

## **WTCS Repository Program Design Summary & Curriculum Standards Model**

### **50-464-1 MAINTENANCE TECHNICIAN APPRENTICE**

#### **Program Information**

**Instructional Level** Technical Diploma & Apprenticeship

**Career Cluster** Manufacturing

**CIP Code** 47.0105

#### **Trade & Program Description**

The Maintenance Technician works on mechanical and electrical equipment and machines in paper mills, foundries, production mills, food processing, schools and hospitals. The mechanical would include installing equipment, repair and replace units, maintaining equipment and using machines such as lathes, drill presses and various hand tools. The electrical would include working with electrical drawings, troubleshooting electrical motors, AC and DC drives, PLC's (programmable logic controllers), and solid state devices.

#### **Target Population**

1. Cohort groups of apprentices from maintenance technician related trades.
2. Cross-training and skill development for electricians, millwrights, machine maintenance and related trades.

#### **External Requirements from Wisconsin DWD-BAS**

- Wisconsin Department of Workforce Development, Bureau of Apprenticeship Standards, Exhibit A Work Processes
- 5-year apprenticeship with 10 semesters of paid related instruction (or the equivalent) at 864 total hours
- Other requirements as set forth by the state apprenticeship advisory committee
- National Electrical Code, State electrical codes (DSPS), and other applicable industrial standards
- Transition to Trainer course in last year of the apprenticeship

#### **WTCS Maintenance Technician Apprenticeship Program Outcomes**

- 1 Apply AC and DC theory to an industrial setting
- 2 Apply the National Electric Code requirements to industrial equipment and facilities
- 3 Apply operational principles to transformers
- 4 Maintain electric motors and motor controls
- 5 Apply operational and troubleshooting principles to variable speed drives
- 6 Apply operational and troubleshooting principles to programmable logic controllers and automation equipment
- 7 Communicate trade and occupational related information effectively
- 8 Demonstrate proper rigging techniques
- 9 Select an appropriate power transmission system for a given application

- 10 Identify suitable pumps for given applications
- 11 Recommend bearings for given applications
- 12 Apply operational and troubleshooting principles to fluid power systems
- 13 Plan maintenance schedules for a given system

**Program Configuration Models for Related Instruction**

**50-464-1 WTCS Maintenance Technician Apprentice Related Instruction *Cohort Model* [2014-15]**

**Description**

This program configuration represents an aligned model for related instruction with class cohorts in the maintenance technician apprenticeship. The model outlines related instruction that comprises 5 years and 10 semesters (terms). It reflects a total of 864 hours of combined on-campus lecture, shop, and hands-on learning as required by the BAS apprenticeship training standards. This model reflects an accelerated first year from the industrial electrical program with 144 hours per semester in terms 1 and 2. Terms 3-10 are shown in a traditional format, and include course competencies from related instruction in both the industrial electrician and maintenance technician apprenticeship trades. Colleges implementing the accelerated first year would be finished in 5 years and 10 terms. Colleges not implementing the accelerated format may develop alternative program configurations involving a 3rd semester each year, or other approach to achieving 864 hours in 5 year apprenticeship.

The model also aligns WTCS learning outcomes with relevant industry/manufacturing standards as identified for the industrial electrician and maintenance trades in the BAS Maintenance Technician Job Book 2014. The model also aligns common and consistent course numbers that colleges may use across the WTCS in the future (along with recommended hours and credits). The curriculum model may be interpreted and implemented by the colleges as required to meet local needs.

**Credits & Hours**

1 - Occupation Specific 24.25 credits & 864 hours

2 - Occupation Supportive 0.00 credits for Transition to Trainer course

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**Total Credits 24.25 credits & 872 hours**

**Term 1**

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-750	<b>DC Electricity for Industrial Electricians</b>	2.00 72 hours	This course introduces the fundamental concepts of and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems. Competencies related to metering and safe use of measuring devices are included.
50-413-751	<b>AC Electricity for Industrial Electricians</b>	2.00	This course is designed to introduce

		72 hours	the industrial electrical apprentice to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems.
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## Term 2

