# ILM Publishing Report 2022: Gasfitter

## 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 Gasfitter there were 7 modules updated due to QA meeting maintenance, and a total of 39 maintenance items 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.

## First Period ILMs

There are two sets of First Period modules for the Gasfitter trade; Gasfitter First Period and Common First Period Pipe Trades. The Gasfitter First Period modules are still aligned to the old course outline and are made available as they are used in custom ILM packages in multiple trades across Canada. The Common First Period Pipe Trades modules are aligned to the newest course outline for Gasfitter, Plumber, Steamfitter/Pipefitter and Sprinkler Systems Installer.

This release only includes the Gasfitter First Period modules. 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.

## Content Development Projects – 2022/2023

Gasfitter Period 2 and Period 3 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

#### **Please note these are not the Common First Period modules aligned to the current course outline. The following modules are still aligned to the old course outline.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version[[1]](#footnote-2)** | **Maintenance Updates\*** | **Rebrand Updates** |
| 080101a | Trade Mathematics | 24.0 | ü | ü |
| 080101b | Perimeter Area Volume and Capacity | 24.0 | ü | ü |
| 080101c | Temperature and Heat Calculation | 24.0 | ü | ü |
| 080101d | Percentage and 45° Offsets | 24.0 | ü | ü |
| 080102a | Introduction to Drawing and Blueprints | 24.0 | ü | ü |
| 080102b | Single Line Drawing | 24.0 | ü | ü |
| 080102c | Residential Blueprint Reading | 24.0 | ü | ü |
| 080103a | Properties of Matter | 24.0 | ü | ü |
| 080103b | Pressure and Atmosphere | 24.0 | ü | ü |
| 080103c | Temperature and Heat | 24.0 | ü | ü |
| 080103d | Principles of Electricity | 24.0 | ü | ü |
| 080103e | Properties of Gases and Principles of Combustion | 24.0 | ü | ü |
| 080104a | Measurement and Calculation of Pressure Drop | 24.0 | ü | ü |
| 080104b | Natural Draft Burner Adjustments and Gas Consumption | 24.0 | ü | ü |
| 080104c | Pilots, Pilot Burners, Thermocouples, and Thermopiles | 24.0 |  | ü |
| 080105a | WHMIS | 24.0 | ü | ü |
| 080105bA | Introduction to Rigging | 24.0 |  | ü |
| 080105bB | Rigging and Hoisting Equipment | 24.0 |  | ü |
| 080105cA | Iron Pipe and Fittings | 24.0 | ü | ü |
| 080105cB | Welded and Flanged Pipe | 24.0 | ü | ü |
| 080105cC | Tube Tubing Hose and Fittings | 24.0 | ü | ü |
| 080105cD | Hangers | 24.0 | ü | ü |
| 080105cE | Valves | 24.0 |  | ü |
| 080106aA | Introduction to Gasfitting Fundamentals | 24.0 | ü | ü |
| 080106aB | Introduction to Gasfitting Codes and Regulations | 24.0 | ü | ü |
| 080106aC | Introduction to Gasfitting Codes and Regulations | 24.0 | ü | ü |
| 080106bA | Introduction to Vents and Chimneys | 24.0 | ü | ü |
| 080106bB | Introduction to Flues Draft Hoods and Vent Connections | 24.0 | ü | ü |
| 080106c | Pressure Regulators and Orifices | 24.0 | ü | ü |
| 080106eA | Basic Electricity for Gas Appliances and Controls | 24.0 | ü | ü |
| 080106eB | Gas and Electrical Controls | 24.0 | ü | ü |
| 080107aA | Safe Use of Tools | 24.0 | ü | ü |
| 080107aB | Explosive Actuated Tools | 24.0 | ü | ü |
| 080107b | Hot Tapping | 24.0 | ü | ü |
| DP080102d | Drawing Package - Wyndham/Carseland Residence | 24.0 | ü | ü |

