

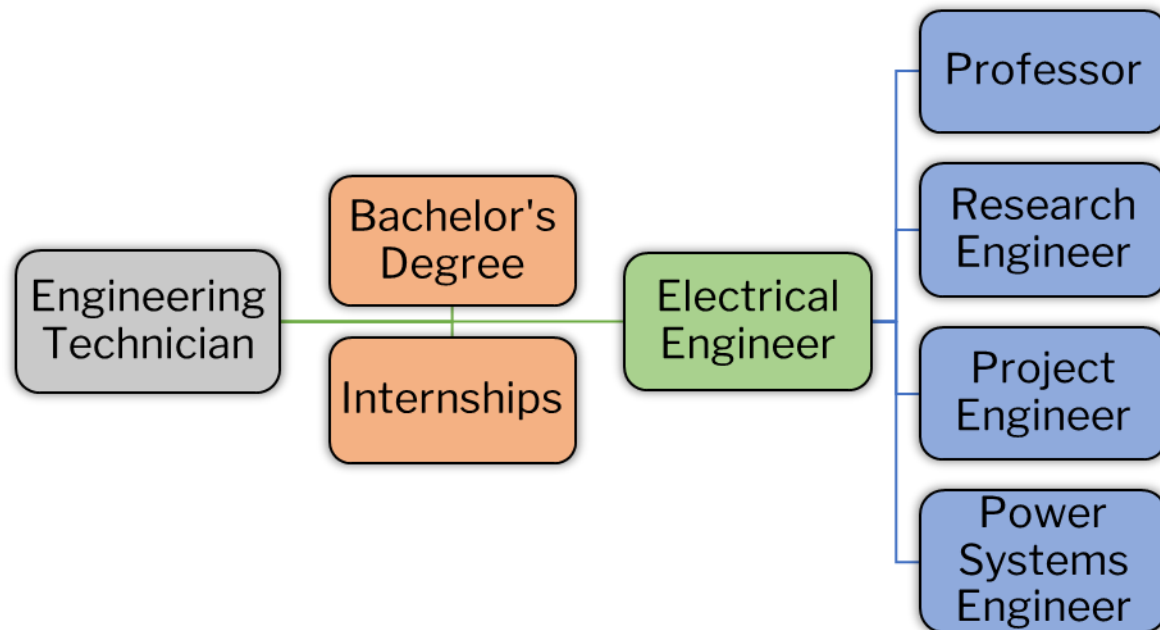
# Electrical Engineer

Also known as: Circuits Engineer, Design Engineer, Electrical Controls Engineer, Electrical Project Engineer, Power Systems Engineer, Electrical Reliability Engineer

An electrical engineer focuses on the design, development, and use of electrical equipment and systems. This is not an entry-level position, requiring a bachelor's degree and extensive study of electrical systems, physics, and mathematics. In the energy sector, electrical engineers are involved with testing and implementing the elements of power generation: transformers, motors, cables, and generators. They may also be involved in the design of new facilities and some even begin their careers as Engineering Technicians before completing their degree.

Pay Scale	Education	Projected Opportunities
\$120,390 in 2021 in WA \$100,420 in 2021 in U.S.	Bachelor's, Master's	350 through 2030 in WA 12,300 through 2031 in U.S.

## Career Path



(The electrical engineer career path can begin in an entry-level position such as an engineering technician, and/or continue education with a bachelor's degree and internships. Electrical engineers can specialize or advance their career into a professor, research engineer, project engineer, or power systems engineer.)

## Training & Requirements

Training	Required Skills	Responsibilities
<p>Electrical Engineers typically need a bachelor's degree in electrical engineering, and some employers even require a master's degree. There are many specializations available within electrical engineering including: computer and electrical engineering, power and energy, telecommunications, and control systems. Many employers also value practical experience gained either on the job, in an internship, or a cooperative engineering program.</p>	<ul style="list-style-type: none"> <li>• Familiar with technology including Microsoft Office, computer aided design software, and analytical software.</li> <li>• Complex problem solving and critical thinking.</li> <li>• Knowledge of the practical application of engineering science and technology.</li> <li>• Careful attention to detail and thorough in completion of work tasks.</li> </ul>	<ul style="list-style-type: none"> <li>• Operate computer-assisted engineering or design programs.</li> <li>• Prepare technical drawings and specifications.</li> <li>• Design, implement, and maintain electrical instruments, equipment, and systems.</li> <li>• Confer with other engineers, customers, or others to discuss existing or potential engineering projects.</li> </ul>

Additional Information:	Related Careers:
<ul style="list-style-type: none"> <li>• <a href="#">O*NET Occupational Data</a></li> <li>• <a href="#">U.S. Bureau of Labor Statistics</a></li> <li>• <a href="#">College Programs</a></li> <li>• <a href="#">Apprenticeships</a></li> <li>• Printable PDF</li> </ul>	<ul style="list-style-type: none"> <li>• Chemical Engineer</li> <li>• Energy Engineer</li> <li>• Fuel Cell Engineer</li> <li>• Mechanical Engineer</li> <li>• Nuclear Engineer</li> </ul>