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-773	<b>Safety &amp; Print Reading for Industrial Electricians</b>	0.50 18 hours	This course will acquaint the apprentice with the interpretation of "Prints" (blueprints) and other engineering and manufacturing documentation. The primary focus of the course will be on the basics of prints and how they are used to convey information to technicians. Application of electrical prints from industrial settings will be studied.
50-413-760	<b>Industrial Electrician Transformers</b>	1.00 36 hours	This course is designed to introduce the Industrial Electrician Apprentice to the basic concepts of single and three-phase transformers. The course will cover transformer theory, turns, current and voltage ratios as well as proper connections and use of various transformers.
50-413-761	<b>Industrial Electrician Motors &amp; Generators</b>	1.00 36 hours	This is the first course of 3 courses for industrial electrician apprentices to explore motor controls. This course introduces concepts, terminology, and safety. In addition, this is designed to give the Industrial Electrician Apprentice the knowledge required by industry to maintain electric motors and generators. This course material will cover DC motors and generators, single-phase and three-phase motors, as well as alternators.
50-413-752	<b>Codes for Industrial Electricians 1: Introduction to the NEC</b>	0.50 18 hours	This course introduces the apprentice to the layout and purpose of the National Electric Code. It also strives to teach the apprentice proper methodology to research a code question and correctly interpret what they are reading. Various examples in the textbook and activity sheets help guide the apprentice through this process. Apprentices will research the structure of the National Electric Code

			and define the requirements of the code that are common to all electrical installations. In addition, apprentices will examine the installation requirements for fire pumps, emergency systems and fire alarms. This is the first course module of 8 dealing with electrical codes applicable to the trade.
50-413-753	<b>Codes for Industrial Electricians 2: OCPD and Electrical Device Installations</b>	0.50 18 hours	In this module of Codes for Industrial Electricians, apprentices will learn how to plan for the installation of overcurrent protection devices and how to select the proper boxes, cabinets and conduits for industrial electrical installations as called for in the NEC and other electrical codes. This is the second of 8 course modules on the NEC.
50-413-756	<b>Codes for Industrial Electricians 5: Article 300, Cords/Cables, and Hazardous Installations</b>	0.50 18 hours	Course five of 8 examines article 300 of the NEC and wiring methods for industrial electrical applications. In addition, apprentices will determine sizing requirements for cords and cables for installations common to industrial facilities. Finally, the course will identify code requirements for equipment installations in hazardous locations.

### Term 3

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-762	<b>Industrial Electrician Motor Controls 1</b>	1.00 36 hours	This course will lead you through the fundamentals of electric motor control. You will learn to recognize and draw the basic symbols, the language of motor control, and how to apply these symbols, into current industrial format. You will also learn to draw and read ladder and wiring diagrams. You will be introduced to the logic used in motor control and be required to apply this logic in order to correctly interpret, design, and wire control circuits.
50-413-763	<b>Industrial Electrician Motor Controls 2</b>	1.00 36 hours	This is the second course of 3 and examines motor controls applicable to the industrial electrician trade.

**Term 4**

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-413-764	<b>Industrial Electrician Motor Controls 3</b>	1.00 36 hours	This is the third of three courses examining motor controls applicable to the industrial electrician trade. Applications and assessment activities are intended in this course.
50-413-754	<b>Codes for Industrial Electricians 3: Article 250 Part A</b>	0.50 18 hours	Course three of 8 examines the application of grounding to industrial electrical situations as required by the NEC and other electrical codes.
50-413-755	<b>Codes for Industrial Electricians 4: Article 250 Part B</b>	0.50 18 hours	Course four of 8 on the NEC continues to examine Article 250 and grounding applications for industrial electrical installations. Apprentices will complete their review of this portion of the NEC and examine additional related electrical codes in effect across Wisconsin.

**Term 5**

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-413-765	<b>Power Systems &amp; Variable Speed Drives for Industrial Electricians</b>	2.00 72 hours	This course provides the opportunity for students to learn about power systems and variable speed drives (VSD's). Topics include electricity, electronics, power transmissions, motor operations, AC and DC motor drives, servo and stepper drives, peripherals and communication. Apprentices will also explore closed loop control, feedback devices, and drive maintenance and the troubleshooting of VSD's. Course includes lab/shop and classroom lecture-lab hours.

