# ILM Publishing Report 2022: Steamfitter/Pipefitter

## Quality Assurance (QA) Maintenance Summary

The ILM office held a total of 23 QA Meetings in the 2021/22 academic year, which included over 90 attendees from 8 different institutions across Alberta. With support and feedback from these individuals, we were able to address and resolve over 700 maintenance comments across all ILM trades! We want to acknowledge each of the Programs and instructors that dedicated their time and effort to supporting this important maintenance work and express our gratitude for your support in our continuous improvement of ILM content for students and learners.

For Steamfitter-Pipefitter, there were 7 modules updated due to QA meeting maintenance, and a total of 7 maintenance comments were addressed. As part of this year’s ILM maintenance process, there were also a number of images and graphics within the ILMs reverted to a previous version. After significant consultation/feedback with Programs and stakeholders, the quality and accuracy of images and graphics from previous ILM versions was identified as being important for student learning and success. The *Maintenance Updates* column in the Module List section below indicates modules where this has occurred.

For more information on the ILM Comments and Maintenance process, please visit our website:

* ILM Maintenance: <https://ilm.nait.ca/ilm-maintenance>
* Comments: <https://ilm.nait.ca/comments>

QA Maintenance meeting dates for the 2022/23 academic year will be finalized and shared in September 2022.

## Content Development Projects

#### Common First Period Pipe Trades

The Common First Period Pipe Trades modules are part of a 2021/22 content development project and will completed later in May 2022. The updated Common First Period Pipe Trades modules will be released as part of a separate file release and communication, which will be sent to all trades impacted by the Common First Period Pipe Trades updates.

#### Steamfitter/Pipefitter Period 2

The Steamfitter/Pipefitter Period 2 content development project is complete. The outcomes, learning objectives and related content in the newly updated Version 24 ILMs for second period are now aligned to the current Alberta course outline. As part of our commitment to continuous improvement, we encourage you to utilize the above ILM Comments page to provide feedback on the new modules. The updated module numbers and names are listed in the Second Period table below.

As part of this update, the old Period 1 and Period 2 modules for Steamfitter/Pipefitter will no longer be available to order from the ILM website. We recognize some of the content in these older modules may still be needed to address content gaps in Period 3 and Period 4, within both Steamfitter/Pipefitter and potentially other trades. If your Program determines, after reviewing the updated Period 2 content, that you may still require access to discontinued Period 1 and Period 2 modules, please contact the ILM office directly (ilm@nait.ca). We can provide instructor-only, digital PDFs for these older modules over the next year until we have completed development of the new Period 3 and Period 4 module sets.

#### Steamfitter/Pipefitter Period 3 and Period 4

Steamfitter/Pipefitter Period 3 and Period 4 modules are scheduled to be updated as part of a 2022/23 content development project. The tentative timeline for completion of this project is May 2023.

## Brand Refresh

The 2022 ILM publication includes a brand refresh for all (English) ILM files. This brand refresh only impacts the style/format of ILM products. It does not impact the content within the ILMs. Changes for each ILM product type include updates to the front and back covers of ILM files, ILM Graphics PowerPoint template, and both student and instructor Digital ILM templates.

## Module List

\*Maintenance updates include image/graphic updates, addressing of website comments, and changes identified at annual Quality Assurance meetings.

