

# Instrumentation Certification: A Vital Step towards Greening America

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As part of a green jobs initiative, Workforce Tulsa and IBEW Local 584 are starting an effort to provide instrumentation training and national certification to unemployed journeymen in Tulsa, Osage, Pawnee and Creek Counties and to integrate this same content into all IBEW apprenticeship programs. Instrumentation training qualifies electricians to optimize the performance and energy efficiency of large scale machinery and process flow technologies.

The training consists of thirty-two 8-hour classes (256 total instructional hours) and requires the use of a sophisticated simulation trainer capable of emulating a variety of equipment. Participants learn how to conduct initial installation of such equipment, optimize its performance, and troubleshoot and correct any problems that may develop over time. This requires participants to master both an extensive knowledge base as well as the hands on skills to apply that knowledge in specific contexts.

Significantly increasing the number of instrumentation certified electricians is absolutely critical to achieving a number of important policy goals. First, this skill set is required to transform current energy consumption patterns for American business. Just as a tune-up improves the mileage of our vehicles, “tuning-up” large scale electrical machinery reduces their energy consumption while increasing their useful life-cycle. This cost reduction makes American businesses more competitive, improves bottom-line performance, and **saves jobs**. Second, these increases in energy efficiency result in both **a smaller carbon footprint for industry** and reductions of peak demand for utilities. Third, the transition to renewable energy sources cannot happen without a sizeable workforce of instrumentation certified individuals. Fourth, instrumentation certified individuals are currently in high demand and this demand will only grow over time. This skills upgrade **will reduce unemployment and increase salary levels**.