

Forty percent of the engineering technicians in the United States work in the manufacturing field. U.S. manufacturing industries are turning to cost-saving technologies, including automated processing and robotics, to improve their competitiveness and productivity. They need technicians who can adapt to constantly changing technologies.

Trained **Manufacturing Engineering Technicians** work closely with engineers. In the automated factory environment they help in the design and development stages, and install, operate, maintain and service robots, robotics equipment and automated systems. They normally work under the direction of engineers or technologists, but often move up to more responsible positions or to supervision. Although some technicians may work on specific systems, most have multiple skills and are able to perform varied tasks.

**Robotics Technicians** install, service, maintain, troubleshoot, and repair robots and automated production systems. They must understand computers, electrical and electronic systems, sensor and feedback principles, and how robots work as machines. Their duties vary depending upon whom they work for and the type of robots on which they work. Technicians employed by manufacturers work closely with designers, engineers, and technologists. They might be involved in the developing, testing, programming, and actual on-site installation of new robots. Some technicians work as robotics trainers and train others to install, use, and maintain robots. Robotics Technicians have another important role -- they are the people who help keep the robots "working". Employed by robot manufacturers, suppliers, distributors or by the companies that use and depend on robots, they maintain and troubleshoot all aspects of robots and automated systems -- mechanical as well as electrical.

### Salary Information:

- Manufacturing Technology: Automation/Robotics, Associate in Applied Science  
\$40,000 Median Salary (Follow-up Study, Monroe Community College Graduates, 2005)
- Industrial Engineering Technician  
\$50,070 Median Salary Range (U.S. Bureau of Labor Statistics, 2008)
- **Industrial Engineering Technician for the Rochester, New York area:**  
\$42,500 Median Salary Range (Career One Stop, 2008)  
[\*Salary varies based on education/advanced degree, work-experience & setting/location]

### Transfer Information:

- An Associate's or Bachelor's degree is entry-level into many of these professions and a Master's degree may be required for some.

### Additional Information:

- Manufacturer Industry: <http://www.managingautomation.com/maonline/research/>
- Society of Manufacturing Engineers: [www.manufacturingiscool.com](http://www.manufacturingiscool.com)