



Center For  
**ENERGY**   
Workforce Development  
Industry Solutions—Regional Implementation

# Credentialing in the Energy Industry

Valerie Taylor, Educational Consultant



### Tier 6-8 – Occupation-Specific Competencies

Lineworker	Substation Technician	Engineering Technician	Relay Technician	Natural Gas Technology
Plant Operator	Electrical Technician	Mechanical Technician	Instrument & Control Technician	Alternate Fuel Technicians

### Tier 5 – Industry-Specific Technical Competencies

Non-Nuclear Generation (Coal, Natural Gas, Oil, Hydro, Solar, Wind, Biofuel, Geothermal)	Nuclear Generation	Electric Transmission & Distribution	Gas Transmission & Distribution
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### Tier 4 – Industry-Wide Technical Competencies

Safety Awareness	Industry Principles & Concepts	Environmental Laws & Regulations	Quality Control & Continuous Improvement	Troubleshooting
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### Tier 3 – Workplace Competencies

Business Fundamentals	Teamwork	Following Directions	Planning, Organizing & Scheduling	Problem Solving Decision Making	Ethics	Employability & Entrepreneurship Skills	Working with Basic Hand & Power Tools & Technology
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### Tier 2 – Academic Competencies

Mathematics	Locating, Reading & Using Information	Writing	Listening	Speaking	Engineering & Technology	Critical & Analytical Thinking	Science	Information Technology
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### Tier 1 – Personal Effectiveness Competencies

Interpersonal Skills	Integrity	Professionalism	Reputation	Motivation	Dependability & Reliability	Self-Development	Flexibility & Adaptability	Ability To Learn
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## Tier 6–8 Job Specific Skills/Credentials

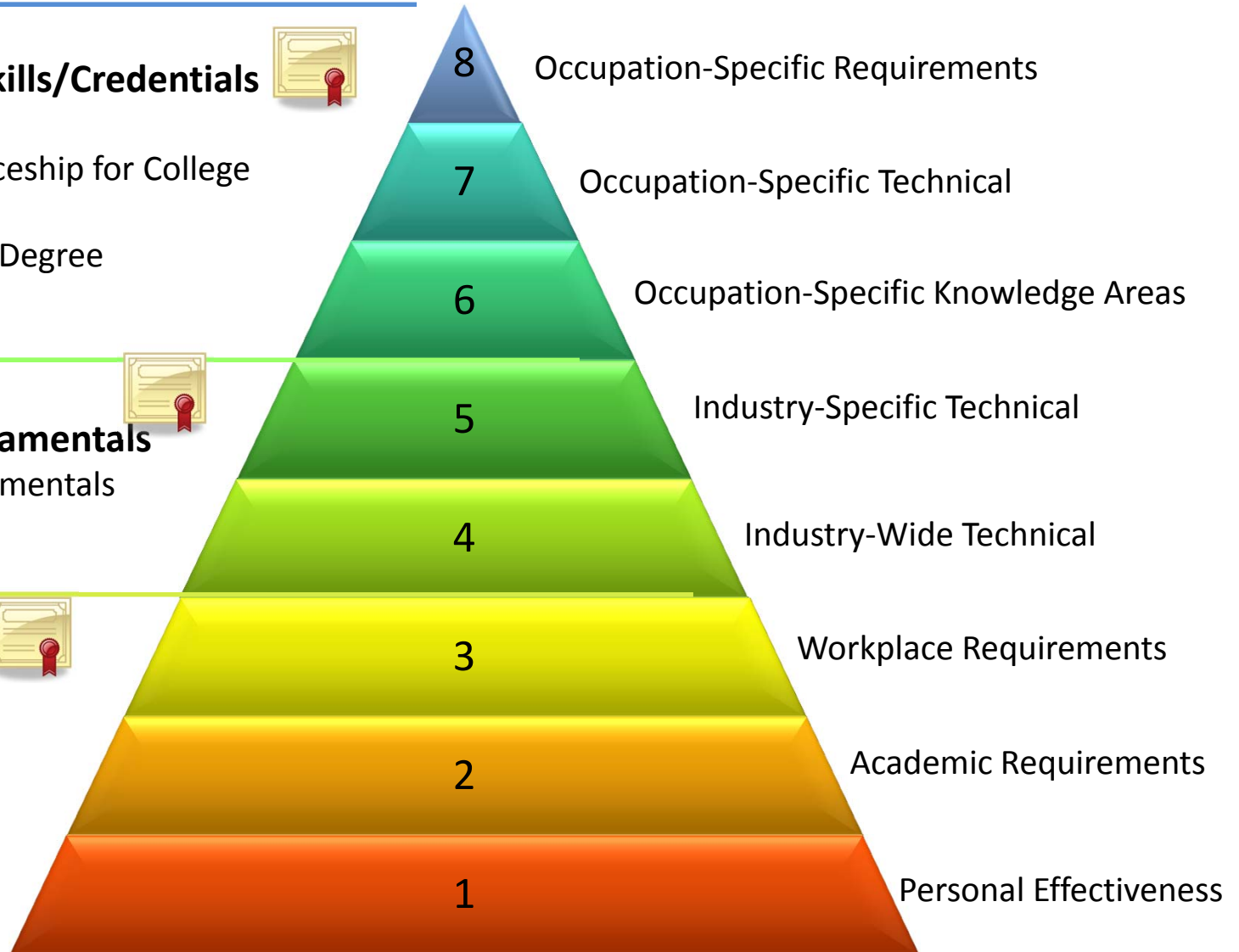
- Associate Degree
- Boot Camp / Apprenticeship for College Credit
- Accelerated Associate Degree