### Second Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates** |
| 080201aA | Volumes Capacities and Surface Area | 24.0 | ü | ü |
| 080201aB | Piping Offsets | 24.0 | ü | ü |
| 080201bA | Grades and Elevations | 24.0 | ü | ü |
| 080201bB | Fill Densities | 24.0 | ü | ü |
| 080201c | Introduction to Computers | 24.0 | ü | ü |
| 080202aA | Residential and Commercial Blueprints | 24.0 | ü | ü |
| 080202aB | Heat Loss | 24.0 | ü | ü |
| 080202b | Specifications and Exercise for DP080202d - Drawing Package | 24.0 | ü | ü |
| 080203aA | Pipe Installation and Gas Line Sizing Regulations | 24.0 | ü | ü |
| 080203aB | Low-Pressure Gas Line Sizing and Installation | 24.0 | ü | ü |
| 080203b | 2-PSI Gas Line Layout | 24.0 | ü | ü |
| 080203c | Low-Pressure Gas Line Layout Including Venting and Air Supply | 24.0 | ü | ü |
| 080203eA | Sizing Vents and Chimneys - Part A | 24.0 | ü | ü |
| 080203eB | Sizing Vents and Chimneys - Part B | 24.0 | ü | ü |
| 080203eC | Additional Vents | 24.0 |  | ü |
| 080203fA | Air Supply - Part A | 24.0 | ü | ü |
| 080203fB | Air Supply - Part B | 24.0 | ü | ü |
| 080203g | Domestic Gas-Fired Appliances | 24.0 | ü | ü |
| 080203hA | Propane Cylinders and Vaporization | 24.0 | ü | ü |
| 080203hB | Customer Bulk Storage Tank Installation and Vaporizers | 24.0 |  | ü |
| 080204aA | Electromagnetic Theory | 24.0 | ü | ü |
| 080204aB | Electrical Principles - Part A | 24.0 | ü | ü |
| 080204aC | Electrical Principles - Part B | 24.0 | ü | ü |
| 080204aD | Conductors | 24.0 | ü | ü |
| 080204aE | Basic Electronics | 24.0 | ü | ü |
| 080204bA | Electrical Circuits for Domestic Gas Appliances and Gas Controls | 24.0 | ü | ü |
| 080204bB | Electrical Circuits and Wiring Diagrams | 24.0 | ü | ü |
| 080204bC | Interpretation and Sequence of Operation of Residential Controls | 24.0 | ü | ü |
| 080204cA | Operating Controls | 24.0 | ü | ü |
| 080204cB | Limit and Safety Controls | 24.0 | ü | ü |
| 080204cC | Combustion/Ignition Controls | 24.0 | ü | ü |
| 080204eA | Transformers | 24.0 | ü | ü |
| 080204eB | Troubleshooting Transformers | 24.0 | ü | ü |
| 080205aA | Natural and Fan-Assisted Draft Appliances - Part A | 24.0 | ü | ü |
| 080205aB | Natural and Fan-Assisted Draft Appliances - Part B | 24.0 | ü | ü |
| 080205bA | Induced Burners and Combustion - Part A | 24.0 | ü | ü |
| 080205bB | Induced Burners and Combustion - Part B | 24.0 | ü | ü |
| 080206b | Mid-Efficiency and High-Efficiency Gas-Fired Appliances | 24.0 |  | ü |
| 080206c | Electrical Circuits and Controls for Commercial Gas Appliances | 24.0 |  | ü |
| DP080202d | Drawing Package | 24.0 | ü | ü |

### Third Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates** |
| 080301a | Mathematics for Gasfitter | 24.0 | ü | ü |
| 080302aA | Combustion of Gas | 24.0 | ü | ü |
| 080302aB | Combustion Analysis | 24.0 | ü | ü |
| 080302aC | Commercial/Industrial Burners | 24.0 | ü | ü |
| 080302bA | Commercial Appliance Installation | 24.0 |  | ü |
| 080302bB | Commercial Appliance Servicing | 24.0 | ü | ü |
| 080302cA | Principles of Flues Vent and Chimney Connectors | 24.0 | ü | ü |
| 080302cB | Barometric Draft Controls Power Assisted Vents and Engineer Design Flues | 24.0 | ü | ü |
| 080302d | Stationary Gas Engines | 24.0 | ü | ü |
| 080302e | Commercial/Industrial Gas Line Sizing | 24.0 | ü | ü |
| 080303a | Code Interpretation | 24.0 | ü | ü |
| 080303bA | Propane Bulk Storage Tanks | 24.0 | ü | ü |
| 080303bB | Propane Vaporizers and Pumps | 24.0 |  | ü |
| 080304a | Introduction to Electrical Code and General Rules | 24.0 | ü | ü |
| 080304bA | Electrical Motors Single Phase | 24.0 |  | ü |
| 080304bB | Electrical Motors Three Phase | 24.0 | ü | ü |
| 080304c | Wiring Diagrams for Electrical Circuits | 24.0 | ü | ü |
| 080304d | Introduction to Electronic Logic Controls | 24.0 |  | ü |
| 080305a | Refrigeration Safety | 24.0 | ü | ü |
| 080305b | Basic Heating/Cooling Systems | 24.0 | ü | ü |
| 080306aA | Electro/Mechanical Controls | 24.0 | ü | ü |
| 080306aB | Installation of Electro/Mechanical Controls | 24.0 |  | ü |
| 080306bA | Flame Proving Devices | 24.0 | ü | ü |
| 080306bB | Flame Safeguard Systems | 24.0 | ü | ü |
| 080306bC | Flame Safeguard Controls | 24.0 | ü | ü |
| 080306cA | Electronic Pre-Packaged Burner Management System | 24.0 | ü | ü |
| 080306cB | Dual Fuel Burner Management System | 24.0 | ü | ü |
| 080307a | Commercial/Industrial Electronic Controls | 24.0 | ü | ü |
| 080307b | Commercial/Industrial HVAC Controls (Rooftop Units) | 24.0 |  | ü |
| 080307c | Steam and Hot Water Boiler Controls | 24.0 |  | ü |
| 080307d | Computer Application in Control Systems | 24.0 | ü | ü |
| 080308aA | Troubleshooting and Servicing Commercial/Industrial Electrical Controls | 24.0 | ü | ü |
| 080308aB | Troubleshooting and Servicing Commercial/Industrial Electrical Controls | 24.0 | ü | ü |
| 080308aC | Troubleshooting and Servicing Commercial/Industrial Electrical Controls | 24.0 | ü | ü |
| 080308aD | Troubleshooting and Servicing Commercial/Industrial Electrical Controls | 24.0 | ü | ü |
| 080308bA | Troubleshooting and Servicing Commercial/Industrial Gas Operated Controls Equipment | 24.0 | ü | ü |
| 080308bB | Troubleshooting and Servicing Commercial/Industrial Gas Regulators - Part B | 24.0 | ü | ü |
| 080308cA | Troubleshooting Burners Commercial/Industrial Application - Part A | 24.0 |  | ü |
| 080308cB | Troubleshooting Burners Commercial/Industrial Application Troubleshooting Charts - Part B | 24.0 | ü | ü |

### Additional Modules

n/a

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)