## Architecture and Construction

Pathway: Maintenance/Operations

| Code | Topic | Course | Knowledge and Skill | Performance Element | Measurement Criteria |
|---|---|---|---|---|---|
| ACPC01.01 | Communications | #2: The Language of Architecture and Construction | Recognize universal signs and symbols such as colors, flags, stakes and hand signals to function safely in the workplace. | Identify universal signs and symbols to apply to given workplace situations. | Explain functions of signs and symbols. |
| | | | | | Work safely using signs and symbols. |
| | | | | | Inspect all signs and symbols for safe and proper use. |
| | | | | | Use proper signs and signals for the work area. |
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| ACPC02.01 | Problem-Solving and Critical Thinking | #7: Basic Troubleshooting Procedures | Use troubleshooting procedures to solve a maintenance problem. | Troubleshoot to isolate a maintenance problem. | Identify the problem using at least one appropriate troubleshooting method. |
| | | | | Select a solution to address the maintenance problem. | Identify strategies for implementing the solution. |
| | | | | | Identify tools and equipment needed. |
| | | | | Use strategies, tools and equipment to implement the solution. | Use tools and equipment safely, effectively and efficiently. |
| | | | | | Test and verify that the problem is solved. |
| | | | | | |
| ACPC03.01 | Technical | #8: Restoration and Repair of Existing Structures | Apply construction skills to restoration of existing structures. | Evaluate restoration problems to plan solutions. | Identify strategies for implementing solutions. |
| | | | | Determine materials required to complete restoration. | Match materials selected to the restoration specifications. |
| | | | | Implement restoration strategies to produce restored structure. | Restore structure to match original structure within specifications. |
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| ACPC03.02 | Technical | #8: Restoration and Repair of Existing Structures<br>#9: Technical Applications of Maintenance and Operations | Evaluate the work required to repair existing structures. | Use evaluation strategies to assess the extent and condition of any problems. | Identify potential sources of problems. |
| | | | | | Select the most probable cause of each problem. |

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| | | | (CONTINUED) | Identify tools, materials and human resources needed to complete the repair work. | Select tools and materials that will repair the problem effectively and efficiently. |
| | | | | | Employ individuals with the appropriate expertise to complete the repair work. |
| | | | | Complete the repair work to restore project to the original condition. | Use tools and materials safely, effectively and efficiently. |
| | | | | | Test and verify that the repair is complete. |
| | | | | | |
| ACPC03.03 | Technical | #9: Technical Applications of Maintenance and Operations | Practice preventative maintenance to service existing structures. | Develop a checklist to track preventative maintenance. | Read and interpret technical manuals. |
| | | | | | Identify preventative maintenance needs for a variety of conditions. |
| | | | | | List maintenance needs for a variety of equipment, systems and structures. |
| | | | | Identify tools and materials needed to perform preventative maintenance. | Select and use tools and materials safely, effectively and efficiently. |
| | | | | Establish time-based schedules to perform preventative maintenance. | Follow a maintenance schedule. |
| | | | | | Complete and maintain preventative maintenance records. |
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| ACPC03.04 | Technical | #9: Technical Applications of Maintenance and Operations | Maintain and use operational systems to achieve smooth operation of facilities. | Maintain operations systems such as fire prevention, HVAC, security/alarm, environmental and process systems to meet safety and customer requirements. | Read and interpret technical manuals. |
| | | | | | Apply information from technical manuals. |

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