



# ELECTRIFICATION

## ELECTRIFICATION TRAINING

Electrification is now one of the fastest-growing industries in the world. Demand for electric vehicles and energy storage devices is outpacing production and straining the skilled workforce pipeline. To help fill the void, Tooling U-SME has launched a new Electrification training category with two new departments: Electric Vehicle (EV) Manufacturing and Energy Storage, plus a new EV Fundamentals professional certification.

## ELECTRIC VEHICLE MANUFACTURING

EV Manufacturing includes courses that familiarize learners with different types of electric vehicles, including fully electric, hybrid, and fuel-cell vehicles, as well as different charging systems, with instruction on charging methods, levels, and connectors. Electric Vehicle Components are also covered, helping learners understand the physical structure of these new types of transport—as well as how EVs are connected to the Internet of Things and the advantages of that interconnectivity.

### Some of the EV topics addressed:

- Introduction to Electric Mobility Manufacturing
- Overview of Electric Vehicle Components
- Introduction to Electric Motors





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## ENERGY STORAGE

Energy Storage focuses heavily on electricity, batteries, and safety. Learners gain an understanding of electrical units, power sources, power variables, batteries, and battery components, as well as battery management systems. Importantly, we prioritize safety in these classes due to the electrical, fire, and chemical considerations when working with batteries, including the emergency response measures corresponding to each risk.

**Some of the Energy Storage topics addressed:**

- High Energy Batteries
- Lithium-Ion Battery Handling and Safety
- Battery Energy Management
- Battery Selection



## EV FUNDAMENTALS CERTIFICATION

Our EV Fundamentals Certification is designed for entry-level positions in the areas of automotive assembly and production for electric vehicles. This credential can provide the necessary skills for individuals with no background in vehicle production and assembly or for individuals who have experience in this area but need to tailor their knowledge to the Electric Vehicle market.

