Career Exploration



This suits my personality because I am always taking things apart, repairing, installing, wiring, breaking and fixing things.

* Electrician
* Carpenter
* Line Installer and Repairer
* Auto Mechanic
* Drywall Installer
* Electrical Engineering Technicians
* Hearing/Air Refrigerator Mechanics

**Electrician**

HR1. What are the definition of the occupation that your group has chosen and the nature of the work?

**Electricians install and maintain all of the electrical and power systems for our homes, businesses, and factories. They install and maintain the wiring and control equipment through which electricity flows. They also install and maintain electrical equipment and machines in factories and a wide range of other businesses.**
HR2. What are some of the related occupational fields?

**Computer, automated teller, and office machine repairers, Electrical and electronics drafters, Electrical and electronics engineering technicians, Electrical and electronics installers and repairers, Electronic home entertainment equipment installers and repairers, Elevator installers and repairers, Heating, air-conditioning, and refrigeration mechanics and installers, Line installers and repairers**
HR3. Which personality type(s) is best suited to the occupation/job?

Realistic
HR4. What kind of education, training and qualifications are required?

**Most electricians learn their trade through apprenticeship programs that combine on-the-job training with related classroom instruction. Apprenticeship programs combine paid on-the-job training with related classroom instruction. Joint training committees made up of local unions of the International Brotherhood of Electrical Workers and local chapters of the National Electrical Contractors Association; individual electrical contracting companies; or local chapters of the Associated Builders and Contractors and the Independent Electrical Contractors Association usually sponsor apprenticeship programs. Because of the comprehensive training received, those who complete apprenticeship programs qualify to do both maintenance and construction work. Apprenticeship programs usually last 4 years. Each year includes at least 144 hours of classroom instruction and 2,000 hours of on-the-job training. In the classroom, apprentices learn electrical theory, blueprint reading, mathematics, electrical code requirements, and safety and first aid practices. On the job, apprentices work under the supervision of experienced electricians. At first, they drill holes, set anchors and attach conduit. Later, they measure, fabricate, and install conduit and install, connect, and test wiring, outlets, and switches. They also learn to set up and draw diagrams for entire electrical systems. Eventually, they practice and master all of an electrician's main tasks. Some people start their classroom training before seeking an apprenticeship. Education continues throughout an electrician's career. Electricians may need to take classes to learn about changes to the National Electrical Code, and they often complete regular safety programs, manufacturer-specific training, and management training courses. Classes on such topics as low-voltage voice and data systems, telephone systems, video systems, and alternative energy systems such as solar energy and wind energy increasingly are being given as these systems become more prevalent.**

***Licensure.* Most States and localities require electricians to be licensed. Although licensing requirements vary from State to State, electricians usually must pass an examination that tests their knowledge of electrical theory, the National Electrical Code, and local and State electric and building codes.**

***Other qualifications.* Applicants for apprenticeships usually must be at least 18 years old and have a high school diploma or a G.E.D. They also may have to pass a test and meet other requirements.**

**Other skills needed to become an electrician include manual dexterity, eye-hand coordination, physical fitness, and a good sense of balance. Electricians also need good color vision because workers frequently must identify electrical wires by color.**

HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?

RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?

**Median hourly wages of wage and salary electricians were $22.32. The middle 50 percent earned between $17.00 and $29.88. The lowest 10 percent earned less than $13.54, and the highest 10 percent earned more than $38.18.**
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)

**Average employment growth is expected. Job prospects should be good, particularly for workers with the widest range of skills, including voice, data, and video wiring.**
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.

ISC1. What are the working conditions or work environment for the job (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?

 **Electricians work indoors and out, at construction sites, in homes, and in businesses or factories. The work may be strenuous at times and may include bending conduit, lifting heavy objects, and standing, stooping, and kneeling for long periods. Electricians risk injury from electrical shock, falls, and cuts, and must follow strict safety procedures to avoid injuries. When working outdoors, they may be subject to inclement weather. Some electricians may have to travel long distances to jobsites. Most electricians work a standard 40-hour week, although overtime may be required. Those who do maintenance work may work nights or weekends and be on call to go to the worksite when needed. Electricians in industrial settings may have periodic extended overtime during scheduled maintenance or retooling periods. Companies that operate 24 hours a day may employ three shifts of electricians.**
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?

**About 32 percent of all electricians are members of a union, especially the International Brotherhood of Electrical Workers. Among unions representing maintenance electricians are the International Brotherhood of Electrical Workers; the International Union of Electronic, Electrical, Salaried, Machine, and Furniture Workers; the International Association of Machinists and Aerospace Workers; the International Union, United Automobile, Aircraft and Agricultural Implement Workers of America; and the United Steelworkers of America.**
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Experienced electricians can advance to jobs as supervisors. In construction, they also may become project managers or construction superintendents. Those with sufficient capital and management skills can start their own contracting business, although doing so often requires a special electrical contractor's license. Supervisors and contractors should be able to identify and estimate costs and prices and the time and materials needed to complete a job. Many electricians can also become electrical inspectors.**

**For those who seek to advance, it is increasingly important to be able to communicate in both English and Spanish in order to relay instructions and safety precautions to workers with limited understanding of English; Spanish-speaking workers make up a large part of the construction workforce in many areas. Spanish-speaking workers who want to advance in this occupation need very good English skills to understand electrician classes and installation instructions, which are usually written in English and are highly technical.**

**Carpenter**

HR1. What is the definition of the occupation that your group has chosen and the nature of the work?

