	$37,697	13	SOC4
7	Architectural Drafters	$50,965	11	SOC4
8	Power Distributors and Dispatchers	$39,671	11	O*NET
9	Industrial Engineering Technicians	$83,502	10	O*NET
10	Dental Laboratory Technicians	$41,456	10	O*NET
11	Drafters, All Other	$53,560	8	SOC4
12	Broadcast Technicians	Confidential	6	O*NET
13	Computer, Automated Teller, and Office Machine Repairers	$37,185	6	O*NET
14	Mechanical Engineering Technicians	$75,598	5	O*NET
15	Medical Equipment Repairers	$41,592	5	O*NET
16	Electro-Mechanical Technicians	$65,257	4	O*NET
17	Manufacturing Production Technicians	N/A	4	O*NET
18	Audio and Video Equipment Technicians	$36,399	4	O*NET
19	Avionics Technicians	$62,195	4	O*NET
20	Electrical Drafters	$64,801	3	SOC4
21	Mechanical Drafters	$58,355	3	O*NET
22	Environmental Engineering Technicians	$44,182	3	O*NET
23	Non-Destructive Testing Specialists	N/A	3	SOC4
24	Electronic Drafters	$64,801	2	SOC4
25	Civil Engineering Technicians	$53,863	2	O*NET
26	Engineering Technicians, Except Drafters, All Other	N/A	2	SOC4
27	Geophysical Data Technicians	N/A	2	O*NET
28	Medical Appliance Technicians	$34,012	2	O*NET
29	Civil Drafters	$50,965	1	O*NET
30	Robotics Technicians	$65,257	1	O*NET
31	Food Science Technicians	N/A	1	O*NET
32	Museum Technicians and Conservators	$19,779	1	O*NET

BRIGHT OUTLOOK NATIONALLY | GREEN OCCUPATIONS

Job Source: Online advertised jobs data

*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.

SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Candidates Available

This section shows potential candidates in the workforce system in Louisiana for Electrical Engineering Technicians and for the related occupational group of Architecture and Engineering Occupations on November 22, 2020.

Occupation	Candidates
Electrical Engineering Technicians	96
Architecture and Engineering Occupations	3,456

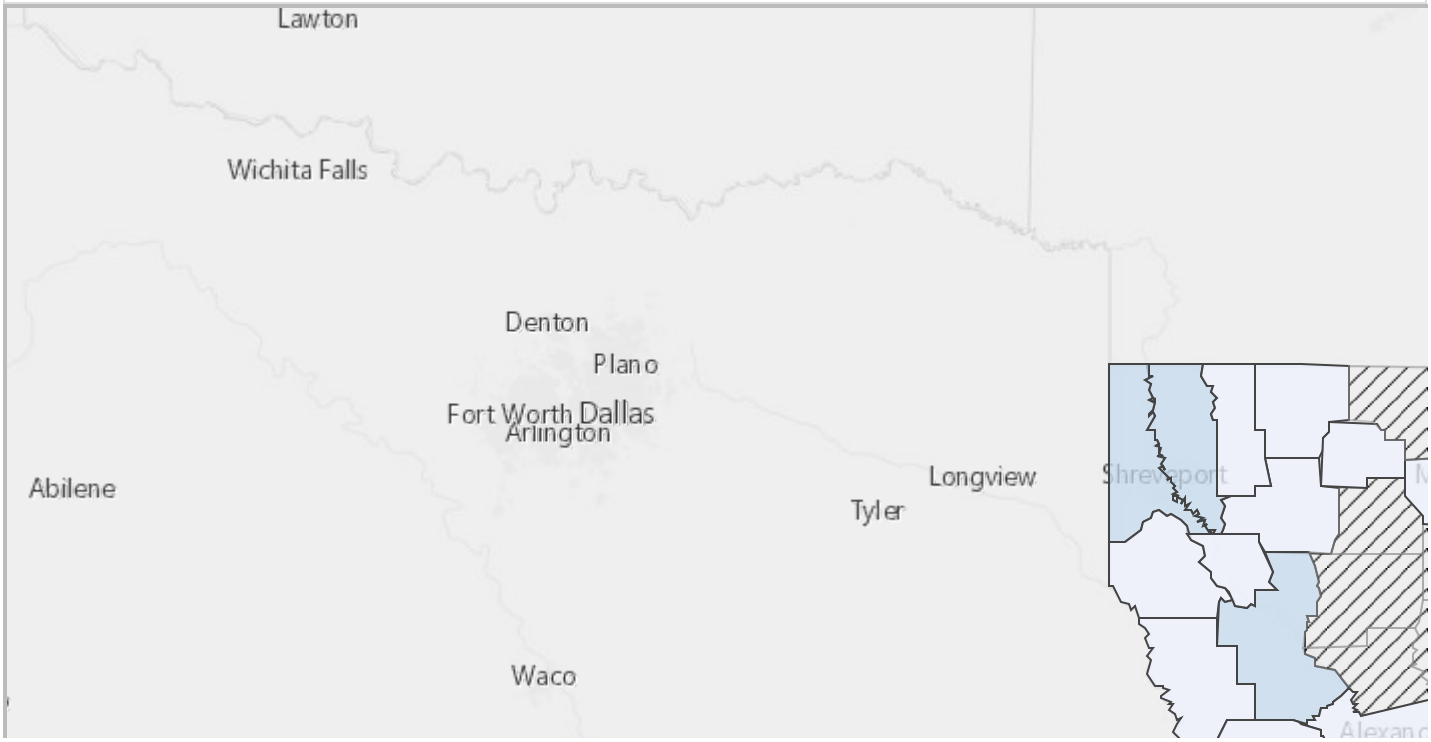
Source: Individuals with active résumés in the workforce system.

Candidate Area Distribution

This section shows the distribution of potential candidates in the workforce system for Electrical Engineering Technicians in Louisiana by parishes on November 22, 2020.

Rank	Area Name	Median Wage	Candidates
1	Orleans Parish	$57,589 state level wages	62
2	Jefferson Parish	$57,589 state level wages	61
3	St. Bernard Parish	$57,589 state level wages	52
4	St. Charles Parish	$57,589 state level wages	52
5	Plaquemines Parish	$57,589 state level wages	48

Rank	Area Name	Median Wage	Candidates
6	Lafayette Parish	$57,589 state level wages	46
7	St. John the Baptist Parish	$57,589 state level wages	46
8	Lafourche Parish	$57,589 state level wages	45
9	St. Tammany Parish	$57,589 state level wages	45
10	St. Martin Parish	$57,589 state level wages	44



Candidates

40	41 - 43	44 - 46	47 - 48	49 - 52	52 - 62	N/A

Candidate Source: Individuals with active résumés in the workforce system.
Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

Candidates in Related Occupations

This section shows how many potential candidates in the workforce system were looking for work in Louisiana in occupations related to Electrical Engineering Technicians on November 22, 2020.

Rank	Occupation	Median Wage	Candidates	*Related By
1	Electrical and Electronics Repairers, Commercial and Industrial Equipment	$62,553	553	O*NET
2	Computer User Support Specialists	N/A	548	O*NET
3	Manufacturing Production Technicians	N/A	379	O*NET
4	Audio and Video Equipment Technicians	$36,399	234	O*NET
5	Electronics Engineering Technicians	$57,589	174	O*NET
6	Drafters, All Other	$53,560	166	SOC4
7	Non-Destructive Testing Specialists	N/A	133	SOC4
8	Mechanical Drafters	$58,355	130	O*NET
9	Industrial Engineering Technicians	$83,502	111	O*NET
10	Architectural Drafters	$50,965	102	SOC4
11	Electrical Engineering Technicians	$57,589	96	N/A
12	Surveying Technicians	$37,697	81	SOC4
13	Aerospace Engineering and Operations Technicians	N/A	76	O*NET
14	Computer, Automated Teller, and Office Machine Repairers	$37,185	76	O*NET
15	Civil Drafters	$50,965	67	O*NET
16	Civil Engineering Technicians	$53,863	62	O*NET
17	Electronic Home Entertainment Equipment Installers and Repairers	N/A	59	O*NET
18	Engineering Technicians, Except Drafters, All Other	N/A	56	SOC4
19	Electrical Drafters	$64,801	55	SOC4
20	Electro-Mechanical Technicians	$65,257	52	O*NET
21	Mechanical Engineering Technicians	$75,598	51	O*NET

Rank	Occupation	Median Wage	Candidates	*Related By
22	Industrial Engineering Technologists	N/A	46	SOC4
23	Avionics Technicians	$62,195	46	O*NET
24	Environmental Engineering Technicians	$44,182	44	O*NET
25	Automotive Engineering Technicians	$75,598	42	SOC4
26	Medical and Clinical Laboratory Technologists	N/A	41	O*NET
27	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	N/A	39	O*NET
28	Broadcast Technicians	Confidential	38	O*NET
29	Dental Laboratory Technicians	$41,456	37	O*NET
30	Electronic Drafters	$64,801	23	SOC4
31	Robotics Technicians	$65,257	19	O*NET
32	Electronics Engineering Technologists	N/A	19	O*NET
33	Electrical Engineering Technologists	N/A	17	SOC4
34	Food Science Technicians	N/A	15	O*NET
35	Power Distributors and Dispatchers	$39,671	15	O*NET
36	Mechanical Engineering Technologists	N/A	11	SOC4
37	Medical Equipment Repairers	$41,592	10	O*NET
38	Geophysical Data Technicians	N/A	9	O*NET
39	Medical Appliance Technicians	$34,012	8	O*NET
40	Camera and Photographic Equipment Repairers	$39,384	7	O*NET
41	Electromechanical Engineering Technologists	N/A	6	SOC4
42	Fuel Cell Technicians	N/A	5	SOC4
43	Museum Technicians and Conservators	$19,779	5	O*NET
44	Manufacturing Engineering Technologists	N/A	4	SOC4
45	Radio Mechanics	N/A	4	O*NET
46	Mapping Technicians	$37,697	3	SOC4

Rank	Occupation	Median Wage	Candidates	*Related By
47	Electrical and Electronic Engineering Technicians	$57,589	2	SOC4
48	Photonics Technicians	N/A	2	SOC4
49	Elevator Installers and Repairers	Confidential	2	O*NET
50	Electrical and Electronics Drafters	$64,801	1	SOC4
51	Nanotechnology Engineering Technicians	N/A	1	SOC4

BRIGHT OUTLOOK NATIONALLY | GREEN OCCUPATIONS

Candidate Source: Individuals with active résumés in the workforce system.
Wage Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.
*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.
SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Jobs and Candidates Available

This section shows the number of job openings advertised online, as well as potential candidates in the workforce system in Louisiana for Electrical Engineering Technicians and for the related occupational group of Architecture and Engineering Occupations on November 22, 2020 (Jobs De-duplication Level 2).

