



CAREER PROFILE

Technician

JOB OUTLOOK

Employment is expected to grow by seven percent by 2028.⁷ Technicians are needed in a wide range of fields, including medicine, manufacturing, energy, and construction. As robotics and automation become more and more of a reality, technicians will find themselves in high demand to build and maintain these new machines.

SALARY RANGE⁶

\$22,000–\$82,000

WHO ARE THEY?

Technicians like to work with their hands using sophisticated equipment. They enjoy diagnosing and solving problems. Technicians have excellent design skills and mathematical expertise to develop innovative solutions to problems.¹ Depending on the field, technicians may work independently or under the direction of a professional. They can find themselves working in many different environments and fields. Examples of technicians include service center technicians, automotive technicians in garages or service stations, maintenance technicians repairing and maintaining equipment used by industry, pharmacists, psychiatric technicians caring for people who have mental illness and developmental disabilities, dental technicians, medical technicians working in labs or hospitals, or veterinary technicians caring for animals. In the energy field, technicians can find jobs in geoscience, engineering, construction, drilling, automation, instrumental, and electronic technical jobs.²

WHAT DO THEY DO?

Technicians assemble, operate, maintain, and upgrade equipment used every day all around the world. They perform highly technical mechanical or diagnostic tests. They inspect and diagnose problems and figure out the best way to correct them. Technicians perform routine preventive maintenance to ensure that machines and equipment continue to run smoothly. They plan repair work using blueprints or diagrams. Technicians meet with clients to estimate repairs and costs.³ They conduct scientific tests on samples to determine their content and characteristics. They record data from trials and compile information from reports, computer databases, and other sources.⁴ Technicians prepare layouts and drawings of parts to be made and of the process for putting the pieces together, often using three-dimensional design software.⁵ Technicians make things work.

¹ Oil gas Workforce, careers, Technician, On the internet <https://oilgasworkforce.com/careers/videos#videoPlayer> (visited March 6, 2020)

² Snagajob, Technician Job Description, On the internet <https://www.snagajob.com/job-descriptions/technician/> (visited March 6, 2020)

³ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, General Maintenance and Repair Workers, on the Internet at <https://www.bls.gov/ooh/installation-maintenance-and-repair/general-maintenance-and-repair-workers.htm> (visited March 7, 2020).

⁴ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Geological and Petroleum Technicians, on the Internet at <https://www.bls.gov/ooh/life-physical-and-social-science/geological-and-petroleum-technicians.htm> (visited March 7, 2020).

⁵ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Mechanical Engineering Technicians, on the Internet at <https://www.bls.gov/ooh/architecture-and-engineering/mechanical-engineering-technicians.htm> (visited March 7, 2020).

⁶ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Employment Statistics, on the Internet <https://www.bls.gov/oes/2017/may/oes499071.htm> (visited March 6, 2020)

⁷ Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, Geological and Petroleum Technicians, on the Internet at <https://www.bls.gov/ooh/life-physical-and-social-science/geological-and-petroleum-technicians.htm> (visited March 7, 2020).



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EDUCATION/ TRAINING

In addition to a high school diploma, this position requires the following:

- Training in the field of specialization
- State and local licensing

HOW DO I BECOME ONE?⁸

Technicians need a high school education to begin. Some technicians need an associate degree or some post-secondary education. They may be required to get licensure or background checks. Technicians should work on continuing education credits to improve their expertise. Technicians may need strong arithmetic mental math skills to count, calculate fractions, and understand measurements quickly. They need to understand instructions and communicate effectively. Technicians need to be effective record keepers. They need to use their hands with precision on small items or in small spaces. Technicians may need the stamina to stand on their feet for many hours or lift heavy objects. There are a lot of options for work in this field!

⁸ Snagajob, Technician Job Description, On the internet <https://www.snagajob.com/job-descriptions/technician/> (visited March 7, 2020)