**Carpenters construct, erect, install, and repair structures and fixtures made from wood and other materials. Carpenters are involved in many different kinds of construction, from the building of highways and bridges to the installation of kitchen cabinets.**
HR2. What are some of the related occupational fields?

**Brickmasons, blockmasons, and stonemasons, Cement masons, concrete finishers, segmental pavers, and terrazzo workers, Construction equipment operators, Drywall and ceiling tile installers, tapers, plasterers, and stucco masons, Electricians, Plumbers, pipelayers, pipefitters, and steamfitters**
HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

**Realistic**
HR4. What kind of education, training and qualifications are required?

**Carpenters can learn their craft through on-the-job training, vocational schools or technical colleges, or formal apprenticeship programs, which often takes 3 to 4 years. Learning to be a carpenter can start in high school. Classes in English, algebra, geometry, physics, mechanical drawing, blueprint reading, and general shop will prepare students for the further training they will need.**
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?

**median hourly wages of wage and salary carpenters were $18.72. The middle 50 percent earned between $14.42 and $25.37. The lowest 10 percent earned less than $11.66, and the highest 10 percent earned more than $33.34.**
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job you or your (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Line Installer and Repairer**

HR1. What are the definition of the occupation that your group has chosen and the nature of the work?
HR2. What are some of the related occupational fields?
HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

Realistic
HR4. What kind of education, training and qualifications are required?
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job you (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Auto Mechanic**

HR1. What are the definition of the occupation that your group has chosen and the nature of the work?

**Automotive service technicians and mechanics fix cars or light trucks that have broken down. They must be able to figure out the source of the problem quickly and correctly. They must know automobiles well.**
HR2. What are some of the related occupational fields?

**Automotive body and related repairers, Diesel service technicians and mechanics, Small engine mechanics**
HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

**Realistic**
HR4. What kind of education, training and qualifications are required?

**Training programs usually use both classroom instruction and hands-on practice. In some technical and trade schools this training lasts 6 months to a year. In community colleges this training usually lasts 2 years. In addition to automotive training, it also includes other classes like math, English, and computers. Some training programs also help their future technicians get the various power and hand tools they need, since technicians may have to provide their own tools once on the job.**

**Technicians should have good reading, math, and computer skills. They must study technical manuals and may even visit an automobile maker to learn how to repair new autos, so they can keep up with the latest in the field. Trainees also must have mechanical skills and know how cars work.**
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?

**In May 2008, the average yearly wages of all automotive service technicians and mechanics were $37,540**
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)

**Employment of automotive service technicians and mechanics is expected to grow slower than the average for all occupations through the year 2018. The closing of many automobile dealerships will lead to fewer job openings in dealer service centers. However, job opportunities are expected to be very good for people who complete a training program and receive a certification. People who are good at figuring out problems should have the best chances. Their training should include basic electronics skills. People without formal automotive training will likely have to compete for beginner jobs.**
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Heating/Air Refrigerator Mechanics**

HR1. What is the definition of the occupation that your group has chosen and the nature of the work?
HR2. What are some of the related occupational fields?
HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

Realistic
HR4. What kind of education, training and qualifications are required?
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job you (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Drywall Installer**

HR1. What are the definition of the occupation that your group has chosen and the nature of the work?
HR2. What are some of the related occupational fields?
HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

Realistic
HR4. What kind of education, training and qualifications are required?
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job you (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)

**Electrical Engineering Technicians**

HR1. What are the definition of the occupation that your group has chosen and the nature of the work?

**Engineering technicians use the principles and theories of science, engineering, and mathematics to solve technical problems in research and development, manufacturing, sales, construction, inspection, and maintenance. Their work is more narrowly focused and application-oriented than that of scientists and engineers. Many engineering technicians assist engineers and scientists, especially in research and development. Others work in quality control, inspecting products and processes, conducting tests, or collecting data. In manufacturing, they may assist in product design, development, or production.**
HR2. What are some of the related occupational fields?

**Broadcast and sound engineering technicians and radio operators, Drafters, Science technicians**HR3. Which personality type(s) is best suited to the occupations/jobs you have researched?

**Realistic**
HR4. What kind of education, training and qualifications are required?

**Because many engineering technicians assist in design work, creativity is desirable. Good communication skills and the ability to work well with others also are important because engineering technicians are typically part of a team of engineers and other technicians.**
HR5. What technology skills are needed to be successful in the career/occupational fields you have explored?
RC1. What does the occupation pay, or what are the average earnings nationally and in this area of the country?

**Median annual wages of wage and salary electrical and electronic engineering technicians were $53,240 in May 2008. The middle 50 percent earned between $41,550 and $64,120. The lowest 10 percent earned less than $32,490, and the highest 10 percent earned more than $78,560.**
RC2. What is the projected growth for this career field over the next 10 years? (i.e. will there be more or less jobs like this in the future?)

**Overall employment of engineering technicians is expected to grow slower than the average for all occupations, but projected growth and job prospects vary by specialty. Opportunities will be best for individuals with an associate degree or other postsecondary training in engineering technology.**
RC3. Please identify local or national organizations that would hire someone in the career field you have explored.
ISC1. What are the working conditions or work environment for the job you (such as work schedule, hours, exempt/salaried or non-exempt/hourly, etc.)?
ISC2. Are positions in this career field typically part of collective bargaining units (unions)?
ISC3. What kind of opportunities for advancement are there for the career? (i.e. Is there a chance to get promoted, etc.?)