# ILM Publishing Report 2022: Sheet Metal Worker

## Maintenance Summary

As part of this year’s ILM maintenance process, there were 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.

## 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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version[[1]](#footnote-2)** | **Maintenance Updates\*** | **Rebrand Updates**  |
| 110101a | Sheet Metal Worker Apprenticeship Training Program Orientation | 24.0 | ✓ | ✓ |
| 110101b | Workplace Safety | 24.0 | ✓ | ✓ |
| 110101c | Hazardous Materials and Fire Protection | 24.0 |  | ✓ |
| 110101d | Ladders, Scaffolds and Lifts | 24.0 |  | ✓ |
| 110101e | Rigging | 24.0 |  | ✓ |
| 110101f | Hand Tools | 24.0 | ✓ | ✓ |
| 110101g | Bench Machines | 24.0 | ✓ | ✓ |
| 110101h | Floor and Power Equipment | 24.0 |  | ✓ |
| 110101i | Explosive Actuated Tools | 24.0 | ✓ | ✓ |
| 110101j | Materials | 24.0 | ✓ | ✓ |
| 110101k | Seams, Fasteners, Sealants, and Insulation | 24.0 |  | ✓ |
| 110101l | Basic Math Concepts | 24.0 | ✓ | ✓ |
| 110101m | Conversion and Linear Measurement | 24.0 | ✓ | ✓ |
| 110102a | Introduction to Drafting | 24.0 | ✓ | ✓ |
| 110102b | Basic Geometry | 24.0 | ✓ | ✓ |
| 110102c | Simple Layout | 24.0 | ✓ | ✓ |
| 110102d | Rectangular Elbows | 24.0 | ✓ | ✓ |
| 110102e | Rectangular Change Elbows and Y-Branches | 24.0 | ✓ | ✓ |
| 110102f | Ogee Offsets | 24.0 | ✓ | ✓ |
| 110102g | Duct Takeoffs | 24.0 | ✓ | ✓ |
| 110102h | Introduction to Parallel Line Pattern Development | 24.0 | ✓ | ✓ |
| 110102i | Roof Jacks | 24.0 | ✓ | ✓ |
| 110102j | Finials | 24.0 | ✓ | ✓ |
| 110102k | Round Elbows and Offsets | 24.0 | ✓ | ✓ |
| 110102l | Introduction to Conical Layout | 24.0 | ✓ | ✓ |
| 110103aA | Flat Rectangular Fitting Fabrication - Part A | 24.0 | ✓ | ✓ |
| 110103aB | Flat Rectangular Fitting Fabrication - Part B | 24.0 | ✓ | ✓ |
| 110103b | Round Fitting Fabrication | 24.0 | ✓ | ✓ |
| 110103c | Roof Jack Fabrication | 24.0 | ✓ | ✓ |
| 110103d | Joints and Seams | 24.0 | ✓ | ✓ |
| 110103e | Welding Safety | 24.0 | ✓ | ✓ |
| 110103f | Welding and Cutting Process | 24.0 |  | ✓ |
| 110103g | Mild Steel GMAW Welding | 24.0 |  | ✓ |
| 110104a | Orthographic Projection | 24.0 | ✓ | ✓ |
| 110104b | Pictorial Drawings | 24.0 | ✓ | ✓ |
| 110104c | Residential HVAC Components | 24.0 | ✓ | ✓ |
| 110104d | HVAC Blueprints | 24.0 | ✓ | ✓ |
| 110104e | HVAC Material Takeoff | 24.0 | ✓ | ✓ |
| 110104f | Residential HVAC Components | 24.0 | ✓ | ✓ |
| 110104g | Residential Heating Systems and Equipment | 24.0 | ✓ | ✓ |
| 110104h | Residential Installations and Codes | 24.0 | ✓ | ✓ |
| DP110104i | Blueprint Package Castilian Plan | 24.0 | ✓ | ✓ |