### First Period

n/a – see previous info on CFP

### Second Period (new course outline alignment)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version[[1]](#footnote-2)** | **Maintenance Updates\*** | **Module Re-development** | **Rebrand Updates**  |
| 070201a | Temperature and Heat Science | 24.0 |  | ü | ü |
| 070201b | Expansion and Contraction Control | 24.0 |  | ü | ü |
| 070201c | Heat Transfer Equipment | 24.0 |  | ü | ü |
| 070201d | Temperature and Heat Calculations | 24.0 |  | ü | ü |
| 070201e | Heat Loss Calculation | 24.0 |  | ü | ü |
| 070201f | Heat Emission Units | 24.0 |  | ü | ü |
| 070201g | Buoyancy | 24.0 |  | ü | ü |
| 070202a | Hydronic Heating Systems | 24.0 |  | ü | ü |
| 070202b | Hydronic Heating Boilers | 24.0 |  | ü | ü |
| 070202c | Boiler Trim | 24.0 |  | ü | ü |
| 070202dA | Introduction to Pumps - Part A | 24.0 |  | ü | ü |
| 070202dB | Introduction to Pumps: Part B | 24.0 |  | ü | ü |
| 070202e | Hydronic Heating/Cooling Systems | 24.0 |  | ü | ü |
| 070202f | Liquid Heat Tracing | 24.0 |  | ü | ü |
| 070203a | Lift Planning | 24.0 |  | ü | ü |
| 070203b | Fibre and Wire Rope | 24.0 |  | ü | ü |
| 070203c | Pulleys and Levers | 24.0 |  | ü | ü |
| 070203d | Slings and Hoisting Equipment Hardware | 24.0 |  | ü | ü |
| 070203e | Hoisting Communication | 24.0 |  | ü | ü |
| 070203f | Scaffolds and Access Equipment | 24.0 |  | ü | ü |
| 070204a | Plastic and Lined Piping | 24.0 |  | ü | ü |
| 070204b | Fibreglass Piping | 24.0 |  | ü | ü |
| 070204c | Iron and Glass Piping | 24.0 |  | ü | ü |
| 070204d | Alloy Piping | 24.0 |  | ü | ü |
| 070204e | Specialty Piping | 24.0 |  | ü | ü |
| 070204f | Pipe Bending | 24.0 |  | ü | ü |
| 070205a | Trigonometry | 24.0 |  | ü | ü |
| 070205b | Multiple Pipe Offsets | 24.0 |  | ü | ü |
| 070205c | Gasket and Joint Layouts | 24.0 |  | ü | ü |
| 070205d | Orthographic Projections | 24.0 |  | ü | ü |
| 070205e | Piping Isometrics | 24.0 |  | ü | ü |
| 070205f | Drawing Specifications | 24.0 |  | ü | ü |
| 070205g | Drawing Views | 24.0 |  | ü | ü |
| 070206a | Properties of Gas | 24.0 |  | ü | ü |
| 070206b | Gas System Components | 24.0 |  | ü | ü |
| 070206c | Test Equipment | 24.0 |  | ü | ü |
| 070206d | Pilots, Thermocouples, and Thermopiles | 24.0 |  | ü | ü |
| DP070207j | Drawing Package #1 | 24.0 | ü |  | ü |
| DP070207k | Drawing Package #2 | 24.0 | ü |  | ü |

### Third Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| 070301a | Introduction to Refrigeration | 24.0 | ✓ | ✓ |
| 070301b | Basic Refrigeration Systems | 24.0 | ✓ | ✓ |
| 070301cA | Refrigeration and Basic HVAC Systems - Part A | 24.0 | ✓ | ✓ |
| 070301cB | Refrigeration and Basic HVAC Systems - Part B | 24.0 | ✓ | ✓ |
| 070302aA | Controls - Part A | 24.0 | ✓ | ✓ |
| 070302aB | Controls - Part B | 24.0 | ✓ | ✓ |
| 070303aA | Process Facilities - Part A | 24.0 | ✓ | ✓ |
| 070303aB | Process Facilities - Part B | 24.0 | ✓ | ✓ |
| 070303bA | Basic Requirements of Specialty Piping Systems - Part A | 24.0 | ✓ | ✓ |
| 070303bB | Basic Requirements of Specialty Piping Systems - Part B | 24.0 | ✓ | ✓ |
| 070303c | Basic Requirements of Specialty Systems | 24.0 | ✓ | ✓ |
| 070303d | Industrial Fire Protection Systems | 24.0 | ✓ | ✓ |
| 070304a | Quality Control | 24.0 |  | ✓ |
| 070304b | Job Planning for New Construction | 24.0 | ✓ | ✓ |
| 070304c | Job Planning for a Maintenance Project | 24.0 | ✓ | ✓ |
| 070305a | Condensing Steam Plants | 24.0 | ✓ | ✓ |
| 070305b | Non-Condensing Steam Plants | 24.0 | ✓ | ✓ |
| 070305c | High Temperature Hot Water Plants | 24.0 | ✓ | ✓ |
| 070305d | High-Pressure Boilers and Accessories | 24.0 | ✓ | ✓ |
| 070305e | High-Pressure Boiler Trim | 24.0 | ✓ | ✓ |
| 070305f | High-Pressure Boiler Auxiliary Equipment | 24.0 | ✓ | ✓ |
| 070305g | Pressure Vessels | 24.0 | ✓ | ✓ |
| 070305h | Power Piping Auxiliary Equipment | 24.0 | ✓ | ✓ |
| 070305i | Power Piping Auxiliary Systems | 24.0 | ✓ | ✓ |
| 070305j | High-Pressure Steam Traps | 24.0 | ✓ | ✓ |
| 070305k | Cascading and Exhaust Steam Systems | 24.0 |  | ✓ |
| 070305l | Pressure Reducing Valve Stations | 24.0 | ✓ | ✓ |
| 070305m | Specialty Steam Equipment and Heat Tracing | 24.0 |  | ✓ |
| 070305n | Cooling Towers and Heat Exchangers | 24.0 | ✓ | ✓ |
| 070306a | Fabrication of Eccentric Reducing Tee | 24.0 | ✓ | ✓ |
| 070306b | Concentric Lateral Y Branch | 24.0 |  | ✓ |
| 070306d | True Wye Project | 24.0 | ✓ | ✓ |
| 070307a | Trade Math | 24.0 | ✓ | ✓ |
| 070307b | Trade Science | 24.0 | ✓ | ✓ |
| 070308a | Applied Industrial Blueprint Reading | 24.0 | ✓ | ✓ |
| 070308b | Orthographics | 24.0 | ✓ | ✓ |
| 070308c | Schematics | 24.0 | ✓ | ✓ |
| 070308d | Piping Spools | 24.0 | ✓ | ✓ |
| 070308e | Rolling Offsets | 24.0 | ✓ | ✓ |
| DP070308f | Hewes Booster Pump Station | 24.0 | ✓ | ✓ |
| DP070308g | AAE Solvent Recovery Unit | 24.0 | ✓ | ✓ |
| DP070308h | JLGas Plant | 24.0 | ✓ | ✓ |