## Tier 4–5 Industry Fundamentals

- Energy Industry Fundamentals Certificate

## Tier 1–3 Basic Training

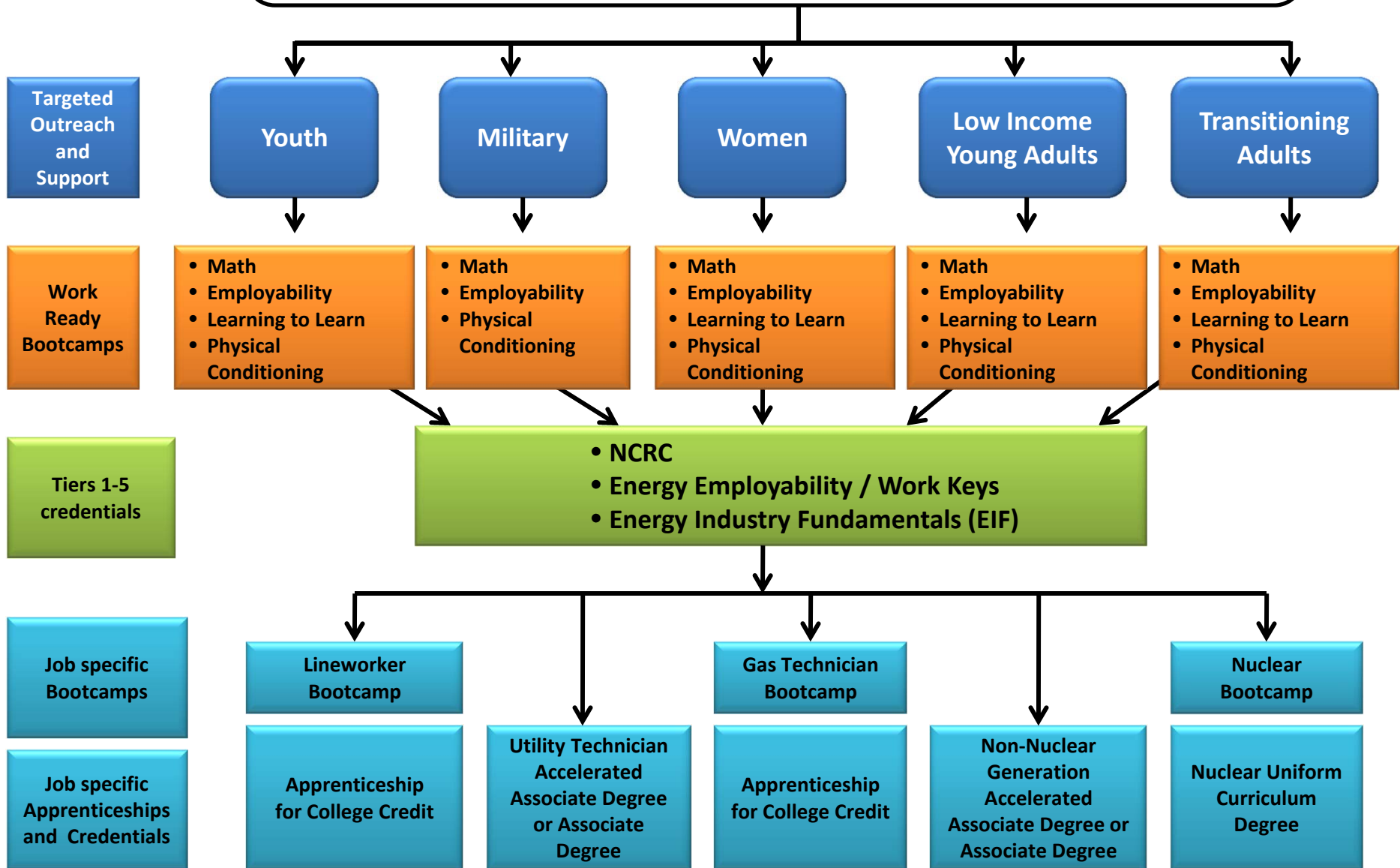
- Energy Industry Employability Skills Certificate
- National Career Readiness Certificate