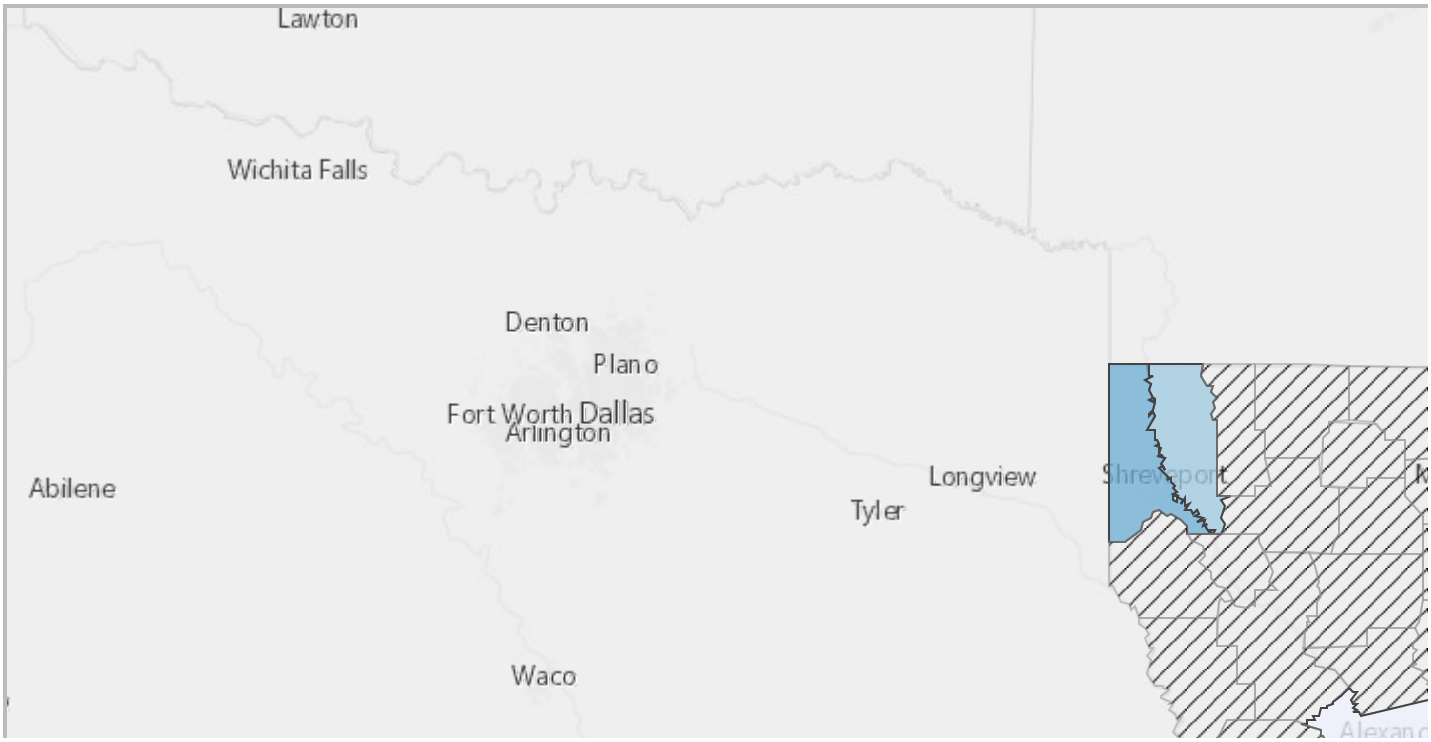
Occupation	Job Openings	Candidates	Candidates per Job
Electrical Engineering Technicians	18	96	5.33
Architecture and Engineering Occupations	734	3,456	4.71

Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.

Jobs and Candidates Area Distribution

This section shows the distribution of number of job openings advertised online, as well as potential candidates in the workforce system for Electrical Engineering Technicians in Louisiana by parishes on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Area Name	Median Wage	Job Openings	Candidates	Candidates per Job
1	Orleans Parish	$57,589 state level wages	1	62	62.00
2	St. Charles Parish	$57,589 state level wages	1	52	52.00
3	Caddo Parish	$57,589 state level wages	1	43	43.00
4	Calcasieu Parish	$57,589 state level wages	1	43	43.00
5	Bossier Parish	$57,589 state level wages	2	43	21.50
6	East Baton Rouge Parish	$57,589 state level wages	2	42	21.00
7	Terrebonne Parish	$57,589 state level wages	2	42	21.00
8	Jefferson Parish	$57,589 state level wages	3	61	20.33
9	Rapides Parish	$57,589 state level wages	5	40	8.00
10	Acadia Parish	$57,589 state level wages	0	41	N/A



Candidates per Job

8.01 - 20.33	20.34 - 21.00	21.01 - 21.50	21.51 - 43.00	43.01 - 52.00	52.00 - 62.00	N/A

Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.
Wage Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2019 survey.

National Supply and Demand Summary

Electrical Engineering Technicians Employment of electrical and electronics engineering technicians is projected to grow 2 percent from 2016 to 2026, slower than the average for all occupations.

Many of these technicians work in traditional manufacturing industries, and employment of these technicians is projected to decline or grow slowly in many of them. Employment of these technicians in the federal government is projected to decline as well. However, employment of electrical and electronics engineering technicians will likely grow in engineering services firms as companies seek to contract out these services as a way to lower costs.

Electrical and electronics engineering technicians also work closely with electrical and electronics engineers and computer hardware engineers in the computer systems design services industry. Demand for these technicians is expected to be sustained by the continuing integration of computer

and electronics systems, especially automation systems. In addition, computer, cellular phone, and Global Positioning System (GPS) technologies are being included in automobiles and various portable and household electronics systems.

Job Prospects

Prospective electrical and electronics engineering technicians may face competition for jobs. Candidates with a certification will likely have the best job opportunities.

Source: U.S. Department of Labor Bureau of Labor Statistics

Employers by Number of Job Openings

This section shows the employers with the highest number of job openings advertised online for Electrical Engineering Technicians in Louisiana on November 22, 2020 (Jobs De-duplication Level 2).

Rank	Employer Name	Job Openings
1	EDG Inc.	4
2	ManpowerGroup	2
3	Sabre Industries, Inc.	2
4	Terrebonne Parish Consolidated Government	2
5	Canon Medical Systems USA, Inc.	1
6	Disaster and Emergency Management Services, LLC (DEMSI, LLC)	1
7	Tetra Tech Inc	1
8	United Site Services Inc	1

Source: Online advertised jobs data

Advertised Job Skills

This section shows the top advertised detailed job skills found in job openings advertised online for Electrical Engineering Technicians in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Job Skill	Advertised Skill Group	Job Opening Match Count
1	Procurement of equipment	Purchasing Manager Skills	4
2	Connect wires to circuit breakers	Electrician Skills	3
3	Attention to detail	Basic Skills	3

Rank	Advertised Detailed Job Skill	Advertised Skill Group	Job Opening Match Count
4	Stand for long periods	Basic Skills	2
5	Stand for long periods of time	Cashier Skills	2
6	Management consulting	Data Analyst Skills	2
7	Maintain equipment	Maintenance Technician Skills	2
8	Risk management	Risk Analyst Skills	2
9	Safety analysis	Safety Manager Skills	2
10	Documentation of test results	Software Tester Skills	2

Source: Online advertised jobs data

Advertised Tools and Technology

This section shows the top advertised detailed tools and technologies found in job openings advertised online for Electrical Engineering Technicians in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Tool or Technology	Advertised Tool and Technology Group	Job Opening Match Count
1	Ladders	Ladders	3
2	Transformers	Instrument Transformers	3
3	Voltmeters	Voltage or Current Meters	3
4	Oscilloscopes	Oscilloscopes	3
5	Circuit breakers	Circuit Breakers	3
6	Tableau	Business Intelligence and Data Analysis Software	2
7	Microsoft Excel	Spreadsheet Software	2
8	Microsoft Access	Database User Interface and Query Software	2
9	Structured query language (SQL)	Database User Interface and Query Software	2
10	Linux software	Operating System Software	2

Source: Online advertised jobs data

Typical Job Skills

This section shows the job skills that are related to Electrical Engineering Technicians.

Rank	Typical Job Skills	Typical Skill Category
1	Assemble equipment or components	Work Output
2	Maintain electronic equipment	Work Output
3	Calibrate scientific or technical equipment	Work Output
4	Inspect finished products to locate flaws	Information Input
5	Prepare contracts, disclosures, or applications	Work Output
6	Resolve operational performance problems	Interacting With Others
7	Confer with other personnel to resolve design or operational problems	Interacting With Others
8	Test performance of electrical, electronic, mechanical, or integrated systems or equipment	Information Input
9	Fabricate devices or components	Work Output
10	Interpret design or operational test results	Mental Processes
11	Provide technical guidance to other personnel	Interacting With Others
12	Install instrumentation or electronic equipment or systems	Work Output
13	Evaluate designs or specifications to ensure quality	Mental Processes
14	Prepare procedural documents	Work Output
15	Document technical design details	Work Output
16	Design electrical equipment or systems	Mental Processes
17	Determine operational methods	Mental Processes
18	Devise research or testing protocols	Mental Processes
19	Test products for functionality or quality	Information Input
20	Evaluate the characteristics of green technologies	Mental Processes
21	Estimate operational costs	Information Input
22	Estimate time requirements for development or production projects	Mental Processes
23	Test green technologies or processes	Information Input
24	Supervise production or support personnel	Interacting With Others

Rank	Typical Job Skills	Typical Skill Category
25	Supervise engineering or other technical personnel	Interacting With Others

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Personal Skills

This section shows the personal skills that are most useful for Electrical Engineering Technicians. Click on a link in the Personal Skills column to view more detailed information.

