

**THE OHIO STATE UNIVERSITY**

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**Knowledge and Skills for  
the 21st Century Workforce**

APPA, July 2019  
Desiree Weber, Traci Lepicki, Beth Crawford

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<p>Certificates of Completion for both AIA members and non-AIA members are available upon request.</p>	
<p>Questions related to specific materials, methods, and services will be addressed at the conclusion of this presentation.</p>	




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**Course Description**

What knowledge and skills do facilities professionals need in the 21<sup>st</sup> century? Join us to discuss how to analyze institutional needs to create a custom skilled trades training program, featuring career pathways to support skill enhancement and career advancement. We will offer considerations for managing resources and work schedules to support program participation. We will present strategies to align curriculum and assessments with the critical knowledge and skills. And, we will share how we are utilizing classroom, lab, and on-the-job learning to invest in our employees—attracting and retaining talent.




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THE STATE BOARD OF TECHNICAL EDUCATION

### Learning Objectives

Participants will know and be able to:

- Identify the resource commitment required to build a skilled trades training program
- Identify existing resources that will help build a skilled trades training program at their institution
- Analyze their institution's needs (e.g., skills, knowledge) to select and develop curriculum for their skilled trades training program
- Identify how to align the training program with their work schedules



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# Context and Need

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THE STATE BOARD OF TECHNICAL EDUCATION



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THE STATE OF OHIO  
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### Efficiency

- Multi-skilled workforce
- Decrease expenses
- Increase customer satisfaction

### Strategic Efforts

- Consistency
- Competitive pay
- Aging workforce
- Attract and retain talent
- Remain vendor of choice for OSU



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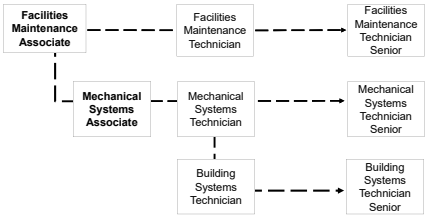
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THE STATE OF OHIO  
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### Career Pathways



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graph LR; FMA[Facilities Maintenance Associate] -.-> FMT[Facilities Maintenance Technician]; FMA -.-> MSA[Mechanical Systems Associate]; FMA -.-> FMTS[Facilities Maintenance Technician Senior]; MSA -.-> MST[Mechanical Systems Technician]; MSA -.-> MSTS[Mechanical Systems Technician Senior]; MST -.-> BST[Building Systems Technician]; MST -.-> BSTS[Building Systems Technician Senior];
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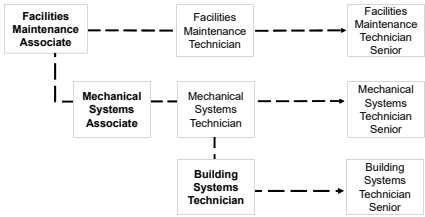
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THE STATE OF OHIO  
UNIVERSITY SYSTEM

### Career Pathways



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graph LR; FMA[Facilities Maintenance Associate] -.-> FMT[Facilities Maintenance Technician]; FMA -.-> MSA[Mechanical Systems Associate]; FMA -.-> FMTS[Facilities Maintenance Technician Senior]; MSA -.-> MST[Mechanical Systems Technician]; MSA -.-> MSTS[Mechanical Systems Technician Senior]; MST -.-> BST[Building Systems Technician]; MST -.-> BSTS[Building Systems Technician Senior];
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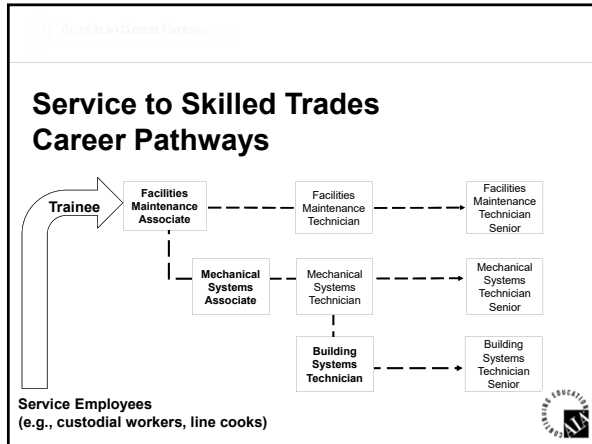
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# Program Planning and Analysis