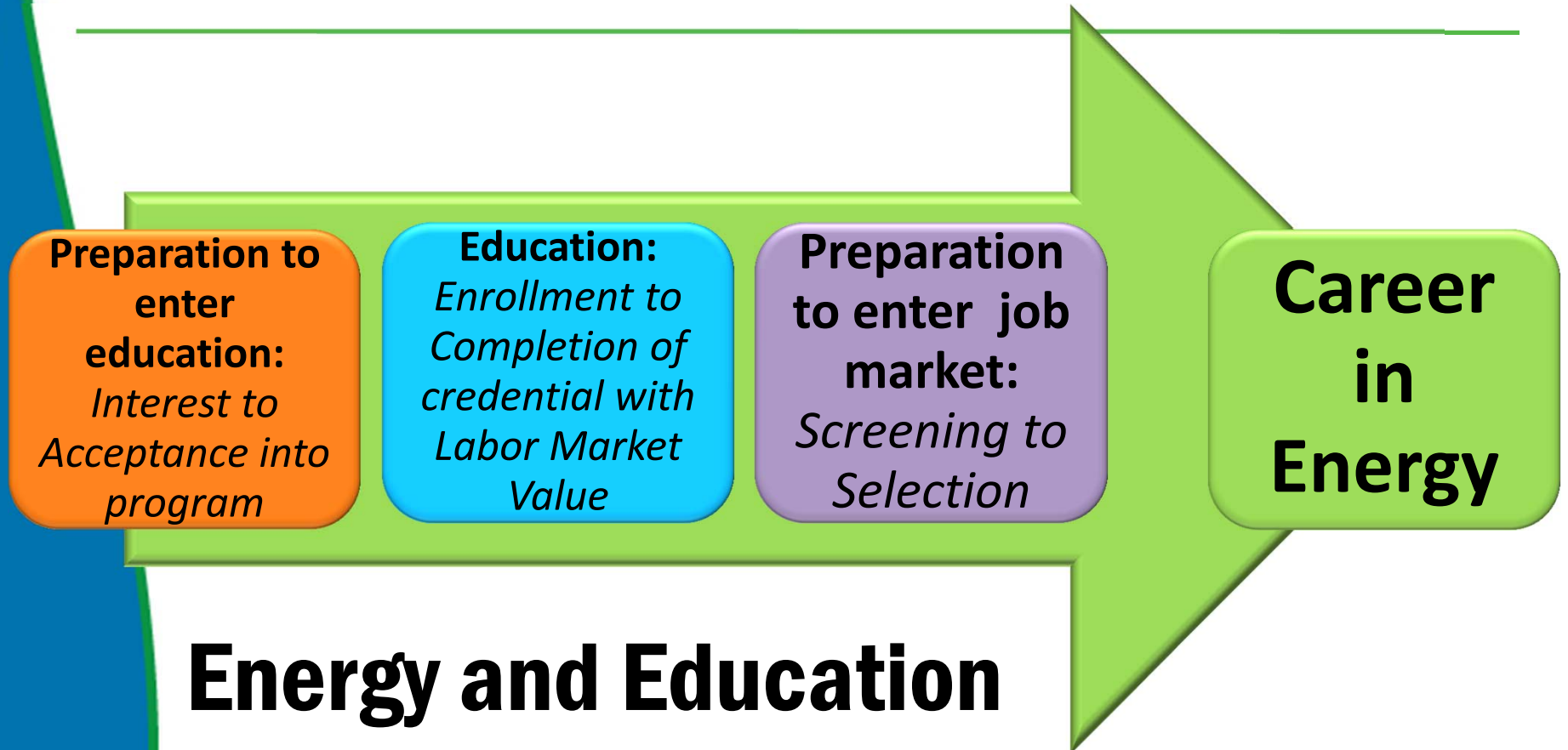
Energy Competency Tier Model for Skilled Technician Positions in Energy Efficiency, Energy Generation and Energy Transmission and Distribution



