

**Professional Technical Studies: Transportation, Distribution, & Logistics Cluster  
Facility & Mobile Equipment Maintenance Pathway**

Strand:

**PT-TDL1**

**Problem Solving and Critical Thinking**

Students use information technology to define, test, and solve problems.

Standard:

**PT-TDL1a:** The student will clarify the problems or issues to be addressed and the objectives so as to:

Components:

**PT-TDL1a.1:** identify constraints and parameters;

**PT-TDL1a.2:** obtain and analyze available information and statistical data;

**PT-TDL1a.3:** generate alternative ideas, proposals, and solutions that would solve the problem;

**PT-TDL1a.4:** evaluate alternative solutions;

**PT-TDL1a.5:** identify the best solution based on risks, costs, and benefits; and

**PT-TDL1a.6:** present the solution and the logic and the rationale for the solution.

Standard:

**PT-TDL1b:** The student will analyze and evaluate ideas, proposals, and solutions to the problem so as to:

Component:

**PT-TDL1b.1:** evaluate the quality of information used to support the solution; and

**PT-TDL1b.2:** evaluate the risks, costs, and benefits of testing and implementing the solution.

Standard:

**PT-TDL1c:** The student will develop solutions to performance problems using a structured problem-solving process so as to:

Components:

**PT-TDL1c.1:** describe the problem completely and accurately using data and graphs and charts;

**PT-TDL1c.2:** develop and present a comprehensive mapping of potential root and indirect causes (e.g., troubleshooting diagram);

**PT-TDL1c.3:** identify and evaluate alternative solutions;

**PT-TDL1c.4:** test, monitor, and evaluate best solutions; and

**PT-TDL1c.5:** develop plans to fully implement solutions to address performance problems.

Strand:

**PT-TDL2**

**Maintaining Facilities, Equipment, and Supplies**

Students use information technology to manage facilities, equipment, and supplies.

Standard:

**PT-TDL2a:** The student will develop and manage repair plans so as to:

Components:

**PT-TDL2a.1:** identify and describe automotive equipment reliability/performance problems;

**PT-TDL2a.2:** determine causes of reliability/performance problems of equipment, subsystems, and/or components including electrical/electronics, fluid power, and mechanical systems and computer-controlled systems;

**PT-TDL2a.3:** determine repair procedures and equipment, materials, parts, supplies, and labor requirements to accomplish repairs; and

**PT-TDL2a.4:** present and explain report/findings to customer.

Strand:

**PT-TDL3**

**Facility and Mobile Equipment Maintenance**

Students understand preventive maintenance and repair strategies.

Standard:

**PT-TDL3a:** The student will develop and manage preventative maintenance plans and systems so as to:

Components:

**PT-TDL3a.1:** develop and manage preventative maintenance plans and systems to meet business and equipment manufacturer requirements; and

**PT-TDL3a.2:** monitor and evaluate the performance of maintenance plans and systems.

Standard:

**PT-TDL3b:** The student will maintain and improve facilities, equipment, and system performance so as to:

Components:

**PT-TDL3b.1:** develop and manage repair plans; and

**PT-DCP3b.2:** develop plans for improving facilities/equipment/system performance.

Strand:

**PT-TDL4**

**Management of Sales and Service Operations**

Students use technology to manage sales and service operations,

Standard:

**PT-TDL4a:** The student will determine sales growth opportunities for new products and services so as to:

Components:

**PT-TDL4a.1:** analyze changing customer/market needs;

**PT-TDL4a.2:** evaluate competitor products/services and pricing strategies;

**PT-TDL4a.3:** determine future demand for potential products and services; and

**PT-TDL4a.4:** identify most promising products and services.

Standard:

**PT-TDL4b:** The student will sell transportation services so as to:

Components:

**PT-TDL4b.1:** establish customer relationship;

**PT-TDL4b.2:** determine customer needs;

**PT-TDL4b.3:** describe and explain alternative products, services, and pricing;

**PT-TDL4b.4:** assist customer in making decisions;

**PT-TDL4b.5:** close customer sale; and

**PT-TDL4a.6:** complete sales transaction.

Strand:

**PT-TDL5**

**Employability and Career Development**

Students use skills to plan career paths and pursue career opportunities.

Standard:

**PT-TDL5a:** The student will locate appropriate information on organizational policies in handbooks and manuals so as to:

Component:

**PT-TDL5a.1:** select the appropriate document(s) as referenced for the situation.

Standard:

**PT-TDL5b:** The student will demonstrate flexibility and willingness to learn new knowledge and skills so as to:

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- Components:
- PT-TDL5b.1:** display initiative and open-mindedness in accomplishing a work challenge; and
  - PT-TDL5b.2:** complete all tasks thoroughly and identify strategies for accomplishing job.