Personal Skill	Skill Description	Rank by Importance (Out of 100)
Critical Thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	69
Reading Comprehension	Understanding written sentences and paragraphs in work related documents.	63
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	60
Complex Problem Solving	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.	60
Monitoring	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.	56
Active Learning	Understanding the implications of new information for both current and future problem-solving and decision-making.	53
Speaking	Talking to others to convey information effectively.	53
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.	53
Systems Analysis	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.	53

Personal Skill	Skill Description	Rank by Importance (Out of 100)
Judgment and Decision Making	Considering the relative costs and benefits of potential actions to choose the most appropriate one.	53
Quality Control Analysis	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.	53
Repairing	Repairing machines or systems using the needed tools.	53
Troubleshooting	Determining causes of operating errors and deciding what to do about it.	53
Equipment Maintenance	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.	53
Time Management	Managing one's own time and the time of others.	50
Systems Evaluation	Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.	50
Writing	Communicating effectively in writing as appropriate for the needs of the audience.	50
Coordination	Adjusting actions in relation to others' actions.	50
Social Perceptiveness	Being aware of others' reactions and understanding why they react as they do.	47
Mathematics	Using mathematics to solve problems.	47
Instructing	Teaching others how to do something.	47
Service Orientation	Actively looking for ways to help people.	44
Equipment Selection	Determining the kind of tools and equipment needed to do a job.	44
Operation and Control	Controlling operations of equipment or systems.	44
Learning Strategies	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.	44

Personal Skill	Skill Description	Rank by Importance (Out of 100)
Management of Personnel Resources	Motivating, developing, and directing people as they work, identifying the best people for the job.	41
Technology Design	Generating or adapting equipment and technology to serve user needs.	41
Negotiation	Bringing others together and trying to reconcile differences.	41
Persuasion	Persuading others to change their minds or behavior.	38
Operations Analysis	Analyzing needs and product requirements to create a design.	31
Science	Using scientific rules and methods to solve problems.	31
Installation	Installing equipment, machines, wiring, or programs to meet specifications.	28
Programming	Writing computer programs for various purposes.	22
Management of Material Resources	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.	22
Management of Financial Resources	Determining how money will be spent to get the work done, and accounting for these expenditures.	22

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Education Requirements

Electrical Engineering Technicians Electrical Engineering Technicians usually require at least an Associate's degree. However, not all employers may make this a hiring requirement.

Source: This information is based on the BLS Occupational Outlook Handbook (OOH).

Required Level of Education

This section shows the results of a national survey listing the most common required level of education for Electrical Engineering Technicians.

Rank	Required Level of Education	Percentage of Respondents
1	Post-Secondary Certificate - awarded for training completed after high school (for example, in agriculture or natural resources, computer services, personal or culinary services, engineering technologies, healthcare, construction trades, mechanic and repair technologies, or precision production)	31.68%
2	Associate's Degree (or other 2-year degree)	25.29%
3	Some College Courses	17.18%
4	High School Diploma - or the equivalent (for example, GED)	11.01%
5	Bachelor's Degree	10.67%
6	Master's Degree	4.16%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

On The Job Training

This section shows the results of a national survey listing the most common lengths of on the job training for Electrical Engineering Technicians.

Rank	On The Job Training	Percentage of Respondents
1	Over 1 year, up to and including 2 years	30.76%
2	Over 1 month, up to and including 3 months	17.76%
3	Over 3 months, up to and including 6 months	16.19%
4	Over 6 months, up to and including 1 year	15.19%
5	Over 2 years, up to and including 4 years	9.53%
6	Anything beyond short demonstration, up to and including 1 month	9.25%
7	Over 4 years, up to and including 10 years	1.33%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

On-Site or In-Plant Training

This section shows the results of a national survey listing the most common lengths of on-site or in-plant training for Electrical Engineering Technicians.

Rank	On-Site or In-Plant Training	Percentage of Respondents
1	Up to and including 1 month	19.47%
2	Over 1 month, up to and including 3 months	19.02%
3	Over 1 year, up to and including 2 years	18.36%
4	Over 3 months, up to and including 6 months	16.53%
5	Over 6 months, up to and including 1 year	13.01%
6	Over 2 years, up to and including 4 years	7.37%
7	Over 4 years, up to and including 10 years	4.96%
8	None	1.27%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Education Level of Jobs and Candidates

This section shows the minimum level of education requested by employers on job openings advertised online, as well as the educational attainment of potential candidates in the workforce system that are looking for jobs as Electrical Engineering Technicians in Louisiana on November 22, 2020. There were 12 job openings advertised online that did not specify a minimum education requirement (Jobs De-duplication Level 2).

Rank	Education Level	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
1	High School Diploma or Equivalent	0	N/A	17	17.71%
2	1 Year of College or a Technical or Vocational School	0	N/A	7	7.29%
3	2 Years of College or a Technical or Vocational School	0	N/A	8	8.33%
4	3 Years of College or a Technical or Vocational School	0	N/A	5	5.21%
5	Vocational School Certificate	0	N/A	10	10.42%
6	Associate's Degree	1	5.56%	21	21.88%
7	Bachelor's Degree	5	27.78%	27	28.13%
8	Master's Degree	0	N/A	1	1.04%
9	Not Specified	12	66.67%	0	N/A

Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.

Education Training Programs

This section shows the Education Training Programs for Electrical Engineering Technicians in Louisiana.

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
Central Louisiana Technical Community College	Computer Technology A community college certificate of completion	Alexandria, LA	$8,038	4 Semesters	✓
Central Louisiana Technical Community College	Computer Technology A community college certificate of completion	Ferriday, LA	$8,038	4 Semesters	✓
ITI Technical College	Automation & Electronic Systems Technology An associate degree	Baton Rouge, LA	$29,500	24 Months	✓
ITI Technical College	Industrial Instrumentation An industry-recognized certificate or certification, Employment	Baton Rouge, LA	$17,500	15 Months	
Louisiana Tech University - Ruston	Electrical Engineering Technology	Ruston, LA	$33,852	1500 Hours	

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
Northwestern State University of LA Natchitoches (MC)	Electronics Engineering Technology A baccalaureate degree	NATCHITOCHES, LA	$34,512	8 Semesters	✓
Remington College - Lafayette	Electronic Technology	Lafayette, LA	$20,995	12 Months	
Remington College - Shreveport	Electronic Technology	Shreveport, LA	$20,995	12 Months	
Remington College - Shreveport	Electronic Technology	Shreveport, LA	$20,995	12 Months	
South Louisiana Community College	Electrician-Credit An associate degree	Lafayette, LA	$7,191	32 Weeks	✓

Source: U.S. Department of Commerce, Bureau of the Census, Midyear Estimates

Advertised Job Certifications

This section shows the top advertised certification groups found in job openings advertised online for Electrical Engineering Technicians in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Certification Group	Advertised Certification Sub-Category	Job Opening Match Count
1	Certification of Disability Management Specialists (CDMS) Commission	Community and Social Services Management	4
2	CompTIA Certifications	Information Technology - All Other	2
3	American Heart Association (AHA) CPR & First Aid Certifications	Nursing	1

Source: Online advertised jobs data

Training Program Completers

There is no data available for Electrical Engineering Technicians in Louisiana.

National Education, Training, Licensing and Qualifications

Electrical Engineering Technicians Education

Programs for electrical and electronics engineering technicians usually lead to an associate's degree in electrical or electronics engineering technology. Vocational–technical schools include postsecondary institutions that serve local students and emphasize training needed by local employers.

Community colleges offer programs similar to those in technical institutes but include more theory-based and liberal arts coursework. Some of these colleges allow students to concentrate in computer electronics, industrial electronics, or communications electronics.

Prospective electrical and electronics engineering technicians usually take courses in programming languages, chemistry, physics, logical processors, and circuitry. Coursework in test equipment is also helpful. The Technology Accreditation Commission of ABET accredits programs that include at least college algebra, trigonometry, and basic science courses.

Important Qualities

Logical-thinking skills. Electrical and electronics engineering technicians must isolate and then identify problems for the engineering staff to work on. They need good reasoning skills to identify and fix problems. Technicians must also follow a logical sequence or specific set of rules to carry out electrical engineers' designs, inspect designs for quality control, and put together prototypes.

Math skills. Electrical and electronics engineering technicians use math for analysis, design, and troubleshooting in their work.

Mechanical skills. Electronics engineering technicians in particular must use hand tools and soldering irons on small circuitry and electronic parts to create detailed electronic components by hand.

Observational skills. Electrical engineering technicians sometimes visit construction sites to make sure that electrical engineers' designs are being carried out correctly. They are responsible for evaluating projects onsite and reporting problems to engineers.

Writing skills. These technicians must write reports about onsite construction, the results of testing, or problems they find when carrying out designs. Their writing must be clear and well organized so that the engineers they work with can understand the reports.

Licenses, Certifications, and Registrations

Technicians may choose to earn certification to show an advanced level of knowledge. Several organizations offer certification.

The National Institute for Certification in Engineering Technologies (NICET) offers certification in electrical power testing. This certification would benefit those technicians working in the electric power generation, transmission, and distribution industry.

ETA International also offers certifications in several fields, including basic electronics, biomedical electronics, and renewable energy.

The International Society of Automation offers certification as a Control Systems Technician. To gain such certification, technicians must demonstrate skills in pneumatic, mechanical, and electronic instrumentation. In addition, they must demonstrate an understanding of process control loops and process control systems.

Source: U.S. Department of Labor Bureau of Labor Statistics

Typical Work Experience Requirements

Electrical Engineering Technicians Employees in these occupations usually need one or two years of training involving both on-the-job experience and informal training with experienced workers. A recognized apprenticeship program may be associated with these occupations.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Related Work Experience

This section shows the results of a national survey listing the most common related work experience for Electrical Engineering Technicians.

Rank	Related Work Experience	Percentage of Respondents
1	Over 8 years, up to and including 10 years	23.39%
2	Over 4 years, up to and including 6 years	20.71%
3	Over 2 years, up to and including 4 years	15.35%
4	Over 1 year, up to and including 2 years	14.66%
5	Over 6 months, up to and including 1 year	7.97%
6	Over 3 months, up to and including 6 months	7.54%
7	Over 10 years	7.40%
8	None	1.68%

Rank	Related Work Experience	Percentage of Respondents
9	Over 1 month, up to and including 3 months	1.30%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Work Experience of Jobs and Candidates

This section shows the minimum required work experience requested by employers on job openings advertised online, as well as the experience level of potential candidates in the workforce system that are looking for jobs as Electrical Engineering Technicians in Louisiana on November 22, 2020. There were 12 job openings advertised online that did not specify a minimum experience requirement (Jobs De-duplication Level 2).

Rank	Experience	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
1	Not Specified	12	66.67%	0	N/A
2	Less than 1 year	0	N/A	1	1.04%
3	1 Year to 2 Years	4	22.22%	4	4.17%
4	2 Years to 5 Years	1	5.56%	5	5.21%
5	5 Years to 10 Years	1	5.56%	13	13.54%
6	More than 10 Years	0	N/A	73	76.04%

Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.

