Assessment: Program Assessment Plan

Program (CTE) - Industrial Millwright Technology CRT

Unit Mission: Technical training is taught in mechanical operations, fluid power, industrial pumps, preventive predictive maintenance, precision shaft alignment, electrical theory, welding processes, and all safety standards for tools and equipment in the work place. Upon successful completion of the program, the student will possess the skills necessary to be able to diagnose and repair mechanical, electrical, and liquid and air handling systems. These are common systems found in most industrial, agricultural, mining, construction, and service industries that use machinery to produce a product or service. Other employment opportunities for graduates of this program can include steel mills, paper mills, mining operations, gravel quarries, universities, schools, textile mills, food processing plants, automotive plants, ship yards, power plants, hospitals, aerospace industry facilities, and office complexes.

Outcome: Think critically to solve workplace problems

Think critically to solve workplace problems.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Written - IT 220 Alignment Principles (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Laser Alignment Module 15502.

Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Blueprint and drawing interpretation

Read and interpret standard blueprints and drawings of industrial equipment.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Written - IT 201 Blueprint Reading and Measurement Fundamentals (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Introduction to Construction Drawings Module 00105.

Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Align shafts using laser and dial indicator methods of

Program (CTE) - Industrial Millwright Technology CRT

alignment

Align shafts using laser and dial indicator methods of alignment.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Written - IT 220 Alignment Principles (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Laser Alignment Module 15502.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Perform troubleshooting and maintenance

Perform troubleshooting and maintenance of fluid handling pumps, industrial gear trains and drives, and material handling systems.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Written - IT 210 Failure Analysis and Predictive/ Preventive Maintenance (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Troubleshooting and Repairing pumps module 15405.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Fluid and air handling systems

Rebuild and replace components in fluid and air handling systems.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Written - IT 103 Industrial Pump Technology (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Pumps Module 15404.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Bearing and seal replacement

Replace bearings and seals in a non-destructive manner.

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Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Project - IT 105 Mechanical Power Transmission (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Troubleshooting and Repairing Gearboxes Module 15411.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Basic electrical theory and safety

Understand and apply basic electrical theory and safety on single and three phase power equipment.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Project - IT 214 Basic Electrical Theory for Industrial Technicians (Active)

Criterion: 80% of students will pass a written assessment final on the electrical chapters 1,2,5,9 and 10, with a 65% or higher.
Notes: This assessment is not an NCCER assessment.

Outcome: Industrial equipment failure

Identify failure causes in industrial equipment using vibration analysis and the root cause analysis tree.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Project - IT 210 Failure Analysis and Predictive/ Preventive Maintenance (Active)

Criterion: All students will pass a written assessment with a 70% or higher and pass a performance assessment with 100% in Troubleshooting and Repairing Conveyors Module 15402.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Identify metals according to standard metallurgical tests

Identify metals according to standard metallurgical tests.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Program (CTE) - Industrial Millwright Technology CRT

Assignment - Project - IT 216 Basic Metallurgy (Active)

Criterion: All students will pass a written assessment of Metallurgy, Chapter 3, with a 65% or higher.
Notes: This assessment is not an NCCER assessment

Outcome: Fabrication and layout of equipment in industrial settings

Fabrication and layout of equipment in industrial settings.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Project - IT 201 Blueprint Reading and Measurement Fundamentals (Active)

Criterion: 80% of students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Setting Baseplates and Soleplates Module 15207.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).

Outcome: Perform safely in the work environment, meeting and obeying all workplace safety requirements

Perform safely in the work environment, meeting and obeying all workplace safety requirements.

Outcome Status: Active
Assessment Year: 2015-2016
Start Date: 01/25/2016

Assessment Measures

Assignment - Project - IT 106 Millwright and Process Terminology (Active)

Criterion: All students will pass a written assessment with a 70% or higher and pass a performance assessment with 100%, in Safety and Hazard Recognition.
Notes: All written and performance assessments are national standards through National Center for Construction and Educational Research (NCCER).