# Career Pathways



# Student Path to Success



## Energy and Education Partnerships

# Preparation to enter education:

## Work Ready Bootcamps - Front Loading for Success

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- Math
- Employability
- Learning to Learn
- Physical Conditioning

- Short Term solutions to build individual needs
- Prepare and succeed, not fail and remediate

# Education

## Tiers 1-5 Credentials – the foundation

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- National Career Readiness Certificate
- Energy Employability / Work Keys
- Energy Industry Fundamentals (EIF)

- NCRC and Energy Employability assess ability to begin training; testing the levels for success through pilots
- EIF curriculum now available
- ANSI accredited certificate available to approved providers

# Why an Energy Industry Fundamentals Certificate?

There is no other credential that ensures potential workers have an understanding of the industry as a whole.

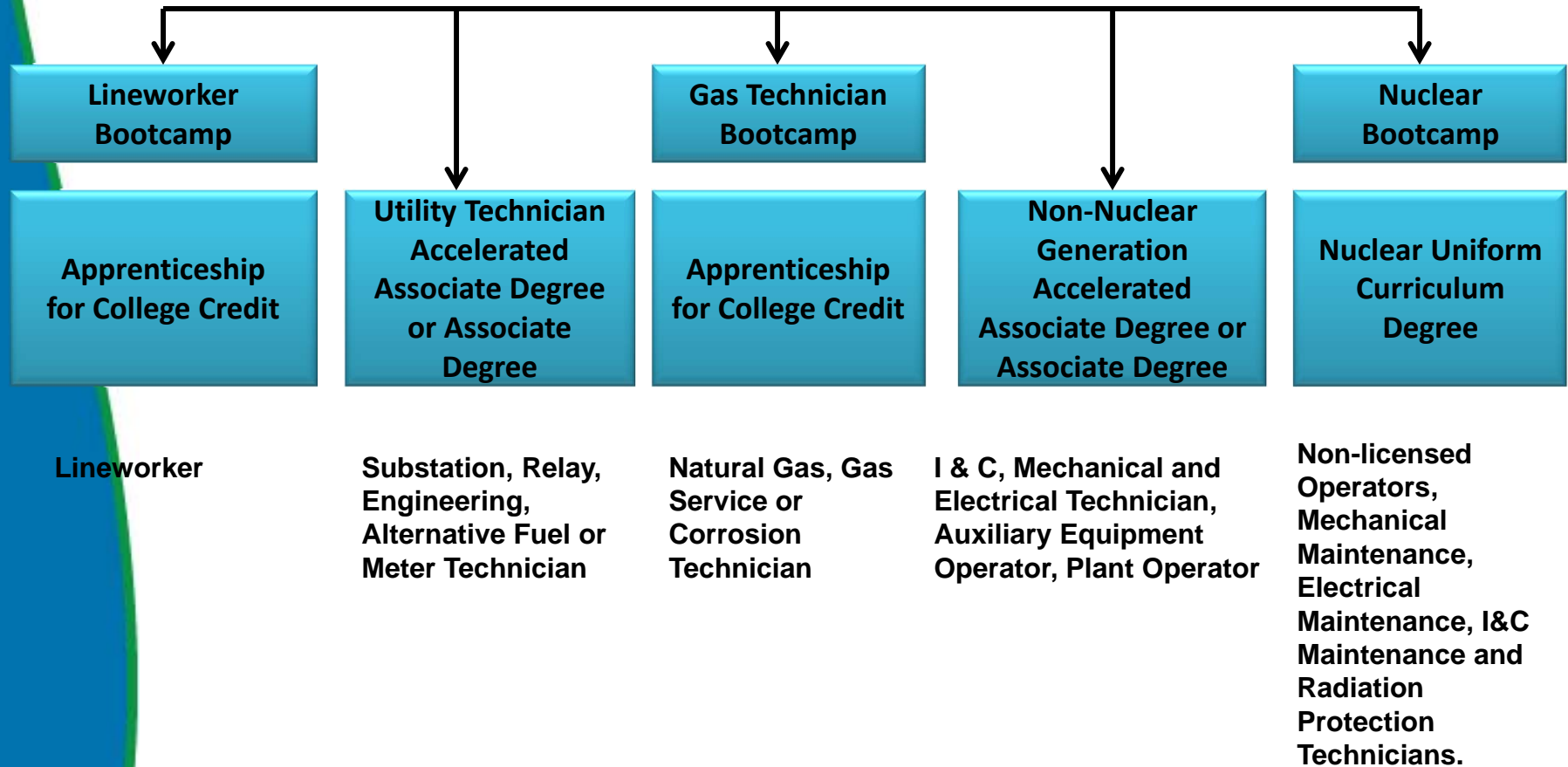
- This training/credential helps make occupation-specific training more meaningful, and
- Enables students to understand how individual companies and jobs fit into the big picture.