Current Job Order Wage Information

The employer has NOT indicated a salary range for this job. The information below shows statistics on typical salaries in the local labor market for Electrical Engineering Technicians. This data is NOT an indication of what this employer is willing to pay for this job.

Employment Wage Statistics

This section shows the estimated employment wage statistics for individuals in Louisiana employed for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in 2019.

Rate Type / Statistical Type	Entry level	Median	Experienced

Rate Type / Statistical Type	Entry level	Median	Experienced
Annual wage or salary	$33,177	$57,589	$92,264
Hourly wage	$15.95	$27.69	$44.36

Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.

Wage Rates on Advertised Jobs

This section shows a statistical breakdown of available wage data on the 18 job openings advertised online for Electrical Engineering Technicians in Louisiana that posted a salary on November 22, 2020.

Rate Type / Statistical Type	Entry Level	Median	Experienced
Annual wage or salary	N/A	N/A	N/A
Hourly Wage	N/A	N/A	N/A

Source: Online advertised jobs data
Note: This information is based on actual job orders and is not based on a statistically valid labor market survey. Hourly wage rate calculations in this section assume a 40 hour work week.

Desired Salary of Available Candidates

This section shows the desired salary of potential candidates in the workforce system that are looking for jobs as Electrical Engineering Technicians in Louisiana on November 22, 2020.

Rank	Desired Salary	Potential Candidates	Percentage of Potential Candidates
1	Not Specified	17	17.71%
2	$5,000 - $19,999	1	1.04%
3	$20,000 - $34,999	17	17.71%
4	$35,000 - $49,999	19	19.79%
5	$50,000 - $64,999	21	21.88%
6	$65,000 - $79,999	9	9.38%
7	$80,000 - $94,999	5	5.21%
8	$95,000 or more	7	7.29%

Source: Individuals with active résumés in the workforce system.

Wage Rates Area Distribution

There is no data available for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana.

Wage Rates in Related Occupations

This section shows a comparison of 2019 median annual rates for occupations that are in the same occupational family as Electrical Engineering Technicians for Louisiana.

Rank	Occupation	Median	*Related By
1	Industrial Engineering Technicians	$83,502	O*NET
2	Mechanical Engineering Technicians	$75,598	O*NET
3	Automotive Engineering Technicians	$75,598	SOC4
4	Electro-Mechanical Technicians	$65,257	O*NET
5	Robotics Technicians	$65,257	O*NET
6	Electrical and Electronics Drafters	$64,801	SOC4
7	Electronic Drafters	$64,801	SOC4
8	Electrical Drafters	$64,801	SOC4
9	Electrical and Electronics Repairers, Commercial and Industrial Equipment	$62,553	O*NET
10	Avionics Technicians	$62,195	O*NET
11	Mechanical Drafters	$58,355	O*NET
12	Electrical and Electronic Engineering Technicians	$57,589	SOC4
13	Electronics Engineering Technicians	$57,589	O*NET
14	Electrical Engineering Technicians	$57,589	N/A
15	Civil Engineering Technicians	$53,863	O*NET
16	Drafters, All Other	$53,560	SOC4
17	Architectural and Civil Drafters	$50,965	SOC4
18	Architectural Drafters	$50,965	SOC4
19	Civil Drafters	$50,965	O*NET
20	Environmental Engineering Technicians	$44,182	O*NET
21	Medical Equipment Repairers	$41,592	O*NET
22	Dental Laboratory Technicians	$41,456	O*NET

Rank	Occupation	Median	*Related By
23	Power Distributors and Dispatchers	$39,671	O*NET
24	Camera and Photographic Equipment Repairers	$39,384	O*NET
25	Surveying and Mapping Technicians	$37,697	SOC4
26	Surveying Technicians	$37,697	SOC4
27	Mapping Technicians	$37,697	SOC4
28	Computer, Automated Teller, and Office Machine Repairers	$37,185	O*NET
29	Audio and Video Equipment Technicians	$36,399	O*NET
30	Medical Appliance Technicians	$34,012	O*NET
31	Museum Technicians and Conservators	$19,779	O*NET
*	Elevator Installers and Repairers	Confidential	O*NET
*	Broadcast Technicians	Confidential	O*NET

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* Rank is suppressed for confidential data.

Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.
*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.
SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Wage Rates by Industry

There is no data available for Electrical Engineering Technicians in Louisiana.

National Earnings Data Summary

Electrical Engineering Technicians The median annual wage for electrical and electronics engineering technicians was $62,190 in May 2016. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned less than $36,850, and the highest 10 percent earned more than $91,640.

In May 2016, the median annual wages for electrical and electronics engineering technicians in the top industries in which they worked were as follows:

Federal government $66,210
Engineering services 61,010
Merchant wholesalers, durable goods 58,970
Semiconductor and other electronic component manufacturing 57,630
Navigational, measuring, electromedical, and control instruments manufacturing 56,820

Electrical and electronics engineering technicians may work in day or night shifts, depending on production schedules. In the federal government, their schedules tend to follow a standard workweek.

Source: U.S. Department of Labor Bureau of Labor Statistics

Occupational Employment & Future Employment Outlook

This section shows the long term employment projections for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana from 2016-2026.

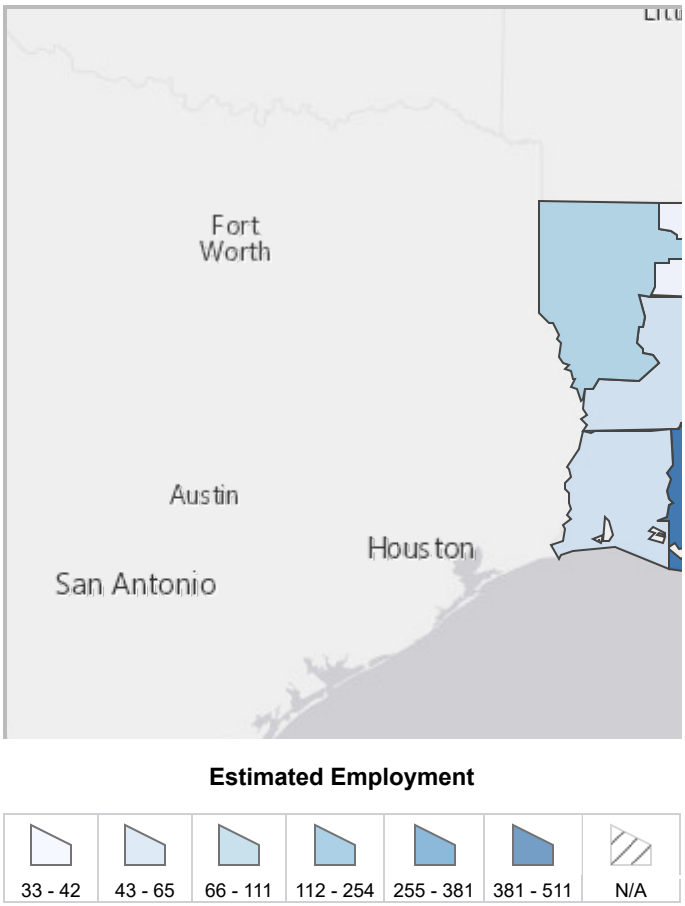
Occupation	2016 Estimated Employment	2026 Projected Employment	Total 2016-2026 Employment Change	2016-2026 Annual Avg. Percent Change
Electrical and Electronic Engineering Technicians	1,471	1,601	130	0.85%
Total All	2,034,986	2,203,144	168,158	0.80%

Source: Occupational Employment Projections

Employment Data Area Distribution

This section shows the distribution of the estimated employment for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana by regional labor market area.

Rank	Area	2016 Estimated Employment
1	4th Regional Labor Market Area, Lafayette	511
2	1st Regional Labor Market Area, New Orleans	381
3	2nd Regional Labor Market Area, Baton Rouge	254
4	7th Regional Labor Market Area, Shreveport	111
5	5th Regional Labor Market Area, Lake Charles	65
6	6th Regional Labor Market Area, Alexandria	60
7	3rd Regional Labor Market Area, Houma	42
8	8th Regional Labor Market Area, Monroe	32



Source: Labor Market Statistics, Occupational Employment Projections Program

Employment Data in Related Occupations

This section shows the 2016 Estimated Employment in Louisiana for occupations related to Electrical Engineering Technicians.

Rank	Occupation	2016 Estimated Employment	*Related By
1	Computer User Support Specialists	3,524	O*NET
2	Medical and Clinical Laboratory Technologists	2,759	O*NET
3	Electrical Engineering Technologists	1,566	SOC4
4	Electromechanical Engineering Technologists	1,566	SOC4
5	Electronics Engineering Technologists	1,566	O*NET
6	Engineering Technicians, Except Drafters, All Other	1,566	SOC4

Rank	Occupation	2016 Estimated Employment	*Related By
7	Fuel Cell Technicians	1,566	SOC4
8	Industrial Engineering Technologists	1,566	SOC4
9	Manufacturing Engineering Technologists	1,566	SOC4
10	Manufacturing Production Technicians	1,566	O*NET
11	Mechanical Engineering Technologists	1,566	SOC4
12	Nanotechnology Engineering Technicians	1,566	SOC4
13	Nanotechnology Engineering Technologists	1,566	SOC4
14	Non-Destructive Testing Specialists	1,566	SOC4
15	Photonics Technicians	1,566	SOC4
16	Civil Engineering Technicians	1,551	O*NET
17	Electrical and Electronic Engineering Technicians	1,471	SOC4
18	Electrical Engineering Technicians	1,471	SOC4
19	Electronics Engineering Technicians	1,471	O*NET
20	Mapping Technicians	1,272	SOC4
21	Surveying and Mapping Technicians	1,272	SOC4
22	Surveying Technicians	1,272	SOC4
23	Drafters, All Other	1,154	SOC4
24	Architectural and Civil Drafters	1,134	SOC4
25	Architectural Drafters	1,134	SOC4
26	Civil Drafters	1,134	O*NET
27	Computer, Automated Teller, and Office Machine Repairers	1,062	O*NET
28	Mechanical Drafters	978	O*NET
29	Electrical and Electronics Repairers, Commercial and Industrial Equipment	913	O*NET
30	Audio and Video Equipment Technicians	729	O*NET
31	Geophysical Data Technicians	707	O*NET
32	Dental Laboratory Technicians	598	O*NET
33	Automotive Engineering Technicians	444	SOC4
34	Mechanical Engineering Technicians	444	O*NET

Rank	Occupation	2016 Estimated Employment	*Related By
35	Industrial Engineering Technicians	404	O*NET
36	Environmental Engineering Technicians	374	O*NET
37	Medical Equipment Repairers	292	O*NET
38	Electronic Home Entertainment Equipment Installers and Repairers	267	O*NET
39	Electrical and Electronics Drafters	229	SOC4
40	Electrical Drafters	229	SOC4
41	Electronic Drafters	229	SOC4
42	Broadcast Technicians	200	O*NET
43	Food Science Technicians	187	O*NET
44	Avionics Technicians	183	O*NET
45	Radio Mechanics	148	O*NET
46	Museum Technicians and Conservators	89	O*NET
47	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	63	O*NET
48	Medical Appliance Technicians	45	O*NET
*	Aerospace Engineering and Operations Technicians	Confidential	O*NET
*	Camera and Photographic Equipment Repairers	Confidential	O*NET
*	Electro-Mechanical Technicians	Confidential	O*NET
*	Elevator Installers and Repairers	Confidential	O*NET
*	Power Distributors and Dispatchers	Confidential	O*NET
*	Robotics Technicians	Confidential	O*NET

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* Rank is suppressed for confidential data.

