

General Technical Knowledge Assessment (GenTech) – *Testing content areas*

The General Technical Knowledge Assessment (GenTech) is administered to candidates who have passed the Technician Pre-employment Assessment. The assessment focuses on the knowledge areas that are relevant to a technician's job.

Learn more and download GenTech practice questions at careers.ti.com.

Basic Electronics

AC Circuits

- Radio Frequency
- Series & Parallel AC Circuits
- Sinusoidal Alternating Wave Forms

DC Circuits

- Basic Units and Notation
- Circuit Analysis
- Current & Voltage
- DC Response of Capacitors
- Ohm's Law
- Parallel Circuits & Current Dividers
- Series-Parallel Circuits
- Series Circuits & Voltage Dividers
- Watt's Law

Discrete Components

- Components
- Op-Amp Characteristics
- Optic Devices
- Practical Op-Amp Circuits
- Temperature Transducer
- Transistors

Digital Circuits

- Basic Digital Functions
- Combination Logic
- Memory Devices
- Microprocessors
- Number Systems

Technical Science

- Chemical Concepts
- Atomic Theory
- Calculations Involving Gases
- Chemical Equilibrium
- Classes of Compounds
- Compounds
- Elements
- Ions
- Plasma
- Safety
- Solutions
- States of Matter

Physical Concepts

- Basic Units
- Definitions
- Derived Units
- Electromagnetic Spectrum
- Electromagnetism
- Energy & Matter
- Equipment & Process Variables
- Instrumentation
- Laws of Motion
- Magnetic Field Interaction with Ions
- Math Functions
- Mathematical Calculations
- Metrology
- Optics Terminology
- Quantitative Measurements
- Space & Time
- Unit Conversion
- Waves & Particles

Applied Electrical

- Industrial Controls
- Safety
- AC Motors
- Electromechanical Relays
- Industrial Schematics
- Poly-Phase AC Power
- Single-Phase AC Power
- Solid State Relays

- Troubleshooting

Power Supply Concepts

- Filtering
- Review of DC & AC Circuits
- Unregulated Power Supplies

Mechanics & Electrical/Mechanical Shop

- Safety
- Cabling & Wiring
- Gears, Springs, and Pulleys
- Mechanics
- Pneumatics/Hydraulics