Industrial Engineering Technologists and Technicians

SOC: 17-3026 • Career Profile Report

■ Key Facts

$64,790	74,600	+2.0%
Median Salary	Employment	Growth Rate

■ Requirements & Salary Range

Education: Associate's degree

■ Automation Risk Assessment

Low Risk - 17.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■■ Work-Life Balance

7.2/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.2/10	**Investigative**	8.8/10
Artistic	6.4/10	**Social**	5.2/10
Enterprising	5.8/10	**Conventional**	6.6/10

■ Top Skills Required

Analytical skills, Communication skills, Critical-thinking skills, Detail oriented, Math skills, Observational skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Industrial Engineering Technologists and Technicians typically perform the following tasks: • 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. • Read worker logs, product processing sheets, or specification sheets to verify that records adhere to quality assurance specifications. • Verify that equipment is being operated and maintained according to quality assurance standards by observing worker performance. • Aid in planning work assignments in accordance with worker performance, machine capacity, production schedules, or anticipated delays. • Evaluate industrial operations for compliance with permits or regulations related to the generation, storage, treatment, transportation, or disposal of hazardous materials or waste. • Adhere to all applicable regulations, policies, and procedures for health, safety, and environmental compliance. • Analyze, estimate, or report production costs. • Assist engineers in developing, building, or testing prototypes or new products, processes, or procedures. • Calibrate or adjust equipment to ensure quality production, using tools such as calipers, micrometers, height gauges, protractors, or ring gauges. • Conduct statistical studies to analyze or compare production costs for sustainable and nonsustainable designs. • Coordinate equipment purchases, installations, or transfers. • Create or interpret engineering drawings, schematic diagrams, formulas, or blueprints for management or engineering staff. • Design plant layouts or production facilities. • Develop manufacturing infrastructure to integrate or deploy new manufacturing processes. • Develop or implement programs to address problems related to production, materials, safety, or quality. • Develop production, inventory, or quality assurance programs. • Develop sustainable manufacturing technologies to reduce greenhouse gas emissions, minimize raw material use, replace toxic materials with non-toxic materials, replace non-renewable materials with renewable materials, or reduce waste. • Identify opportunities for improvements in quality, cost, or efficiency of automation equipment.