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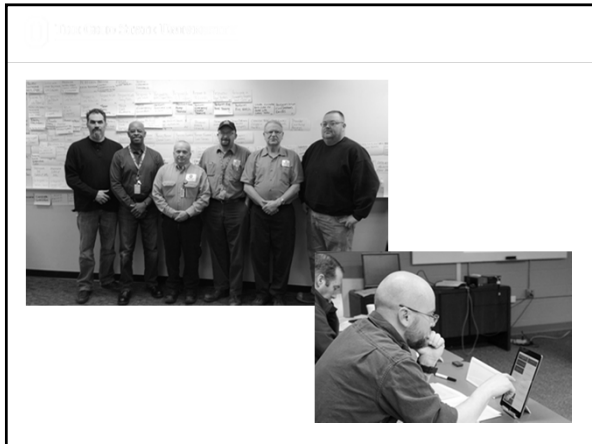
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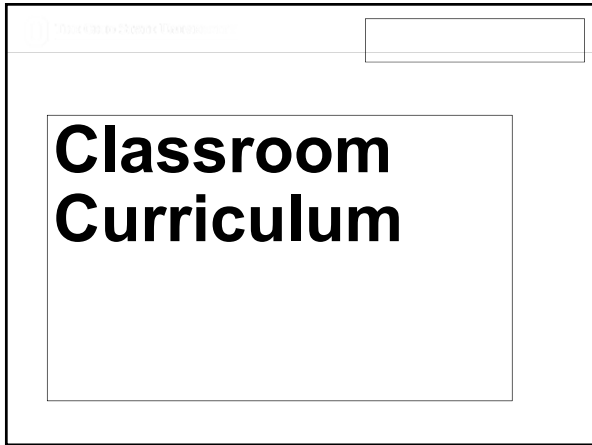
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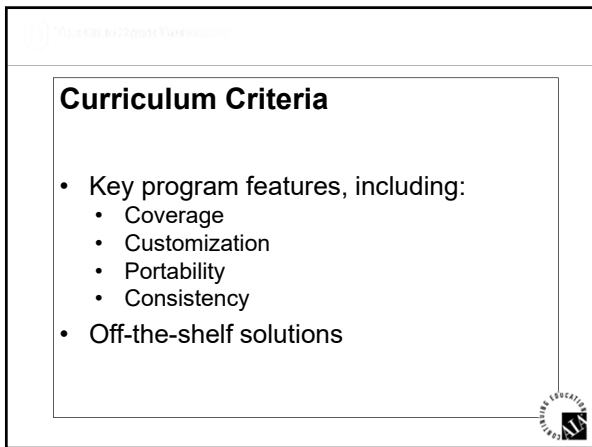
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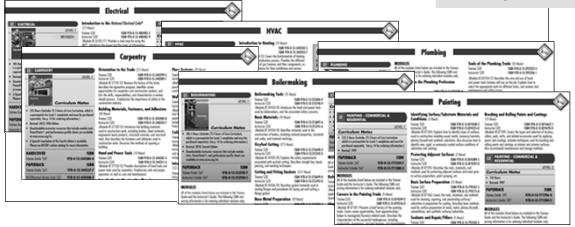
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THE NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH

## Curriculum Selection

National Center for Construction Education and Research


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THE NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH

## Work-Based Learning

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THE NATIONAL CENTER FOR CONSTRUCTION EDUCATION AND RESEARCH

## On-the-Job-Training (OJT) Criteria

To create a simple approach which includes:

