# APPRENTICESHIP UPDATE



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Apprenticeship Program
Poised to Add IT Trades

The Manufacturers Alliance Intermediary Apprenticeship Program continues to expand and build structured training and employment support systems for the skilled trades for advanced manufacturers in Central New York. Over the last two years, we have engaged over 30 local companies to upskill over 100 employees to help the companies grow and remain competitive.

Behind the scenes, our manufacturers employ many other highly skilled employees who are vital to their day to day operations. Many of us are not aware that many of these supportive roles are also apprentice able in New York State, including many IT roles.

Over the past 12 months, several new NYSDOL registered IT trade outlines have been developed to help train IT specialists from entry level Computer Technicians to Data Analysts. Many of these new IT trades were developed and sponsored by local firms. The roles currently active in New York State include the following:

#### **Network Engineer**

Also referred to as a Network Specialist or Network Architect, a network engineer is a technology professional who has the necessary skills to plan, implement, and oversee the computer networks that support in-house voice, data, video, and wireless network services.

#### **Systems Engineer**

System Engineers are often employed in job titles such as Computer Network Architect, Computer Systems Engineer, System Architect, and Systems Specialist. Their major job function is to design and build data communication networks. These networks may be small interoffice connections or larger networking systems such as cloud infrastructures.

## **Security Analyst**

Information Security Analyst, Computer Systems Analyst or even System Architects study an organization's current computer systems and procedures, and design solutions to help the organization operate more efficiently and effectively. They can integrate the requirements of business and information technology together because they understand the needs and limitations of both.

#### **Network Administrator**

Systems Administrators and Network Administrators are a critical part of every organization. They are responsible for the day-to-day operation, installation, and support of an organization's computer systems. This could include local area networks, wide area networks, network segments, and other data communication systems.

## **IT Project Manager**

An IT Project Manager wears many hats. They plan, coordinate and monitor IT project, as well as evaluate the project outcomes based on mandated project policies and procedures. They also manage the project employees.

#### **Data Analyst**

Data Analysts or Business Intelligence Analysts use data to answer questions and solve problems. They identify trends and make predictions based on their analysis. Their analyses can be used to do things like identify consumer market trends or even predict machine failure.

### **Software Developer**

Software Developers develop and implement new software programs and maintain or improve existing software. They design and update software databases and ensure functionality and optimization of software utilized by the company.

# **Computer Support Technician**

Sometimes referred to as Junior Network System Administrators or Junior Network Support Specialists, they must be able to accurately diagnose and resolve computer issues that arise, in a timely manner. They must be knowledgeable of numerous computer systems, hardware and software, and related computer equipment. As a part of their training, they must constantly stay up-to-date with constantly changing technologies.

Many of these IT roles overlap in some ways based on the size of a company. However, due to the competency-based credentialing of these trades, one individual could potentially attain a journey worker qualification in multiple areas. For more information on how to establish an apprenticeship program at your company, contact <a href="MPOnge@MACNY.org">MPOnge@MACNY.org</a>.