**Term 6**

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-413-769	<b>Industrial Electrician Programmable Logic Controllers 1</b>	1.00 36	This course is designed to teach the fundamentals of programmable logic controller and its programming

		hours	software. The first course of 3 will introduce terminology, concepts, print reading and safety.
50-413-757	<b>Codes for Industrial Electricians 6: Conductors, Raceways and Data/Communication Cables</b>	0.50 18 hours	Course six of 8 covers the selection of proper conductors and raceways for industrial electrical installations as required by the NEC and other electrical codes. In addition, course competencies will include examining the installation requirements for data and communication cables.
50-464-709	<b>Rigging &amp; Safety for Maintenance Technician Apprentices</b>	0.50 18 hours	Apprentices will compare types of rigging equipment and their uses; determine safe loads, estimate rig and crib loads, and examine safety requirements. Course competencies include rigging and moving a load using different types of industrial equipment. Hand signaling techniques will be reviewed.

### Term 7

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-758	<b>Codes for Industrial Electricians 7: Motors and Generators</b>	0.50 18 hours	Course seven of 8 reviews the code requirements for the selection of electrical components for typical industrial electrical motor installations. Course module includes sizing of controls, conductors, switches, branches, and more.
50-413-759	<b>Codes for Industrial Electricians 8: Transformers</b>	0.50 18 hours	Course eight of 8 reviews the electrical code requirements which provide for the protection of various industrial transformer installations. Course competencies include developing plans, sizing equipment and components, safety, and references to applicable sections of the NEC.
50-464-719	<b>Preventative and Predictive Maintenance for Maintenance Technician Apprentices</b>	1.00 36 hours	Course learning outcomes include competencies related to assessing machine conditions, planning maintenance and repair, documenting work performed, and predictive and preventative maintenance.

### Term 8

Course #	Course Title	Credits	Course Descriptions
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		<b>&amp; Hours</b>	
50-464-712	<b>Bearings, Measurement &amp; Printreading for Maintenance Tech Apprentices</b>	2.00 72 hours	Course learning outcomes include competencies related to bearings, precision measurement, and print reading. Printreading includes comparing types of prints, interpreting structural drawings, and identifying parts from prints. This course also develops apprentice skills in precision measurement. Types of measuring instruments will be compared and then measuring skills using tapes, steel rules, micrometers, calipers, indicators, and gauges will be developed. Apprentices will examine bearing types and applications, and compare equipment bearings. Learners will develop skills related to bearing inspection, selection, removal, mounting, lubrication and diagnosing bearing failures.

### Term 9

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-464-713	<b>Power Transmission Systems for Maintenance Tech Apprentices</b>	1.50 48 hours	Course learning outcomes include examining belts, chain drives, gears & gear drives, and clutches & brakes. Apprentices will develop skills inspecting power transmission systems and troubleshooting mechanical drive systems. Apprentices will also learn about adhesives & sealants used in maintenance, repair and service related work processes.
50-464-718	<b>Fluid Power Systems for Maintenance Tech Apprentices</b>	0.75 24 hours	Course learning outcomes include inspecting, testing, servicing, and troubleshooting hydraulic, pneumatic, compressed air, and vacuum systems. Apprentices will review safety procedures for various common maintenance tasks.

### Term 10

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-464-717	<b>Precision Alignment, Pumps &amp; Pumping Systems for Maintenance Tech</b>	2.00	Course learning outcomes include competencies related to pumps,

	<b>Apprentices</b>	72 hours	compressors, couplings, and precision alignment. Course compares different coupling types and examines common misalignment problems. Apprentices will develop skills related to inspecting, troubleshooting, and preparing couplings for removal and installation, and also aligning and lubricating couplings. Laser alignment techniques will be introduced. Apprentices will also examine pumps, pump types, operating specifications, and their applications. Pump components such as packings, seals, gaskets, materials of construction, and related instrumentation are included in the course. Course competencies focus on inspection, testing, service, repair and maintenance of pumps and pumping systems.
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**Term OTHER**

Course #	Course Title	Credits & Hours	Course Descriptions
47-455-455	<b>Transition to Trainer: Your Role as a Journey Worker</b>	0.00 8 hours	You have already learned to use the tools of your chosen trade. In this workshop you will be introduced to a new set of basic tools--the tools of a jobsite trainer. You will explore the skills that are necessary to be an effective trainer, discover how to deliver hands-on training, and examine the process for giving useful feedback. During the workshop you will build a Training Toolkit to take back to your work on the job.