# Education

## Tiers 6-8 Credentials – Job Specific

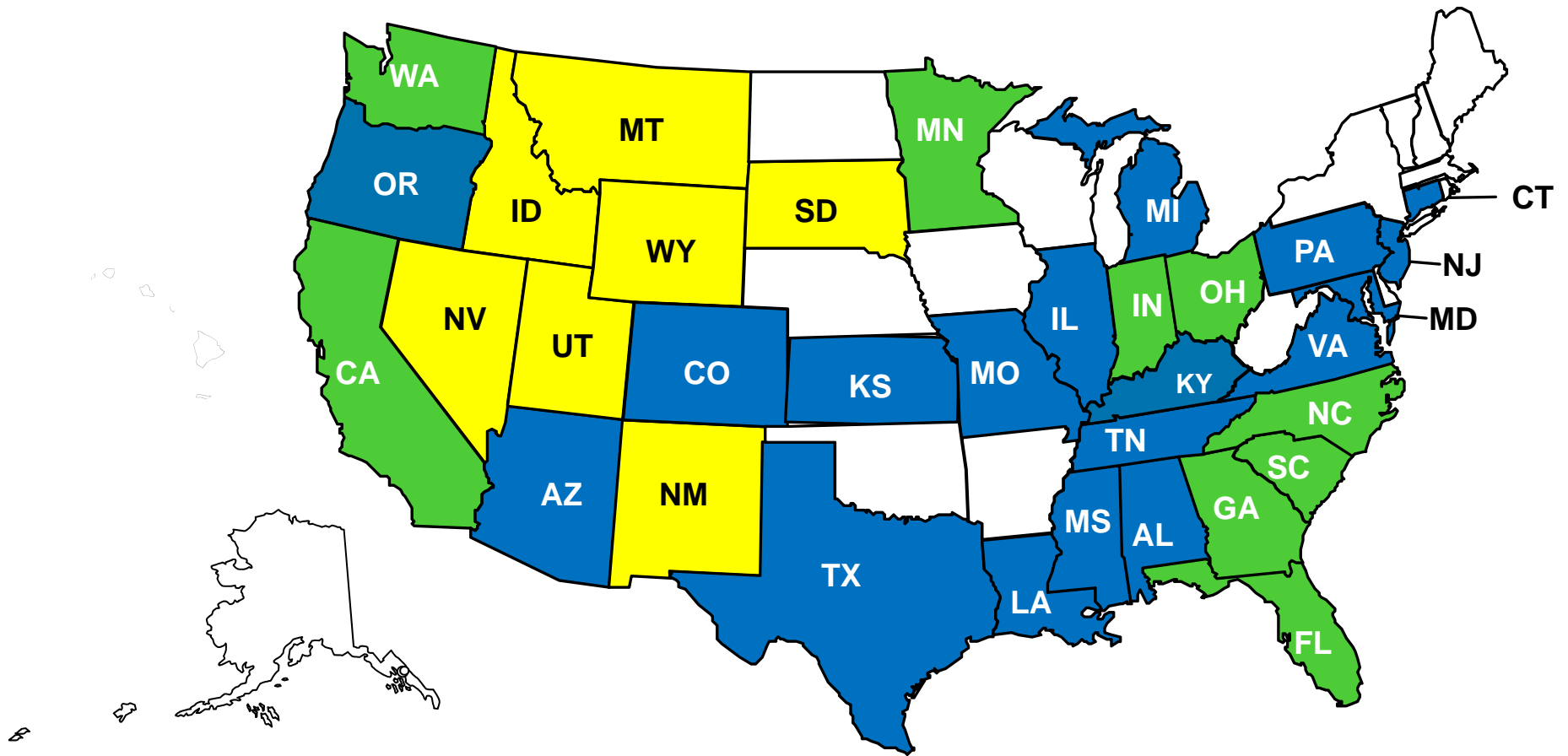


# What's next?

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- Integration of military credentials
- Prior learning credit for military training
- Lineworker and apprenticeship credit recommendations from ACE
