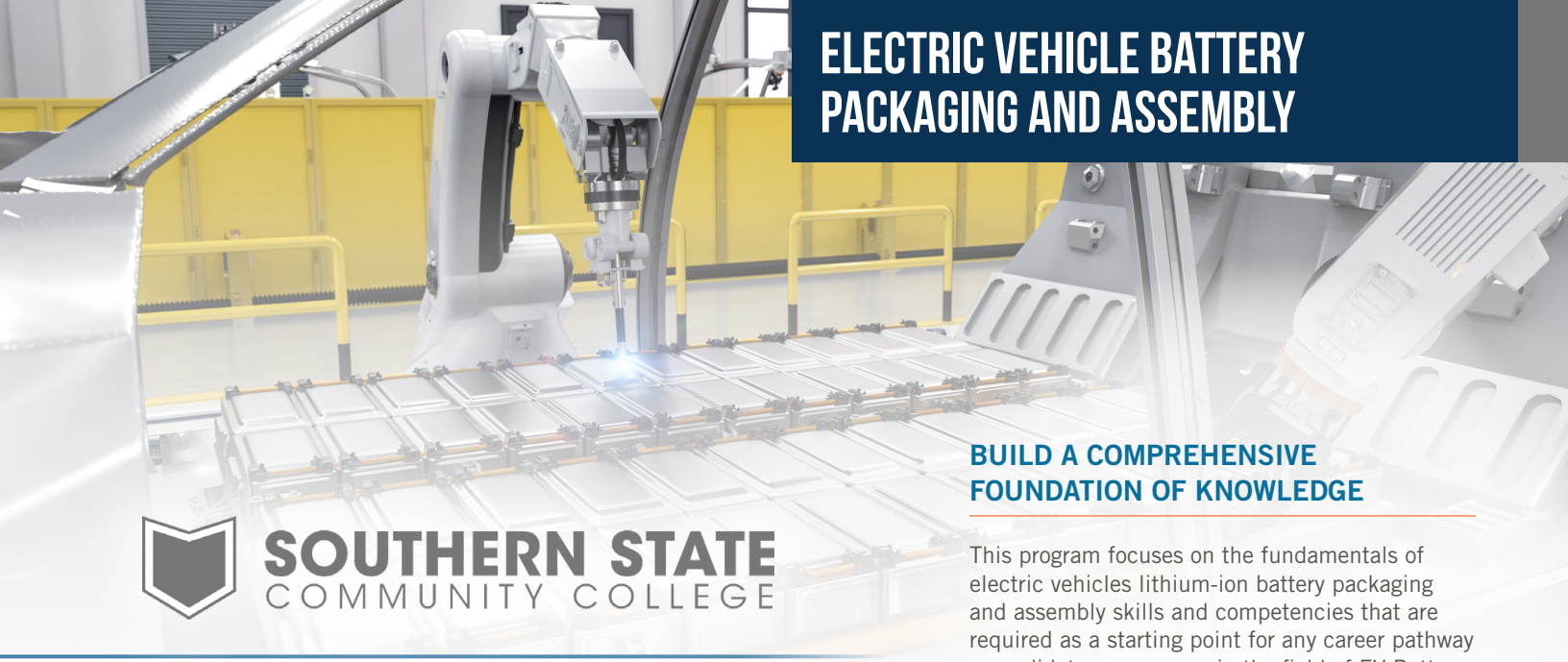

ELECTRIC VEHICLE BATTERY PACKAGING AND ASSEMBLY

SOUTHERN STATE COMMUNITY COLLEGE

CERTIFICATION

ELECTRIC VEHICLE (EV) BATTERY DEMAND SURGES, DRIVING RAPID MANUFACTURING EXPANSION AND OVER 150,000 NEW JOBS BY 2030*

To help meet the growing demand for EVs and battery-operated devices, SME is introducing its second Electrification Certification, Electric Battery Packaging and Assembly, to increase talent in the EV battery-related industry. This credential is designed for entry-level positions in the areas of battery assembly and packaging for electric vehicles. The Battery Packaging and Assembly Certification will also provide the necessary skills for individuals with no background in Battery Packaging and Assembly or for individuals who have experience in this area but need to tailor their knowledge to the EV market. The credential is ideal for high school and college students, dislocated workers, under-employed individuals, veterans, at-risk youth, and others who are seeking new employment in a new, fast-growing industry.

SHORT-TERM, COMPREHENSIVE TRAINING

The online classes from Tooling U-SME cover topics agreed upon by manufacturing experts as being relevant for foundational EV lithium-ion battery knowledge across a wide-range of industries. The information is presented in an engaging and interactive format for maximum effectiveness, and pre-and post-assessments measure a student's increased knowledge. Classes are self-paced, typically taking 60 minutes to complete. The training program can be completed in just a few weeks (typically less than one month). They are conveniently accessible anytime, anywhere on desktops and laptops, and on tablets and phones with the Tooling U-SME app.

BUILD A COMPREHENSIVE FOUNDATION OF KNOWLEDGE

This program focuses on the fundamentals of electric vehicles lithium-ion battery packaging and assembly skills and competencies that are required as a starting point for any career pathway a candidate may pursue in the field of EV Battery packaging and assembly:

- Advanced Battery Components
- EV Battery Types, Comparisons, & Uses
- Evolution & Future of Battery Technology
- EV Battery Manufacturing 101
- EV Battery Limitations & Stress Factors
- Factor Tuning Battery Failure Mechanisms
- Types of EV Battery & Pack Design
- Battery Management System Design & Analytics
- Temperature Monitoring
- Automated Measurement of Pack Isolation
- Battery Recycling & Disposal
- Introduction to Battery Cell Inspection

EARN A NATIONALLY RECOGNIZED CERTIFICATION

The SME Electric Vehicles Battery Assembly and Packaging (BPA) is focused on fundamentals of electric vehicles lithium-ion battery packaging and assembly skills. The credential can help individuals begin a lifelong career in a growing industry where there is opportunity for advancement and good-paying jobs.

sme.org/EVBPA

GAIN VISIBILITY WITH A DIGITAL BADGE

Upon passing the certification exam, individuals will earn a digital badge, providing enhanced opportunities to share their qualifications and get discovered by employers.

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Choose a starting point based on employee's experience or company goals for a quick-start training solution.

ELECTRIC VEHICLE BATTERY PACKAGING AND ASSEMBLY

ELECTRIC VEHICLE BATTERY PACKAGING AND ASSEMBLY TRAINING PROGRAM

Overview of Electric Vehicle Components **200**
Introduction to Electric Vehicle Charging **150**
High Energy Batteries **325**
Intro to Battery Design & Assembly **240**
Lithium-Ion Battery Handling and Safety **330**
Battery Management Systems Overview **250**
Battery Recycling **235**
Lockout/Tagout Procedures **141**
Arc Flash Safety **251**
High Voltage Safety **255**
Department of Transportation Hazard Communication Overview **153**
Hazardous Materials Handling **155**
Fire Safety and Prevention **181**
Flammable/Combustible Liquids **191**
Electrical Units **101**
Safety for Electrical Work **111**
Introduction to Circuits **201**
Electrical Print Reading **261**
DC Power Sources **271**
Introduction to Semiconductors **283**
Battery Selection **321**
Troubleshooting: Electrical Faults **330**
Troubleshooting: Continuity Testing **340**
Relays, Contactors, and Motor Starters **201**
Control Devices **211**
Introduction to Electric Motors **301**
DC Motor Applications **321**
Intro to Adhesive Bonding **110**
Basics of the Bonding Process **120**

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