

Electrical Apprenticeships' Many Rewards

Universities and colleges are not the only route to a great future.

By Michael Callanan, Executive Director, NJATC

How do you find the top-notch professionals in a particular field? Do you look at the quality of their theoretical knowledge, the depth of their hands-on training, or both?

When it comes to the electrical profession—or any other profession where the mastery of complex technical skills is fundamental to success—the answer is “both.”

That’s why for more than 60 years NECA-IBEW’s NJATC apprenticeship program has helped union-trained electrical professionals gain both.

Currently, the NJATC is the nation’s largest registered apprenticeship program. About 45,000 men and women are enrolled in one of the four NJATC multi-year apprenticeships leading to journeyman status as a commercial/industrial electrician, IT systems installer, lineman or residential electrician.

NECA-IBEW spends more than \$140 million a year to fund the program and 300+ local JATC training centers across the country.

Modern-day apprenticeships like the NJATC program offer an optimum blend of formal post-secondary education and practical work experience. They combine sponsor-provided course work and classroom instruction with extensive on-the-job training.

Apprentices receive wages for the work they do while on the job, unlike college students who must pay for their education and training. For example, NJATC apprentices typically earn between \$50,000 and \$150,000 in wages and benefits over the course of a three- to five-year apprenticeship period.

This unusual earn-as-you-learn process makes today’s apprenticeship similar to a career scholarship.

In addition, many apprenticeship programs give participants the option of earning college credits for the course work

they complete during their apprenticeship. Apprentices in the NJATC program can tie their course work to associate and bachelor degree programs. (See sidebar on page 18.)

Fallacies of the College Path

Given these eye-opening benefits, why are apprenticeships so often overlooked in the search for a post-secondary pathway to a rewarding career? Misplaced perceptions and media hype are probably the best answers.

Higher education is big business in the United States. The name of the game is maintaining enrollment and revenues in the face of escalating costs.

Armed with cutting-edge marketing techniques and multi-million media budgets, colleges and universities work hard to convince parents, students, and teachers that a college degree is the only means to a rewarding career and top wages.

A closer look at the numbers reveals that there are many routes to good wages. While the median weekly earnings of workers with bachelor’s degrees were 63% higher than the median for high school graduates, the highest paid *high school* graduates earn more than double the lowest-paid *college* graduates. (See table below.)

Even the median earnings of high school graduates exceeded the earnings of the lowest-paid college graduates by more than 20%.

Hard vs. Soft Skills

Various studies show that the earnings of workers with “hard” occupation-oriented skills often exceed those of workers with advanced degrees but “soft” skills in the humanities or social sciences.

For example, architects holding a bachelor’s degree (the typical education level for most architects) on average earn nearly 42% more than librarians holding a master’s degree (the typical education level for this field).

Similarly, a 1999 study found that individuals with associate degrees in technical or occupation-oriented fields frequently earned more than those holding a “soft” bachelor’s degree.

Indeed, individuals with “soft” bachelor’s degrees often turn to community college voca-

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2002 Median Weekly Earnings of Full-time Workers Over 25

Educational Attainment	1st Decile	Median	9th Decile
High school graduates	\$295	\$538	\$1,026
Some college/associate degree	\$333	\$631	\$1,219
Bachelor’s degree	\$444	\$879	\$1,787

Source: Bureau of Labor Statistics

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tional programs to gain technical credentials and better-paying jobs.

This link between higher wages and the “hard” skills is unquestionably a significant factor behind the success of apprenticeships like the NECA-IBEW program, which focus on highly skilled technical fields rarely covered by formal college curricula.

So too is the fact that many graduates of our apprenticeship programs enter the job market with salaries equal to or greater than college graduates.

Personal and Professional Satisfaction

Upon graduation, most NECA-IBEW apprentices enter the job market as journeymen earning \$40,000 to \$70,000, depending on local wage rates.

By comparison, a National Association of Colleges and Employers survey in the spring of 2004 put the average starting salary of liberal arts grads at \$29,000, business administration majors at \$38,000, and chemical engineer grads at \$52,000.

Regardless of wages, the appeal of an apprenticeship is often the direct applicability of professional training to real-world situations. Some experts believe hands-on relevance is a factor behind greater retention rates in apprenticeships over traditional bachelor-degree programs.

Less than half of all students entering four-year colleges or universities actually graduate. By comparison, the NJATC’s five-year apprenticeship for commercial-industrial electricians consistently boasts graduation rates over 80%.

In short, the continued success of the NECA-IBEW program in providing individuals with outstanding skills training, educational benefits, pay and career opportunities is testimony to the significant rewards of a modern-day apprenticeship...and the recognized expertise and industry leadership of NECA-IBEW. ■

Callanan is the executive director of the National Joint Apprenticeship and Training Committee (NJATC) of the organized electrical construction industry.

We Offer College Credit and Degree Programs

Apprentices and journeyman can gain college credits for completed NJATC course work. Further, they can apply the credits toward two- and four-year degrees. A brief overview of these programs follows.

College Credits

ACE Credits. ACE credits are equivalent to semester-hour credits. They can be earned by completing NJATC training courses. Approximately 1,700 colleges and universities accept ACE credits.

Completion of the inside wireman apprenticeship program is worth up to 55 semester credit hours, the telecom/IT systems program up to 37 credit hours, the lineman program up to 25 credit hours, and the residential electrician program up to 17 credit hours. NJATC’s Technical Math Course is worth another three credit hours.

Apprentices accrue credit hours for specific courses they complete. They receive the credits when they are accepted in an accredited degree or certificate program.

Associate Degree Programs

Local College Links. About 120 local JATC training centers have agreements with community colleges allowing apprenticeship courses to be credited toward an associate’s degree, usually in construction technology or construction management. Most programs require apprentices to complete general education courses—in addition to the apprenticeship courses—in order to receive an associate’s degree.

Online Degree. Working with the NJATC, Pellissippi State Technical Community College offers an Internet-based program that allows apprentices to receive Associate of Applied Science (AAS) or Associate of Science (AS) degrees.

Pellissippi, in Knoxville, Tenn., will apply ACE and other college credits toward the 65 credits required for graduation, but at least 20 hours must be acquired through Pellissippi. Participants must meet Pellissippi’s basic admission requirements prior to enrollment. Online students are considered out-of-state unless they reside in Tennessee.

Bachelor’s Degree Programs

Online Degree—Construction Management. Middle Tennessee State University (MTSU) and the NJATC offer Bachelor’s of Science degrees in construction management. MTSU officials base program placement on associate degree status, ACE credits, other college credits, and the work experience of any NJATC apprentice or journeyman.

Of the 132 semester hours required for the degree, only 33 hours must be taken through MTSU. Students not residing in Tennessee are considered out-of-state, although fee reductions may be available to residents of certain Southeastern states.

Online Degree—Human Resource Development. Bachelor’s degrees in human resource development are available through the NJATC and University of Tennessee (UT) in Knoxville. This option is for NECA-IBEW members interested in the education and training side of electrical construction.

Although UT doesn’t recognize ACE credits, the university may award up to 30 semester hours for relevant life/work experience. Before admission, students must complete 54 semester hours from an accredited post-secondary institution. Overall, the online degree requires 30 semester hours be taken through UT; at least nine hours per academic year. Two courses require one-week sessions on the UT-Knoxville campus.