- Focusing on key, important job tasks
- Customizing for unit/site-specific procedures and equipment
- Allowing for hands-on practice and experience
- Providing real-time, teachable moments for questions, feedback, and correction
- Reinforcing learning from classroom and lab settings
- Minimizing job disruptions (not impeding operations)




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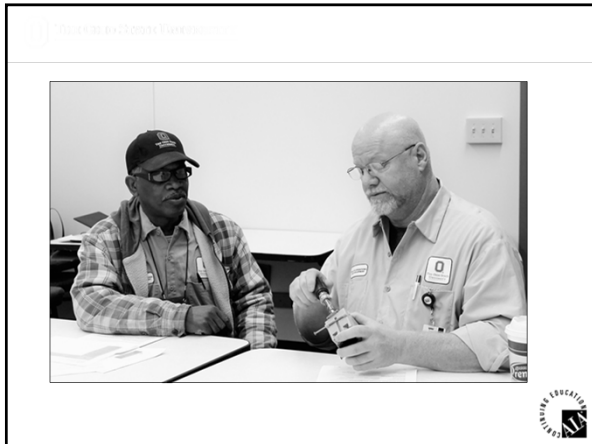
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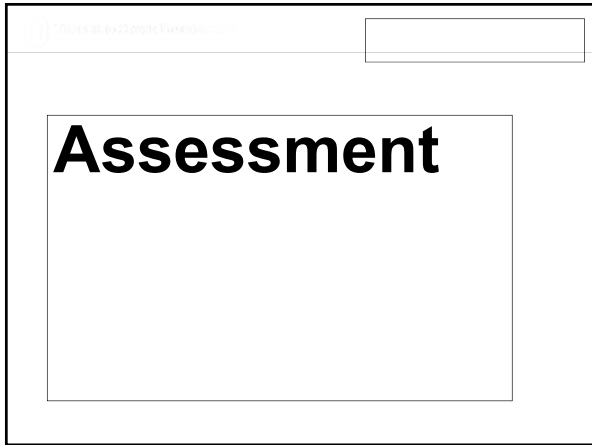
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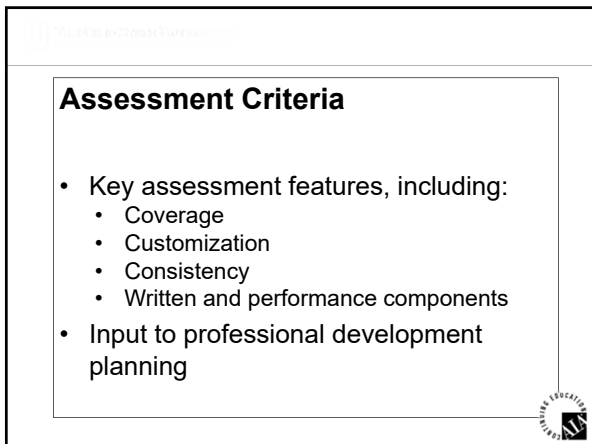
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Professional Development

### Assessment Development

- Utilizing subject matter experts
  - Create items
  - Review and validate items
  - Set cut scores
  - Develop scenarios
  - Refine steps



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Professional Development

### Assessment Administration



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Professional Development

### Assessment Results

- Sharing results with employees
- Impacting employee positions
- Informing professional development plans



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THE STATE OF TEXAS  
DEPARTMENT OF EDUCATION

# Program Implementation

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THE STATE OF TEXAS  
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## Implementation Considerations

- Communication and collaboration
- Tracking and reporting
- Scheduling and logistics
  - Training locations
  - Work schedules
  - Transportation



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THE STATE OF TEXAS  
DEPARTMENT OF EDUCATION

## QUESTIONS?



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THE AMERICAN INSTITUTE OF ARCHITECTS

This concludes The American Institute of Architects Continuing Education Systems Course.



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