**50-464-1 WTCS Maintenance Technician Apprentice Related Instruction **Multi-Craft Model** [2014-15]**

**Description**

The multi-craft model is available to colleges who are approved to offer both the Industrial Electrician Apprentice and also the Millwright-Machine Maintenance Apprentice programs. The model uses courses from both trades in a combined configuration which helps train electricians in maintenance and mechanical skills and maintenance technicians in electrical skills. Colleges not approved to offer both of these trades are directed to the cohort model and program configuration under this program number.

This program configuration model also outlines 5 years, 10 semesters, and 864 total hours of related instruction. An accelerated first year with 144 hours in semesters 1 and 2 are shown to complete the related instruction requirements within the term of the apprenticeship.



## Credits & Hours

1 - Occupation Specific 24.75 credits & 864 hours

2 - Occupation Supportive 0.00 credits & 8 hours

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**Total Credits 24.75 credits & 872 hours**

### Term 1

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-750	<b>DC Electricity for Industrial Electricians</b>	2.00 72 hours	This course introduces the fundamental concepts of and computations related to DC electricity. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems. Competencies related to metering and safe use of measuring devices are included.
50-413-751	<b>AC Electricity for Industrial Electricians</b>	2.00 72 hours	This course is designed to introduce the industrial electrical apprentice to the basic concepts of alternating current. Emphasis is placed on circuit analysis and the problem solving skills necessary for the maintenance of modern industrial electric systems.

### Term 2

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-773	<b>Safety &amp; Print Reading for Industrial Electricians</b>	0.50 18 hours	This course will acquaint the apprentice with the interpretation of "Prints" (blueprints) and other engineering and manufacturing documentation. The primary focus of the course will be on the basics of prints and how they are used to convey information to technicians. Application of electrical prints from industrial settings will be studied.
50-413-760	<b>Industrial Electrician Transformers</b>	1.00 36 hours	This course is designed to introduce the Industrial Electrician Apprentice to the basic concepts of single and three-phase transformers. The course will cover transformer theory, turns, current and voltage ratios as well as proper connections and use of various transformers.
50-413-761	<b>Industrial Electrician Motors &amp; Generators</b>	1.00 36	This is the first course of 3 courses for industrial electrician apprentices to explore motor controls. This course introduces

		hours	concepts, terminology, and safety. In addition, this is designed to give the Industrial Electrician Apprentice the knowledge required by industry to maintain electric motors and generators. This course material will cover DC motors and generators, single-phase and three-phase motors, as well as alternators.
50-413-752	<b>Codes for Industrial Electricians 1: Introduction to the NEC</b>	0.50 18 hours	This course introduces the apprentice to the layout and purpose of the National Electric Code. It also strives to teach the apprentice proper methodology to research a code question and correctly interpret what they are reading. Various examples in the textbook and activity sheets help guide the apprentice through this process. Apprentices will research the structure of the National Electric Code and define the requirements of the code that are common to all electrical installations. In addition, apprentices will examine the installation requirements for fire pumps, emergency systems and fire alarms. This is the first course module of 8 dealing with electrical codes applicable to the trade.
50-413-753	<b>Codes for Industrial Electricians 2: OCPD and Electrical Device Installations</b>	0.50 18 hours	In this module of Codes for Industrial Electricians, apprentices will learn how to plan for the installation of overcurrent protection devices and how to select the proper boxes, cabinets and conduits for industrial electrical installations as called for in the NEC and other electrical codes. This is the second of 8 course modules on the NEC.
50-413-756	<b>Codes for Industrial Electricians 5: Article 300, Cords/Cables, and Hazardous Installations</b>	0.50 18 hours	Course five of 8 examines article 300 of the NEC and wiring methods for industrial electrical applications. In addition, apprentices will determine sizing requirements for cords and cables for installations common to industrial facilities. Finally, the course will identify code requirements for equipment installations in hazardous locations.