Source: Occupational Employment Projections
*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.
SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Projected Annual Openings

This section shows the long term projected annual openings for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana from 2016 to 2026.

Occupation	Total Annual Average Openings	Annual Average Openings Due to Growth	Annual Average Openings Due to Replacement
Electrical and Electronic Engineering Technicians	N/A	N/A	N/A
Architecture and Engineering	N/A	N/A	N/A

Source: Labor Market Statistics, Occupational Employment Projections Program

Projected Annual Openings Area Distribution

This section shows the distribution of the total annual average openings for Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana by regional labor market area from 2016 to 2026.

Rank	Area	Total Annual Average Openings
1	1st Regional Labor Market Area, New Orleans	N/A
2	2nd Regional Labor Market Area, Baton Rouge	N/A
3	3rd Regional Labor Market Area, Houma	N/A
4	4th Regional Labor Market Area, Lafayette	N/A
5	5th Regional Labor Market Area, Lake Charles	N/A
6	6th Regional Labor Market Area, Alexandria	N/A
7	7th Regional Labor Market Area, Shreveport	N/A
8	8th Regional Labor Market Area, Monroe	N/A

There is no total annual average openings data available for Electrical Engineering Technicians in Louisiana.

Source: Labor Market Statistics, Occupational Employment Projections Program

Projected Annual Openings in Related Occupations

This section shows the projected total annual average openings in Louisiana for occupations related to Electrical Engineering Technicians from 2016 to 2026.

Rank	Occupation	Total Annual Average Openings	*Related By
1	Architectural and Civil Drafters	N/A	SOC4
2	Architectural Drafters	N/A	SOC4
3	Audio and Video Equipment Technicians	N/A	O*NET
4	Automotive Engineering Technicians	N/A	SOC4
5	Avionics Technicians	N/A	O*NET
6	Broadcast Technicians	N/A	O*NET
7	Civil Drafters	N/A	O*NET
8	Civil Engineering Technicians	N/A	O*NET
9	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	N/A	O*NET
10	Computer User Support Specialists	N/A	O*NET
11	Computer, Automated Teller, and Office Machine Repairers	N/A	O*NET
12	Dental Laboratory Technicians	N/A	O*NET
13	Drafters, All Other	N/A	SOC4
14	Electrical and Electronic Engineering Technicians	N/A	SOC4
15	Electrical and Electronics Drafters	N/A	SOC4
16	Electrical and Electronics Repairers, Commercial and Industrial Equipment	N/A	O*NET
17	Electrical Drafters	N/A	SOC4
18	Electrical Engineering Technicians	N/A	SOC4
19	Electrical Engineering Technologists	N/A	SOC4
20	Electromechanical Engineering Technologists	N/A	SOC4
21	Electronic Drafters	N/A	SOC4
22	Electronic Home Entertainment Equipment Installers and Repairers	N/A	O*NET
23	Electronics Engineering Technicians	N/A	O*NET
24	Electronics Engineering Technologists	N/A	O*NET

Rank	Occupation	Total Annual Average Openings	*Related By
25	Engineering Technicians, Except Drafters, All Other	N/A	SOC4
26	Environmental Engineering Technicians	N/A	O*NET
27	Food Science Technicians	N/A	O*NET
28	Fuel Cell Technicians	N/A	SOC4
29	Geophysical Data Technicians	N/A	O*NET
30	Industrial Engineering Technicians	N/A	O*NET
31	Industrial Engineering Technologists	N/A	SOC4
32	Manufacturing Engineering Technologists	N/A	SOC4
33	Manufacturing Production Technicians	N/A	O*NET
34	Mapping Technicians	N/A	SOC4
35	Mechanical Drafters	N/A	O*NET
36	Mechanical Engineering Technicians	N/A	O*NET
37	Mechanical Engineering Technologists	N/A	SOC4
38	Medical and Clinical Laboratory Technologists	N/A	O*NET
39	Medical Appliance Technicians	N/A	O*NET
40	Medical Equipment Repairers	N/A	O*NET
41	Museum Technicians and Conservators	N/A	O*NET
42	Nanotechnology Engineering Technicians	N/A	SOC4
43	Nanotechnology Engineering Technologists	N/A	SOC4
44	Non-Destructive Testing Specialists	N/A	SOC4
45	Photonics Technicians	N/A	SOC4
46	Radio Mechanics	N/A	O*NET
47	Surveying and Mapping Technicians	N/A	SOC4
48	Surveying Technicians	N/A	SOC4
*	Aerospace Engineering and Operations Technicians	Confidential	O*NET
*	Camera and Photographic Equipment Repairers	Confidential	O*NET
*	Electro-Mechanical Technicians	Confidential	O*NET
*	Elevator Installers and Repairers	Confidential	O*NET
*	Power Distributors and Dispatchers	Confidential	O*NET
*	Robotics Technicians	Confidential	O*NET

* Rank is suppressed for confidential data.

Source: Occupational Employment Projections

Industries by Employment

This section shows the industries that employed the highest number of Electrical and Electronic Engineering Technicians (no data available for Electrical Engineering Technicians) in Louisiana in 2016.

Rank	Industry Title	Estimated Employment	Percent of Total Employment
1	Professional, Scientific, and Technical Services	231	15.70%
2	Chemical Manufacturing	130	8.84%
3	Management of Companies and Enterprises	70	4.76%
4	Educational Services	67	4.55%
5	Utilities	65	4.42%
6	Machinery Manufacturing	35	2.38%
7	Repair and Maintenance	25	1.70%
*	Self-Employed and Unpaid Family Workers, Primary Job	Confidential	Confidential
*	Crop Production	Confidential	Confidential
*	Support Activities for Mining	Confidential	Confidential

* Rank is suppressed for confidential data.

Source: Louisiana Workforce Commission, Occupational Projections Program

Work Activities

This section shows the most common work activities required by Electrical Engineering Technicians in order of importance. Click on a link in the Work Activity column to view more detailed information.

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Interacting With Computers	Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.	84

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Getting Information	Observing, receiving, and otherwise obtaining information from all relevant sources.	83
Making Decisions and Solving Problems	Analyzing information and evaluating results to choose the best solution and solve problems.	81
Communicating with Supervisors, Peers, or Subordinates	Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.	80
Evaluating Information to Determine Compliance with Standards	Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.	77
Processing Information	Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.	77
Documenting/Recording Information	Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.	76
Updating and Using Relevant Knowledge	Keeping up-to-date technically and applying new knowledge to your job.	76
Identifying Objects, Actions, and Events	Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.	74
Monitor Processes, Materials, or Surroundings	Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.	72
Inspecting Equipment, Structures, or Material	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.	70
Analyzing Data or Information	Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.	70
Organizing, Planning, and Prioritizing Work	Developing specific goals and plans to prioritize, organize, and accomplish your work.	68

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Establishing and Maintaining Interpersonal Relationships	Developing constructive and cooperative working relationships with others, and maintaining them over time.	68
Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment	Providing documentation, detailed instructions, drawings, or specifications to tell others about how devices, parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.	67
Controlling Machines and Processes	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).	67
Interpreting the Meaning of Information for Others	Translating or explaining what information means and how it can be used.	66
Scheduling Work and Activities	Scheduling events, programs, and activities, as well as the work of others.	66
Thinking Creatively	Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.	65
Repairing and Maintaining Electronic Equipment	Servicing, repairing, calibrating, regulating, fine-tuning, or testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.	64
Communicating with Persons Outside Organization	Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.	60

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Estimating the Quantifiable Characteristics of Products, Events, or Information	Estimating sizes, distances, and quantities; or determining time, costs, resources, or materials needed to perform a work activity.	57
Performing General Physical Activities	Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.	56
Training and Teaching Others	Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others.	56
Handling and Moving Objects	Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.	54
Assisting and Caring for Others	Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.	54
Coordinating the Work and Activities of Others	Getting members of a group to work together to accomplish tasks.	52
Judging the Qualities of Things, Services, or People	Assessing the value, importance, or quality of things or people.	52
Performing Administrative Activities	Performing day-to-day administrative tasks such as maintaining information files and processing paperwork.	48
Developing and Building Teams	Encouraging and building mutual trust, respect, and cooperation among team members.	48
Coaching and Developing Others	Identifying the developmental needs of others and coaching, mentoring, or otherwise helping others to improve their knowledge or skills.	47

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Developing Objectives and Strategies	Establishing long-range objectives and specifying the strategies and actions to achieve them.	45
Repairing and Maintaining Mechanical Equipment	Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.	44
Guiding, Directing, and Motivating Subordinates	Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.	42
Provide Consultation and Advice to Others	Providing guidance and expert advice to management or other groups on technical, systems-, or process-related topics.	41
Monitoring and Controlling Resources	Monitoring and controlling resources and overseeing the spending of money.	40
Operating Vehicles, Mechanized Devices, or Equipment	Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.	36
Resolving Conflicts and Negotiating with Others	Handling complaints, settling disputes, and resolving grievances and conflicts, or otherwise negotiating with others.	36
Selling or Influencing Others	Convincing others to buy merchandise/goods or to otherwise change their minds or actions.	24
Performing for or Working Directly with the Public	Performing for people or dealing directly with the public. This includes serving customers in restaurants and stores, and receiving clients or guests.	23

Tasks

This section shows the most common tasks required by Electrical Engineering Technicians in order of importance. Click on a link in the Task column to view more detailed information.

