The National Institute for Innovation and Technology

Fact Sheet

Overview of National Apprenticeship Week (NAW)

National Apprenticeship Week (NAW) is a nationwide celebration that showcases the successes and value of Registered Apprenticeships. Celebrating its 9th year from November 13-19, 2023, NAW is instrumental in promoting high quality jobs, advancing racial and gender equity, and supporting underserved communities.

Registered Apprenticeships: SUPERHIGHWAY to Good Jobs

This year’s theme, “Registered Apprenticeship: Superhighway to Good Jobs,” emphasizes the importance of apprenticeships in rebuilding our economy and improving diversity, equity, inclusion, and accessibility (DEIA) in the workplace. Registered Apprenticeships are recognized as a key strategy to improving job quality and creating access to good-paying jobs for all, including populations historically underrepresented – women, people of color, and individuals with a disability – and underserved populations, such as youth and young adults.

State of the Semiconductor Industry

The semiconductor industry, a linchpin of modern technology, is poised for significant growth, with projections indicating a market value of $1,380.79 billion by 2029.1 Directly employing over 345,000 domestic workers, the semiconductor sector’s influence extends beyond its immediate realm, supporting over 2.3 million U.S. jobs in 2022.2

But a looming skilled workforce shortage threatens this momentum. With the U.S. chip industry’s workforce projected to grow by nearly 115,000 jobs by 2030, there’s an urgent call to action to bridge the potential gap of 67,000 unfilled positions, emphasizing the critical need for skilled workforce development in the sector.3

To meet the growing demand and address the talent shortage, Registered Apprenticeships and related programs offer a clear pathway to getting more workers into key industries like semiconductor and advanced manufacturing.
$500 Billion
There was a worldwide revenue loss of $500 billion due to the shortage of semiconductor chips from 2020-2022.¹

10%
The market share of US semiconductor manufacturing capacity has decreased by more than 10%.³

10.7%
Only 10.7% of engineers in semiconductors are women, highlighting a gender disparity in the industry.⁵

2.3 Million
The U.S. semiconductor industry supported over 2.3 million U.S. jobs in 2022.⁶
Who is NIIT?
The National Institute for Innovation and Technology (NIIT) is a non-profit organization dedicated to eliminating roadblocks to innovation in strategic industry sectors. With a mission to identify these roadblocks in sectors crucial to the nation’s security and global competitiveness, NIIT has taken a keen interest in talent pipeline development. Through comprehensive industry engagement, NIIT is leading the deployment of a national strategy and infrastructure to broaden and build the talent pipeline for the semiconductor industry and strategic industry sectors.

NIIT’s Role with Registered Apprenticeships
NIIT is at the forefront of executing a national strategy to expand the U.S. talent pipeline in semiconductor and advanced manufacturing through Registered Apprenticeships. This includes:

- Ensuring the K-12 system provides a skills-based experiential learning pathway to careers.
- Scaling a system for real-time curriculum alignment with job requirements.
- Building strategic partnerships with key companies to create “learn-and-earn” Registered Apprenticeship programs.
- Creating a national network of community colleges for Registered Apprenticeships and career advancement.
- Launching innovative programs like The National Talent Hub, the G.A.I.N.S Program, and the VetConnect & Veterans Fellowship Program.

Why Registered Apprenticeships Work
Registered Apprenticeships (RAs) have long been recognized as a powerful tool for workforce development, offering a unique blend of classroom instruction and hands-on training. Here’s why they are particularly effective:

**Earn While You Learn:** One of the standout features of RAs is the ability for apprentices to earn a salary while gaining valuable on-the-job training. This model reduces the financial strain often associated with traditional education pathways and makes career advancement more accessible.

**Industry-Driven Training:** RAs are tailored to meet the specific needs of industries. This ensures that apprentices are equipped with the precise skills employers are looking for, increasing their employability and value in the job market.

**Improved Retention Rates:** Studies have shown that employees who undergo apprenticeship programs are more likely to stay with their employers long-term. This is not only beneficial for the employee’s career progression but also reduces turnover costs for businesses.

**Bridging the Skills Gap:** With the rapid evolution of industries, there’s a growing gap between the skills job seekers have and the skills employers need. RAs provide a solution by offering targeted training that evolves with industry demands.

**Promoting Diversity and Inclusion:** RAs offer an avenue to promote diversity in the workforce. By targeting historically underrepresented groups, such as women, people of color, and individuals with disabilities, RAs can drive equity in employment opportunities.

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Economic Benefits: Beyond individual benefits, RAs contribute to the broader economy. By equipping workers with in-demand skills, they help drive productivity, innovation, and economic growth.

Strengthening Community Ties: Local businesses, educational institutions, and community organizations often collaborate in the design and delivery of RAs. This strengthens community ties and ensures that training programs are aligned with local needs and opportunities.

In the context of the semiconductor industry and other tech-driven sectors, RAs can play a pivotal role in addressing workforce shortages and ensuring the U.S. remains at the forefront of technological innovation. The success stories from apprenticeships, both in traditional trades and emerging industries, underscore their potential as a transformative force in workforce development.

NIIT’s Commitment to National Apprenticeship Week

NIIT is proud to support NAW, recognizing the value of apprenticeships in building a skilled workforce for the future. By aligning with NAW’s mission, NIIT reinforces its commitment to fostering innovation, promoting equity, and ensuring the U.S. remains at the forefront of the semiconductor industry. Join us in celebrating the potential of apprenticeships to transform lives and industries.

References

7. Apprenticeships are an overlooked solution for creating more access to quality jobs, https://www.brookings.edu/articles/apprenticeships-are-an-overlooked-solution-for-creating-more-access-to-quality-jobs/

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