### Term 3

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-762	<b>Industrial Electrician Motor Controls 1</b>	1.00 36 hours	This course will lead you through the fundamentals of electric motor control. You will learn to recognize and draw the basic symbols, the language of motor control, and how to apply these symbols, into current industrial format. You will also learn to draw

			and read ladder and wiring diagrams. You will be introduced to the logic used in motor control and be required to apply this logic in order to correctly interpret, design, and wire control circuits.
50-413-763	<b>Industrial Electrician Motor Controls 2</b>	1.00 36 hours	This is the second course of 3 and examines motor controls applicable to the industrial electrician trade.

#### Term 4

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-764	<b>Industrial Electrician Motor Controls 3</b>	1.00 36 hours	This is the third of three courses examining motor controls applicable to the industrial electrician trade. Applications and assessment activities are intended in this course.
50-413-754	<b>Codes for Industrial Electricians 3: Article 250 Part A</b>	0.50 18 hours	Course three of 8 examines the application of grounding to industrial electrical situations as required by the NEC and other electrical codes.
50-413-755	<b>Codes for Industrial Electricians 4: Article 250 Part B</b>	0.50 18 hours	Course four of 8 on the NEC continues to examine Article 250 and grounding applications for industrial electrical installations. Apprentices will complete their review of this portion of the NEC and examine additional related electrical codes in effect across Wisconsin.

#### Term 5

Course #	Course Title	Credits & Hours	Course Descriptions
50-413-765	<b>Power Systems &amp; Variable Speed Drives for Industrial Electricians</b>	2.00 72 hours	This course provides the opportunity for students to learn about power systems and variable speed drives (VSD's). Topics include electricity, electronics, power transmissions, motor operations, AC and DC motor drives, servo and stepper drives, peripherals and communication. Apprentices will also explore closed loop control, feedback devices, and drive maintenance and the troubleshooting of VSD's. Course includes lab/shop and classroom lecture-lab hours.

#### Term 6

Course #	Course Title	Credits &	Course Descriptions
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		<b>Hours</b>	
50-413-769	<b>Industrial Electrician Programmable Logic Controllers 1</b>	1.00 36 hours	This course is designed to teach the fundamentals of programmable logic controller and its programming software. The first course of 3 will introduce terminology, concepts, print reading and safety.
50-413-757	<b>Codes for Industrial Electricians 6: Conductors, Raceways and Data/Communication Cables</b>	0.50 18 hours	Course six of 8 covers the selection of proper conductors and raceways for industrial electrical installations as required by the NEC and other electrical codes. In addition, course competencies will include examining the installation requirements for data and communication cables.
50-464-709	<b>Rigging &amp; Safety for Maintenance Technician Apprentices</b>	0.50 18 hours	Apprentices will compare types of rigging equipment and their uses; determine safe loads, estimate rig and crib loads, and examine safety requirements. Course competencies include rigging and moving a load using different types of industrial equipment. Hand signaling techniques will be reviewed.

### Term 7

<b>Course #</b>	<b>Course Title</b>	<b>Credits &amp; Hours</b>	<b>Course Descriptions</b>
50-413-758	<b>Codes for Industrial Electricians 7: Motors and Generators</b>	0.50 18 hours	Course seven of 8 reviews the code requirements for the selection of electrical components for typical industrial electrical motor installations. Course module includes sizing of controls, conductors, switches, branches, and more.
50-413-759	<b>Codes for Industrial Electricians 8: Transformers</b>	0.50 18 hours	Course eight of 8 reviews the electrical code requirements which provide for the protection of various industrial transformer installations. Course competencies include developing plans, sizing equipment and components, safety, and references to applicable sections of the NEC.
50-423-724	<b>Preventive and Predictive Maintenance for MMMP Trades (C-15)</b>	1.00 36 hours	Course examines both preventative and predictive maintenance concepts as they apply to millwright work processes and machine maintenance. Apprentices will develop skills related to assessing machine conditions and faults based on both preventative and predictive maintenance. This course is the former C-15 module in related instruction for the MMMP apprenticeship program.