Tasks	Task Description	Rank by Importance (Out of 100)
Build, calibrate, maintain, troubleshoot, or repair electrical instruments or testing equipment.	Core	74
Assemble electrical systems or prototypes, using hand tools or measuring instruments.	Core	74
Inspect electrical project work for quality control and assurance.	Core	73
Collaborate with electrical engineers or other personnel to identify, define, or solve developmental problems.	Core	73
Identify solutions to on-site technical design problems involving electrical systems equipment.	Core	73
Set up or operate test equipment to evaluate performance of developmental parts, assemblies, or systems under simulated operating conditions.	Core	70
Review existing electrical engineering criteria to identify necessary revisions, deletions, or amendments to outdated material.	Core	68
Modify electrical prototypes, parts, assemblies, or systems to correct functional deviations.	Core	61
Prepare, review, or coordinate ongoing modifications to contract specifications or plans.	Supplemental	73
Build or test electrical components of electric-drive vehicles or prototype vehicles.	Supplemental	71
Interpret test information to resolve design-related problems.	Supplemental	71
Provide technical assistance in resolving electrical engineering problems encountered before, during, or after construction.	Supplemental	70
Install or maintain electrical control systems or solid state equipment.	Supplemental	70
Evaluate engineering proposals, shop drawings, or design comments for sound electrical engineering practice or conformance with established safety or design criteria.	Supplemental	69
Write procedures for the commissioning of electrical installations.	Supplemental	67

Tasks	Task Description	Rank by Importance (Out of 100)
Write engineering specifications to clarify design details or functional criteria of experimental electronics units.	Supplemental	63
Create or modify electrical components to be used in renewable energy generation.	Supplemental	63
Plan method or sequence of operations for developing or testing experimental electronic or electrical equipment.	Supplemental	63
Assemble or test solar photovoltaic products, such as inverters or energy management systems.	Supplemental	63
Assess electrical components for consumer electronics applications, such as fuel cells for consumer electronic devices, power saving devices for computers or televisions, or energy efficient power chargers.	Supplemental	62
Prepare electrical project cost or work-time estimates.	Supplemental	60
Participate in the development or testing of electrical aspects of new green technologies, such as lighting, optical data storage devices, or energy efficient televisions.	Supplemental	57
Plan, schedule, or monitor work of project support personnel.	Supplemental	57
Perform supervisory duties, such as recommending work assignments, approving leaves, or completing performance evaluations.	Supplemental	56

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

National Working Conditions

Electrical Engineering Technicians Electrical engineering technicians build, calibrate, and repair electrical instruments or testing equipment.

Electrical and electronics engineering technicians held about 137,000 jobs in 2016. The largest employers of electrical and electronics engineering technicians were as follows:

Semiconductor and other electronic component manufacturing 14%
Engineering services 12
Federal government 10

Navigational, measuring, electromedical, and control instruments manufacturing 7
Merchant wholesalers, durable goods 5

Electrical and electronics engineering technicians work closely with electrical and electronics engineers. For this reason, teamwork is an important part of the job. They work in offices, laboratories, and factories because their job tasks involve both engineering theory and assembly-line production.

Electrical and electronics engineering technicians may be exposed to hazards from equipment or toxic materials, but incidents are rare if proper procedures are followed.

Work Schedules

Electrical and electronics engineering technicians may work in day or night shifts, depending on production schedules. In the federal government, their schedules tend to follow a standard workweek.

Source: U.S. Department of Labor Bureau of Labor Statistics

Typical Work Conditions

This section shows the most common work conditions required by Electrical Engineering Technicians in order of importance.

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Electronic Mail	How often do you use electronic mail in this job?	96
Face-to-Face Discussions	How often do you have to have face-to-face discussions with individuals or teams in this job?	93
Work With Work Group or Team	How important is it to work with others in a group or team in this job?	87
Importance of Being Exact or Accurate	How important is being very exact or highly accurate in performing this job?	85
Freedom to Make Decisions	How much decision making freedom, without supervision, does the job offer?	82
Contact With Others	How much does this job require the worker to be in contact with others (face-to-face, by telephone, or otherwise) in order to perform it?	80

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Structured versus Unstructured Work	To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?	80
Indoors, Environmentally Controlled	How often does this job require working indoors in environmentally controlled conditions?	80
Telephone	How often do you have telephone conversations in this job?	79
Impact of Decisions on Co-workers or Company Results	What results do your decisions usually have on other people or the image or reputation or financial resources of your employer?	76
Coordinate or Lead Others	How important is it to coordinate or lead others in accomplishing work activities in this job?	69
Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection, Hard Hats, or Life Jackets	How much does this job require wearing common protective or safety equipment such as safety shoes, glasses, gloves, hard hats or life jackets?	68
Time Pressure	How often does this job require the worker to meet strict deadlines?	66
Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or Controls	How much does this job require using your hands to handle, control, or feel objects, tools or controls?	65
Responsible for Others' Health and Safety	How much responsibility is there for the health and safety of others in this job?	61
Physical Proximity	To what extent does this job require the worker to perform job tasks in close physical proximity to other people?	60

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Importance of Repeating Same Tasks	How important is repeating the same physical activities (e.g., key entry) or mental activities (e.g., checking entries in a ledger) over and over, without stopping, to performing this job?	58
Spend Time Sitting	How much does this job require sitting?	58
Frequency of Decision Making	How frequently is the worker required to make decisions that affect other people, the financial resources, and/or the image and reputation of the organization?	56
Responsibility for Outcomes and Results	How responsible is the worker for work outcomes and results of other workers?	54
Exposed to Hazardous Conditions	How often does this job require exposure to hazardous conditions?	53
Exposed to Contaminants	How often does this job require working exposed to contaminants (such as pollutants, gases, dust or odors)?	52
Consequence of Error	How serious would the result usually be if the worker made a mistake that was not readily correctable?	50
Deal With External Customers	How important is it to work with external customers or the public in this job?	49
Sounds, Noise Levels Are Distracting or Uncomfortable	How often does this job require working exposed to sounds and noise levels that are distracting or uncomfortable?	49
Letters and Memos	How often does the job require written letters and memos?	44
Spend Time Making Repetitive Motions	How much does this job require making repetitive motions?	43
Level of Competition	To what extent does this job require the worker to compete or to be aware of competitive pressures?	42

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Spend Time Standing	How much does this job require standing?	41
Deal With Unpleasant or Angry People	How frequently does the worker have to deal with unpleasant, angry, or discourteous individuals as part of the job requirements?	41
Exposed to Minor Burns, Cuts, Bites, or Stings	How often does this job require exposure to minor burns, cuts, bites, or stings?	39
Exposed to Hazardous Equipment	How often does this job require exposure to hazardous equipment?	37
Indoors, Not Environmentally Controlled	How often does this job require working indoors in non-controlled environmental conditions (e.g., warehouse without heat)?	36
Frequency of Conflict Situations	How often are there conflict situations the employee has to face in this job?	35
Very Hot or Cold Temperatures	How often does this job require working in very hot (above 90 F degrees) or very cold (below 32 F degrees) temperatures?	33
Outdoors, Exposed to Weather	How often does this job require working outdoors, exposed to all weather conditions?	33
Cramped Work Space, Awkward Positions	How often does this job require working in cramped work spaces that requires getting into awkward positions?	33
Spend Time Bending or Twisting the Body	How much does this job require bending or twisting your body?	30
Extremely Bright or Inadequate Lighting	How often does this job require working in extremely bright or inadequate lighting conditions?	30
Spend Time Walking and Running	How much does this job require walking and running?	28

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Spend Time Kneeling, Crouching, Stooping, or Crawling	How much does this job require kneeling, crouching, stooping or crawling?	26
In an Enclosed Vehicle or Equipment	How often does this job require working in a closed vehicle or equipment (e.g., car)?	25
Degree of Automation	How automated is the job?	25
Public Speaking	How often do you have to perform public speaking in this job?	25
Pace Determined by Speed of Equipment	How important is it to this job that the pace is determined by the speed of equipment or machinery? (This does not refer to keeping busy at all times on this job.)	23
Outdoors, Under Cover	How often does this job require working outdoors, under cover (e.g., structure with roof but no walls)?	23
Wear Specialized Protective or Safety Equipment such as Breathing Apparatus, Safety Harness, Full Protection Suits, or Radiation Protection	How much does this job require wearing specialized protective or safety equipment such as breathing apparatus, safety harness, full protection suits, or radiation protection?	23

Work Values and Needs

This section shows the information on the current work values for your selected occupation.

Work Value	Work Value Description	Rank By Extent (Out of 100)
Support	Occupations that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.	72

Work Value	Work Value Description	Rank By Extent (Out of 100)
Working Conditions	Occupations that satisfy this work value offer job security and good working conditions. Corresponding needs are Activity, Compensation, Independence, Security, Variety and Working Conditions.	58
Relationships	Occupations that satisfy this work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment. Corresponding needs are Co-workers, Moral Values and Social Service.	56
Recognition	Occupations that satisfy this work value offer advancement, potential for leadership, and are often considered prestigious. Corresponding needs are Advancement, Authority, Recognition and Social Status.	50
Independence	Occupations that satisfy this work value allow employees to work on their own and make decisions. Corresponding needs are Creativity, Responsibility and Autonomy.	50
Achievement	Occupations that satisfy this work value are results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment. Corresponding needs are Ability Utilization and Achievement.	45

Typical Tools

This section shows common tools used by Electrical Engineering Technicians.