### Fourth Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| 070403d | Job Planning & Critical Lifts | 24.0 | ✓ | ✓ |

### Additional Modules

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| A070101d | Glossary of Terms | 24.0 | ✓ | ✓ |
| A070105b | Shop/Lab Practices: SMAW Welds on Mild Steel | 24.0 | ✓ | ✓ |
| A070203d | Flux Cored Arc Welding (FCAW) | 24.0 | ✓ | ✓ |
| A070203f | Shop/Lab Practices: FCAW Welds on Mild Steel | 24.0 | ✓ | ✓ |
| A070203g | Shop/Lab Practices: Combined GMAW and FCAW on Mild Steel | 24.0 | ✓ | ✓ |
| A070203h | Shop/Lab Practices: SMAW Welds on Mild Steel Plate | 24.0 | ✓ | ✓ |
| A070305a | SMAW Groove Welds on Gray Cast Iron | 24.0 | ✓ | ✓ |
| A070305b | Production and Properties of Metals | 24.0 | ✓ | ✓ |
| A070305c | Carbon and Alloy Steels and Alloy Steel Filler Metals | 24.0 | ✓ | ✓ |
| A070305d | Metal Identification | 24.0 | ✓ | ✓ |
| A070305e | Distortion | 24.0 | ✓ | ✓ |
| A070305f | Hardfacing | 24.0 | ✓ | ✓ |
| A070305g | SMAW Welds on Mild Steel | 24.0 | ✓ | ✓ |
| A070405a | Introduction to the GTAW Process | 24.0 | ✓ | ✓ |
| A070405b | GTAW Electrodes Filler Metals and Shielding Gases | 24.0 | ✓ | ✓ |
| A070405c | GTAW Equipment Maintenance and Troubleshooting | 24.0 | ✓ | ✓ |
| A070405d | GTAW Welds on Mild Steel | 24.0 | ✓ | ✓ |
| A070405e | SMAW Welds on Mild Steel Pipe | 24.0 | ✓ | ✓ |
| A070405f | GTAW Welds on Stainless Steel | 24.0 | ✓ | ✓ |
| A070406a | GMAW and FCAW Welds on Mild Steel Pipe | 24.0 | ✓ | ✓ |

1. ILMs are updated on a module-by-module basis; not all modules in a Period are updated within the same cycle, and a combination of different version numbers within a Period is normal. **However, every module has received a new version number for the 2022 publishing cycle to reflect their rebranding.** The most current, published version of each module will always be the version that is posted on the [Order Modules](https://ilm.nait.ca/order-modules) page of the ILM website. [↑](#footnote-ref-2)