- Articulation framework for pathways
- State Energy Career Clusters for Energy Programs of Study

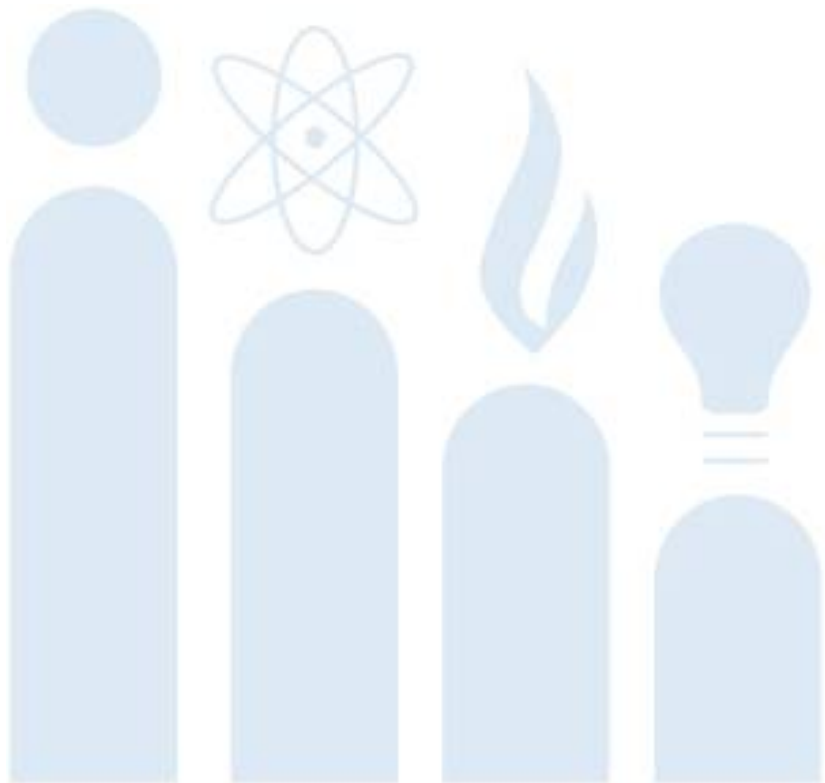
# State Energy Workforce Consortia



GIECP Pilot States  Existing Consortium  Planned Consortium

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