Detailed Tool	Tool Group
Adjustable widemouth pliers	Adjustable widemouth pliers
Adjustable wrenches	Adjustable wrenches
Ammeters	Ammeters
Radio frequency RF amplifiers	Amplifiers
Wrist anti-static straps	Antistatic wrist straps

Detailed Tool	Tool Group
Desoldering stations	Automatic soldering machine
Soldering stations	Automatic soldering machine
Dual power supplies	Auxiliary generator
Binocular light compound microscopes	Binocular light compound microscopes
Brushless direct current DC motors	Brushless motor DC
Desktop computers	Desktop computers
Alternating current AC generators	Diesel generators
Digital cameras	Digital cameras
Dynamometers	Dynamometers
Nanosecond universal counters	Electronic counters
Current probes	Electronic measuring probes
Voltage probes	Electronic measuring probes
Harmonic analyzers	Frequency analyzers
Radio frequency RF spectrum analyzers	Frequency analyzers
Spectrum analyzers	Frequency analyzers
Frequency counters	Frequency counters or timer or dividers
Welding goggles	Goggles
Anti-static heel grounders	Heel grounding straps
Impedance meters	Impedance meters
Transformers	Instrument transformers
Logic analyzers	Integrated circuit testers
Laser printers	Laser printers
Lasers	Lasers
Magnetic pickup tools	Magnetic tools
Programmable logic controllers PLC	Microcontrollers
Microcomputers	Microprocessors
Microprocessors	Microprocessors
Computerized numerical control CNC machining centers	Milling machines
Multimeters	Multimeters
Signal measuring equipment	Multimeters
Laptop computers	Notebook computers

Detailed Tool	Tool Group
Notebook computers	Notebook computers
Ohmmeters	Ohmmeters
Oscilloscopes	Oscilloscopes
Personal computers	Personal computers
Phase shifters	Phase shifters
Phase shift indicators	Phasemeters
Digital plotters	Plotter printers
Dataloggers	Portable data input terminals
Direct current DC potentiometers	Potentiometers
Potentiometers	Potentiometers
Power drills	Power drills
Power meters	Power meters
Power screwdrivers	Power screwguns
Q meters	Q Meters
Screwdrivers	Screwdrivers
Function generators	Signal generators
Radio frequency RF signal generators	Signal generators
Signal generators	Signal generators
Soldering equipment	Soldering iron
Stroboscopes	Speed sensors
Welders	Spot welding machine
Wire strippers	Stripping tools
Tachometers	Tachometers
Bench lathes	Tracer or duplicating or contouring lathe
Metal-oxide varistors MOV	Variable resistors or varistors
Digital voltmeters DVM	Voltage or current meters
Voltage testers	Voltage or current meters
Wattmeters	Wattmeters
Welding hoods	Welding masks
Wire cutters	Wire cutters
Wire crimpers	Wire lug crimping tool

Detailed Tool	Tool Group
Wire wrap guns	Wire wrapping tool

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Technology

This section shows common technology used by Electrical Engineering Technicians.

Detailed Technology	Technology Group
Cadence PSpice	Analytical or scientific software
Computer-aided engineering CAE software	Analytical or scientific software
Mentor Graphics ModelSim	Analytical or scientific software
Proportional integral derivative control PID software	Analytical or scientific software
Root cause analysis software	Analytical or scientific software
The MathWorks MATLAB	Analytical or scientific software
Altium Designer	Computer aided design CAD software
Autodesk AutoCAD	Computer aided design CAD software
Autodesk Revit	Computer aided design CAD software
Bentley Microstation	Computer aided design CAD software
Computer aided design CAD software	Computer aided design CAD software
National Instruments Multisim	Computer aided design CAD software
OrCAD Capture	Computer aided design CAD software
Database software	Data base user interface and query software
Microsoft Access	Data base user interface and query software
Oracle software	Data base user interface and query software
Assembler	Development environment software
C	Development environment software
Microsoft Visual Basic	Development environment software
National Instruments LabVIEW	Development environment software
Verilog	Development environment software
Adobe Systems Adobe Acrobat	Document management software
Microsoft Outlook	Electronic mail software

Detailed Technology	Technology Group
SAP	Enterprise resource planning ERP software
Graphics software	Graphics or photo imaging software
Programmable logic controller PLC software	Industrial control software
Rockwell RSLogix	Industrial control software
Rockwell RSView	Industrial control software
Supervisory control and data acquisition SCADA software	Industrial control software
Wonderware InTouch HMI	Industrial control software
Microsoft Internet Explorer	Internet browser software
C++	Object or component oriented development software
Computer aided software engineering CASE tools	Object or component oriented development software
Python	Object or component oriented development software
Microsoft Office	Office suite software
Emulators	Operating system software
Microsoft Windows	Operating system software
Microsoft PowerPoint	Presentation software
Debugging software	Program testing software
Bentley Systems ProjectWise	Project management software
Microsoft Project	Project management software
Microsoft Excel	Spreadsheet software
Spreadsheet software	Spreadsheet software
Microsoft Word	Word processing software
Word processing software	Word processing software

Licensing Information

This section shows licenses that may be required for Electrical Engineering Technicians in Louisiana. Click on the link for the occupation you're interested in to view more information on how to attain a license.

Licensed Occupation
Calibration Technician, Dairy Industry

Source: Louisiana Workforce Commission, Labor Market Information Program

Typical Knowledge Categories

This section shows the most common knowledge categories required by Electrical Engineering Technicians in order of importance. Click on a link in the Knowledge Category column to view more detailed information.

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
Computers and Electronics	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.	77
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.	77
English Language	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.	73
Mathematics	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.	66
Production and Processing	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.	62
Mechanical	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.	59
Design	Knowledge of design techniques, tools, and principles involved in production of precision technical plans, blueprints, drawings, and models.	51

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
Physics	Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub- atomic structures and processes.	50
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.	47
Public Safety and Security	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.	47
Administration and Management	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.	39
Clerical	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.	36
Chemistry	Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.	33
Communications and Media	Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.	28

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
Law and Government	Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.	27
Telecommunications	Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems.	27
Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.	25
Building and Construction	Knowledge of materials, methods, and the tools involved in the construction or repair of houses, buildings, or other structures such as highways and roads.	24

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Abilities Required

This section shows the results of a national survey listing the most common work abilities required by Electrical Engineering Technicians in order of importance. Click on a link in the Work Ability column to view more detailed information.

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Problem Sensitivity	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.	75
Near Vision	The ability to see details at close range (within a few feet of the observer).	72
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.	69
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.	66

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Inductive Reasoning	The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).	63
Written Comprehension	The ability to read and understand information and ideas presented in writing.	63
Finger Dexterity	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.	60
Oral Expression	The ability to communicate information and ideas in speaking so others will understand.	60
Arm-Hand Steadiness	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.	56
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).	56
Manual Dexterity	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.	56
Speech Clarity	The ability to speak clearly so others can understand you.	56
Speech Recognition	The ability to identify and understand the speech of another person.	56
Visual Color Discrimination	The ability to match or detect differences between colors, including shades of color and brightness.	56
Visualization	The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.	56
Written Expression	The ability to communicate information and ideas in writing so others will understand.	56
Category Flexibility	The ability to generate or use different sets of rules for combining or grouping things in different ways.	53
Flexibility of Closure	The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.	53

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Fluency of Ideas	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).	53
Perceptual Speed	The ability to quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.	53
Selective Attention	The ability to concentrate on a task over a period of time without being distracted.	53
Control Precision	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.	50
Far Vision	The ability to see details at a distance.	50
Mathematical Reasoning	The ability to choose the right mathematical methods or formulas to solve a problem.	50
Originality	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.	50
Hearing Sensitivity	The ability to detect or tell the differences between sounds that vary in pitch and loudness.	41
Speed of Closure	The ability to quickly make sense of, combine, and organize information into meaningful patterns.	41
Time Sharing	The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).	41
Memorization	The ability to remember information such as words, numbers, pictures, and procedures.	38
Multilimb Coordination	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.	35
Number Facility	The ability to add, subtract, multiply, or divide quickly and correctly.	35

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Auditory Attention	The ability to focus on a single source of sound in the presence of other distracting sounds.	31
Depth Perception	The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object.	31
Trunk Strength	The ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing.	31
Static Strength	The ability to exert maximum muscle force to lift, push, pull, or carry objects.	28
Wrist-Finger Speed	The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.	28
Extent Flexibility	The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.	25
Response Orientation	The ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.	25
Rate Control	The ability to time your movements or the movement of a piece of equipment in anticipation of changes in the speed and/or direction of a moving object or scene.	22
Reaction Time	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.	22
Stamina	The ability to exert yourself physically over long periods of time without getting winded or out of breath.	22
Dynamic Strength	The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue.	19
Gross Body Coordination	The ability to coordinate the movement of your arms, legs, and torso together when the whole body is in motion.	19

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Spatial Orientation	The ability to know your location in relation to the environment or to know where other objects are in relation to you.	13
Gross Body Equilibrium	The ability to keep or regain your body balance or stay upright when in an unstable position.	10
Sound Localization	The ability to tell the direction from which a sound originated.	3

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Interests

This section shows the results of a national survey listing the most common work interests for Electrical Engineering Technicians in order of importance.

Work Interest	Work Interest Description	Rank by Importance (Out of 100)
Realistic	Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.	100
Investigative	Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.	83
Conventional	Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.	56

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Styles

This section shows the most common work styles required by Electrical Engineering Technicians in order of importance. Click on a link in the Work Style column to view more detailed information.

Work Style	Work Style Description	Rank by Importance (Out of 100)
Attention to Detail	Job requires being careful about detail and thorough in completing work tasks.	93
Dependability	Job requires being reliable, responsible, and dependable, and fulfilling obligations.	86
Analytical Thinking	Job requires analyzing information and using logic to address work-related issues and problems.	81
Integrity	Job requires being honest and ethical.	81
Cooperation	Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.	80
Adaptability/Flexibility	Job requires being open to change (positive or negative) and to considerable variety in the workplace.	78
Persistence	Job requires persistence in the face of obstacles.	74
Initiative	Job requires a willingness to take on responsibilities and challenges.	74
Independence	Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.	73
Stress Tolerance	Job requires accepting criticism and dealing calmly and effectively with high stress situations.	71
Achievement/Effort	Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.	71
Self Control	Job requires maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior, even in very difficult situations.	70

Work Style	Work Style Description	Rank by Importance (Out of 100)
Innovation	Job requires creativity and alternative thinking to develop new ideas for and answers to work-related problems.	70
Leadership	Job requires a willingness to lead, take charge, and offer opinions and direction.	65
Concern for Others	Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job.	64
Social Orientation	Job requires preferring to work with others rather than alone, and being personally connected with others on the job.	53

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Related Occupations

This section shows a list of occupations related to Electrical Engineering Technicians. Click an occupation title to see more information about that occupation.