### Term 8

Course #	Course Title	Credits & Hours	Course Descriptions
50-423-711	<b>Print Reading for MMMP Trades (C-2)</b>	1.00 36 hours	This course explores reading prints commonly used by millwrights and machine maintenance workers. Course competencies include comparing the types of prints, interpreting structural drawings, identifying parts from prints, and develops apprentice sketching drawing skills.
50-423-713	<b>Precision Measurements for MMMP Trades (C-4)</b>	0.50 18 hours	This course develops apprentice skills in precision measurement. Types of measuring instruments will be compared and then measuring skills using tapes, steel rules, micrometers, calipers, indicators, and gauges will be developed. This was formerly the C-4 module in related instruction for the MMMP trade apprenticeship.
50-423-730	<b>Bearings for the MMMP Trades (M-1)</b>	0.75 24 hours	Apprentices will examine bearing types and applications, and compare equipment bearings. Then learners will develop skills related to bearing inspection, selection, removal, mounting, lubrication and diagnosing bearing failures. Course was formerly the M-1 module in related instruction for the MMMP apprenticeship.

### Term 9

Course #	Course Title	Credits & Hours	Course Descriptions
50-423-734	<b>Gears, Gearboxes, Gear Assemblies for the MMMP Trades (M-5)</b>	0.75 24 hours	Course compares gear types and applications. Apprentices will develop skills inspecting gear assemblies, troubleshooting gear problems, removing gears and components, and reassembling gear drive systems. This course was formerly the M-5 module in related instruction for the MMMP apprenticeship programs.
50-423-735	<b>Mechanical Power Transmission for the MMMP Trades (M-6)</b>	0.75 24 hours	Course examines drive transmission systems and their applications, including roller chains. Apprentices will develop skills inspecting power transmission systems and troubleshooting mechanical drive systems. This course was formerly the M-6 module in related instruction for the MMMP apprenticeship programs.
50-464-718	<b>Fluid Power Systems for Maintenance Tech Apprentices</b>	0.75 24 hours	Course learning outcomes include inspecting, testing, servicing, and troubleshooting hydraulic, pneumatic, compressed air, and vacuum systems. Apprentices will review

			safety procedures for various common maintenance tasks.
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### Term 10

Course #	Course Title	Credits & Hours	Course Descriptions
50-423-731	<b>Couplings &amp; Alignment for the MMMP Trades (M-2)</b>	1.00 36 hours	Course compares different coupling types and examines common misalignment problems. Apprentices will develop skills related to inspecting, troubleshooting, and preparing couplings for removal and installation, and also aligning and lubricating couplings. This course was formerly the M-2 module for related instruction in the MMMP apprenticeship programs.
50-423-722	<b>Packings, Seals, Gaskets for MMMP Trades (C-13)</b>	0.50 18 hours	Apprentices will examine packing, seals, and gaskets and compare materials and applications. Then skills in layout, cutting, inspecting, removing, and installing these components will be developed. This course was the former C-13 module for the MMMP apprenticeship program.
50-423-732	<b>Pumps for the MMMP Trades (M-3)</b>	0.75 24 hours	Course compares different pump types and their applications. Apprentices will complete a field inspection of pumps and learn how to troubleshoot, remove, overhaul, install and perform preventative maintenance on pumps. This course was formerly the M-3 module for related instruction in the MMMP apprenticeship programs.

### Term Other

Course #	Course Title	Credits & Hours	Course Descriptions
47-455-455	<b>Transition to Trainer: Your Role as a Journey Worker</b>	0.00 8 hours	You have already learned to use the tools of your chosen trade. In this workshop you will be introduced to a new set of basic tools--the tools of a jobsite trainer. You will explore the skills that are necessary to be an effective trainer, discover how to deliver hands-on training, and examine the process for giving useful feedback. During the workshop you will build a Training Toolkit to take back to your work on the job.