Printed for: CAVIT Automated Industrial Technology Program



Industrial Engineering Technologists & Technicians

<u>Also called:</u> Industrial Engineering Technician, Manufacturing Technology Analyst, Quality Control Engineering Technician (QC Engineering Technician), Quality Technician

What they do:

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.

On the job, you would:

- Test selected products at specified stages in the production process for performance characteristics or adherence to specifications.
- Compile and evaluate statistical data to determine and maintain quality and reliability of products.
- Study time, motion, methods, or speed involved in maintenance, production, or other operations to establish standard production rate or improve efficiency.

KNOWLEDGE

Engineering and Technology

- mechanical
- product and service development

Manufactured or Agricultural Goods

• manufacture and distribution of products

Math and Science

- arithmetic, algebra, geometry, calculus, or statistics
- physics

Arts and Humanities

English language

SKILLS

Basic Skills

- reading work related information
- listening to others, not interrupting, and asking good questions

Problem Solving

noticing a problem and figuring out the best way to solve it

People and Technology Systems

• figuring out how a system should work and how changes in the future will affect it

• measuring how well a system is working and how to improve it

ABILITIES

Verbal

- listen and understand what people say
- read and understand what is written

Ideas and Logic

- make general rules or come up with answers from lots of detailed information
- notice when problems happen

Math

- add, subtract, multiply, or divide
- choose the right type of math to solve a problem

Attention

pay attention to something without being distracted

PERSONALITY

People interested in this work like activities that include ideas, thinking, and figuring things out.

They do well at jobs that need:

- Attention to Detail
- Dependability
- Analytical Thinking
- Stress Tolerance
- Cooperation
- Integrity

TECHNOLOGY

You might use software like this on the job:

Computer aided design CAD software

- Bentley MicroStation 🖖
- Dassault Systemes SolidWorks 🖖

Desktop communications software

• Eko

Industrial control software

- Supervisory control and data acquisition SCADA software
- VIA Information Tools MAN-IT

EDUCATION









some college or associate's degree usually needed

JOB OUTLOOK



New job opportunities are **less likely** in the future.

Below Average



EXPLORE MORE

- <u>Calibration Technologists & Technicians</u>
- Electrical & Electronic Engineering Technologists & Technicians
- Industrial Engineers
- Manufacturing Engineers
- Mechanical Engineering Technologists & Technicians

You might like a career in one of these industries:

- Manufacturing
- Professional, Science, & Technical