Rank	Related Occupations	Duties	*Related By
1	Automotive Engineering Technicians	Assist engineers in determining the practicality of proposed product design changes and plan and carry out tests on experimental test devices or equipment for performance, durability, or efficiency.	SOC4
2	Drafters, All Other	All drafters not listed separately.	SOC4
3	Electrical and Electronic Engineering Technicians	Apply electrical and electronic theory and related knowledge, usually under the direction of engineering staff, to design, build, repair, calibrate, and modify electrical components, circuitry, controls, and machinery for subsequent evaluation and use by engineering staff in making engineering design decisions.	SOC4
4	Electrical and Electronics Drafters	Prepare wiring diagrams, circuit board assembly diagrams, and layout drawings used for the manufacture, installation, or repair of electrical equipment.	SOC4

Rank	Related Occupations	Duties	*Related By
5	Electrical Drafters	Develop specifications and instructions for installation of voltage transformers, overhead or underground cables, and related electrical equipment used to conduct electrical energy from transmission lines or high-voltage distribution lines to consumers.	SOC4
6	Electrical Engineering Technologists	Assist electrical engineers in such activities as process control, electrical power distribution, or instrumentation design. May prepare layouts of electrical transmission or distribution systems, supervise the flow of work, estimate project costs, or participate in research studies.	SOC4
7	Electromechanical Engineering Technologists	Assist electromechanical engineers in such activities as computer-based process control, instrumentation, or machine design. May prepare layouts of machinery or equipment, plan the flow of work, conduct statistical studies, or analyze production costs.	SOC4
8	Electronic Drafters	Draw wiring diagrams, circuit board assembly diagrams, schematics, and layout drawings used for manufacture, installation, and repair of electronic equipment.	SOC4
9	Engineering Technicians, Except Drafters, All Other	All engineering technicians, except drafters, not listed separately.	SOC4
10	Fuel Cell Technicians	Install, operate, or maintain integrated fuel cell systems in transportation, stationary, or portable applications.	SOC4
11	Industrial Engineering Technologists	Assist industrial engineers in such activities as quality control, inventory control, or material flow methods. May conduct statistical studies or analyze production costs.	SOC4
12	Manufacturing Engineering Technologists	Develop tools, implement designs, or integrate machinery, equipment, or computer technologies to ensure effective manufacturing processes.	SOC4
13	Mechanical Engineering Technologists	Assist mechanical engineers in such activities as generation, transmission, or use of mechanical or fluid energy. Prepare layouts of machinery or equipment or plan the flow of work. May conduct statistical studies or analyze production costs.	SOC4
14	Nanotechnology Engineering Technicians	Operate commercial-scale production equipment to produce, test, or modify materials, devices, or systems of molecular or macromolecular composition. Work under the supervision of engineering staff.	SOC4

Rank	Related Occupations	Duties	*Related By
15	Nanotechnology Engineering Technologists	Implement production processes for nanoscale designs to produce or modify materials, devices, or systems of unique molecular or macromolecular composition. Operate advanced microscopy equipment to manipulate nanoscale objects. Work under the supervision of nanoengineering staff.	SOC4
16	Non-Destructive Testing Specialists	Test the safety of structures, vehicles, or vessels using x-ray, ultrasound, fiber optic or related equipment.	SOC4
17	Photonics Technicians	Build, install, test, or maintain optical or fiber optic equipment, such as lasers, lenses, or mirrors, using spectrometers, interferometers, or related equipment.	SOC4
18	Architectural and Civil Drafters	Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Use knowledge of building materials, engineering practices, and mathematics to complete drawings.	SOC4
19	Architectural Drafters	Prepare detailed drawings of architectural designs and plans for buildings and structures according to specifications provided by architect.	SOC4
20	Mapping Technicians	Calculate mapmaking information from field notes, and draw and verify accuracy of topographical maps.	SOC4
21	Surveying and Mapping Technicians	Perform surveying and mapping duties, usually under the direction of an engineer, surveyor, cartographer, or photogrammetrist to obtain data used for construction, mapmaking, boundary location, mining, or other purposes. May calculate mapmaking information and create maps from source data, such as surveying notes, aerial photography, satellite data, or other maps to show topographical features, political boundaries, and other features. May verify accuracy and completeness of maps.	SOC4
22	Surveying Technicians	Adjust and operate surveying instruments, such as the theodolite and electronic distance-measuring equipment, and compile notes, make sketches and enter data into computers.	SOC4

Rank	Related Occupations	Duties	*Related By
23	Aerospace Engineering and Operations Technicians	Operate, install, calibrate, and maintain integrated computer/communications systems, consoles, simulators, and other data acquisition, test, and measurement instruments and equipment, which are used to launch, track, position, and evaluate air and space vehicles. May record and interpret test data.	O*NET
24	Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	Develop programs to control machining or processing of metal or plastic parts by automatic machine tools, equipment, or systems.	O*NET
25	Computer, Automated Teller, and Office Machine Repairers	Repair, maintain, or install computers, word processing systems, automated teller machines, and electronic office machines, such as duplicating and fax machines.	O*NET
26	Dental Laboratory Technicians	Construct and repair full or partial dentures or dental appliances.	O*NET
27	Electrical and Electronics Repairers, Commercial and Industrial Equipment	Repair, test, adjust, or install electronic equipment, such as industrial controls, transmitters, and antennas.	O*NET
28	Electro-Mechanical Technicians	Operate, test, maintain, or calibrate unmanned, automated, servo-mechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.	O*NET
29	Electronic Home Entertainment Equipment Installers and Repairers	Repair, adjust, or install audio or television receivers, stereo systems, camcorders, video systems, or other electronic home entertainment equipment.	O*NET

Rank	Related Occupations	Duties	*Related By
30	Electronics Engineering Technicians	Lay out, build, test, troubleshoot, repair, and modify developmental and production electronic components, parts, equipment, and systems, such as computer equipment, missile control instrumentation, electron tubes, test equipment, and machine tool numerical controls, applying principles and theories of electronics, electrical circuitry, engineering mathematics, electronic and electrical testing, and physics. Usually work under direction of engineering staff.	O*NET
31	Electronics Engineering Technologists	Assist electronics engineers in such activities as electronics systems and instrumentation design or digital signal processing.	O*NET
32	Industrial Engineering Technicians	Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff. May perform time and motion studies on worker operations in a variety of industries for purposes such as establishing standard production rates or improving efficiency.	O*NET
33	Manufacturing Production Technicians	Set up, test, and adjust manufacturing machinery or equipment, using any combination of electrical, electronic, mechanical, hydraulic, pneumatic, or computer technologies.	O*NET
34	Mechanical Drafters	Prepare detailed working diagrams of machinery and mechanical devices, including dimensions, fastening methods, and other engineering information.	O*NET
35	Mechanical Engineering Technicians	Apply theory and principles of mechanical engineering to modify, develop, test, or calibrate machinery and equipment under direction of engineering staff or physical scientists.	O*NET
36	Medical Appliance Technicians	Construct, fit, maintain, or repair medical supportive devices, such as braces, orthotics and prosthetic devices, joints, arch supports, and other surgical and medical appliances.	O*NET
37	Medical Equipment Repairers	Test, adjust, or repair biomedical or electromedical equipment.	O*NET

Rank	Related Occupations	Duties	*Related By
38	Radio Mechanics	Test or repair mobile or stationary radio transmitting and receiving equipment and two-way radio communications systems used in ship-to-shore communications and found in service and emergency vehicles.	O*NET
39	Robotics Technicians	Build, install, test, or maintain robotic equipment or related automated production systems.	O*NET
40	Audio and Video Equipment Technicians	Set up, or set up and operate audio and video equipment including microphones, sound speakers, video screens, projectors, video monitors, recording equipment, connecting wires and cables, sound and mixing boards, and related electronic equipment for concerts, sports events, meetings and conventions, presentations, and news conferences. May also set up and operate associated spotlights and other custom lighting systems.	O*NET
41	Avionics Technicians	Install, inspect, test, adjust, or repair avionics equipment, such as radar, radio, navigation, and missile control systems in aircraft or space vehicles.	O*NET
42	Broadcast Technicians	Set up, operate, and maintain the electronic equipment used to transmit radio and television programs. Control audio equipment to regulate volume level and quality of sound during radio and television broadcasts. Operate transmitter to broadcast radio or television programs.	O*NET
43	Camera and Photographic Equipment Repairers	Repair and adjust cameras and photographic equipment, including commercial video and motion picture camera equipment.	O*NET
44	Civil Drafters	Prepare drawings and topographical and relief maps used in civil engineering projects, such as highways, bridges, pipelines, flood control projects, and water and sewerage control systems.	O*NET
45	Civil Engineering Technicians	Apply theory and principles of civil engineering in planning, designing, and overseeing construction and maintenance of structures and facilities under the direction of engineering staff or physical scientists.	O*NET

Rank	Related Occupations	Duties	*Related By
46	Computer User Support Specialists	Provide technical assistance to computer users. Answer questions or resolve computer problems for clients in person, or via telephone or electronically. May provide assistance concerning the use of computer hardware and software, including printing, installation, word processing, electronic mail, and operating systems.	O*NET
47	Elevator Installers and Repairers	Assemble, install, repair, or maintain electric or hydraulic freight or passenger elevators, escalators, or dumbwaiters.	O*NET
48	Environmental Engineering Technicians	Apply theory and principles of environmental engineering to modify, test, and operate equipment and devices used in the prevention, control, and remediation of environmental problems, including waste treatment and site remediation, under the direction of engineering staff or scientist. May assist in the development of environmental remediation devices.	O*NET
49	Food Science Technicians	Perform standardized qualitative and quantitative tests to determine physical or chemical properties of food or beverage products.	O*NET
50	Geophysical Data Technicians	Measure, record, or evaluate geological data, using sonic, electronic, electrical, seismic, or gravity-measuring instruments to prospect for oil or gas. May collect or evaluate core samples or cuttings.	O*NET
51	Medical and Clinical Laboratory Technologists	Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.	O*NET
52	Museum Technicians and Conservators	Restore, maintain, or prepare objects in museum collections for storage, research, or exhibit. May work with specimens such as fossils, skeletal parts, or botanicals; or artifacts, textiles, or art. May identify and record objects or install and arrange them in exhibits. Includes book or document conservators.	O*NET
53	Power Distributors and Dispatchers	Coordinate, regulate, or distribute electricity or steam.	O*NET

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SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Career Ladder

This section shows the top 10 occupations and the corresponding individuals in the workforce system who were previously Electrical Engineering Technicians and have changed their occupation over the last 5 years.

Occupation Title	Number of Individuals that Moved	Percentage of Individuals that Moved
Electricians	32	29.09%
Electrical and Electronics Repairers, Commercial and Industrial Equipment	18	16.36%
Electronics Engineering Technicians	12	10.91%
Laborers and Freight, Stock, and Material Movers, Hand	9	8.18%
First-Line Supervisors of Construction Trades and Extraction Workers	7	6.36%
Construction Laborers	7	6.36%
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	7	6.36%
Electrical Engineers	6	5.45%
Electric Motor, Power Tool, and Related Repairers	6	5.45%
Helpers--Installation, Maintenance, and Repair Workers	6	5.45%

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Source: Individuals with active résumés in the workforce system.

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