Second Period

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| 110201a | Roofing | 24.0 | ✓ | ✓ |
| 110201b | Introduction to Combustion | 24.0 | ✓ | ✓ |
| 110201c | Combustion Air Sizing | 24.0 | ✓ | ✓ |
| 110201dA | Appliance Venting - Part A | 24.0 | ✓ | ✓ |
| 110201dB | Appliance Venting - Part B | 24.0 | ✓ | ✓ |
| 110201e | Temperature, Humidity and Ventilation | 24.0 | ✓ | ✓ |
| 110201f | Air Filtration, Circulation and Noise | 24.0 | ✓ | ✓ |
| 110201g | Related Math Skills | 24.0 | ✓ | ✓ |
| 110202a | Leader Heads and Canopies | 24.0 | ✓ | ✓ |
| 110202bA | Pipe Tees - Part A | 24.0 |  | ✓ |
| 110202bB | Pipe Tees - Part B | 24.0 | ✓ | ✓ |
| 110202c | Introduction to Triangulation | 24.0 | ✓ | ✓ |
| 110202dA | Transitions and Twists - Part A | 24.0 | ✓ | ✓ |
| 110202dB | Transitions and Twists - Part B | 24.0 | ✓ | ✓ |
| 110202dC | Transitions and Twists - Part C | 24.0 | ✓ | ✓ |
| 110202e | Transitional Elbows | 24.0 | ✓ | ✓ |
| 110202f | Transitional Ogee Offsets | 24.0 | ✓ | ✓ |
| 110202gA | Transitional Y-Branches - Part A | 24.0 | ✓ | ✓ |
| 110202gB | Transitional Y-Branches - Part B | 24.0 | ✓ | ✓ |
| 110202h | Square and Rectangular to Round | 24.0 | ✓ | ✓ |
| 110202i | Round to Round Reducers | 24.0 | ✓ | ✓ |
| 110203a | Transitional Fitting Fabrication | 24.0 | ✓ | ✓ |
| 110203b | Conical Projects | 24.0 | ✓ | ✓ |
| 110203cA | Custom Fabrication and Hand Skills - Part A | 24.0 | ✓ | ✓ |
| 110203cB | Custom Fabrication and Hand Skills - Part B | 24.0 | ✓ | ✓ |
| 110203d | Tee Fabrication | 24.0 | ✓ | ✓ |
| 110203e | Fabrication from Plan View | 24.0 | ✓ | ✓ |
| 110203f | Power Shop Equipment | 24.0 | ✓ | ✓ |
| 110203g | Soldering | 24.0 | ✓ | ✓ |
| 110204a | Multi-Equipment Systems | 24.0 | ✓ | ✓ |
| 110204b | Multiple Family Blueprint Reading | 24.0 | ✓ | ✓ |
| 110204c | Commercial Building Structures | 24.0 | ✓ | ✓ |
| 110204d | Shop Drawings | 24.0 | ✓ | ✓ |
| 110204e | Light Commercial Installation Procedures | 24.0 | ✓ | ✓ |
| 110204f | Smoke and Fire Containment | 24.0 | ✓ | ✓ |
| 110205a | Basic Electricity and Electrical Meters | 24.0 | ✓ | ✓ |
| 110205b | Standard Furnace Components | 24.0 | ✓ | ✓ |
| 110205c | Basic Wiring Diagrams | 24.0 | ✓ | ✓ |
| 110205d | Furnace Component Diagnostics and Installation | 24.0 | ✓ | ✓ |
| 110205e | Basic Service | 24.0 | ✓ | ✓ |
| 110205f | Heating with Alternative Fuels | 24.0 | ✓ | ✓ |
| 110205g | Gas Piping | 24.0 | ✓ | ✓ |

Third Period

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| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| 110301a | Stainless Steel | 24.0 |  | ✓ |
| 110301b | Heat Loss and Heat Gain | 24.0 | ✓ | ✓ |
| 110301c | Residential HVAC Design | 24.0 |  | ✓ |
| 110301d | Air Flow | 24.0 | ✓ | ✓ |
| 110301e | Small Commercial Duct Design | 24.0 | ✓ | ✓ |
| 110302a | Multiple Branches | 24.0 | ✓ | ✓ |
| 110302bA | Triangulation from Elevation - Part A | 24.0 | ✓ | ✓ |
| 110302bB | Triangulation from Elevation - Part B | 24.0 | ✓ | ✓ |
| 110302c | Reducing Round Elbows | 24.0 | ✓ | ✓ |
| 110302d | Round Reducing Offsets | 24.0 | ✓ | ✓ |
| 110302e | Round Reducing Y-Branches | 24.0 | ✓ | ✓ |
| 110302f | Truncated Cones | 24.0 | ✓ | ✓ |
| 110302gA | Pipe Tees on Cones - Part A | 24.0 | ✓ | ✓ |
| 110302gB | Pipe Tees on Cones - Part B | 24.0 | ✓ | ✓ |
| 110303a | Aluminum Fabrication | 24.0 |  | ✓ |
| 110303b | Stainless Steel Fabrication | 24.0 | ✓ | ✓ |
| 110303d | Introduction to Computerized Layouts and Plasma | 24.0 | ✓ | ✓ |
| 110303e | SMACNA Specification Fabrication | 24.0 | ✓ | ✓ |
| 110303f | Gas Tungsten Welding (GTAW) | 24.0 |  | ✓ |
| 110304a | Multiple Zone Equipment | 24.0 | ✓ | ✓ |
| 110304b | Duct Construction | 24.0 | ✓ | ✓ |
| 110304c | Specifications and Schedules | 24.0 | ✓ | ✓ |
| 110304e | Job Supervision | 24.0 | ✓ | ✓ |
| 110304f | Architectural and Custom Sheet Metal | 24.0 | ✓ | ✓ |
| 110305a | Electronic Ignition | 24.0 | ✓ | ✓ |
| 110305b | System Controls and Schematics | 24.0 | ✓ | ✓ |
| 110305c | Furnace Start-Up | 24.0 | ✓ | ✓ |
| 110305d | Testing and Troubleshooting | 24.0 | ✓ | ✓ |
| 110305e | Basic Refrigeration | 24.0 | ✓ | ✓ |

Fourth Period

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| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| 110401a | Natural Ventilation | 24.0 | ✓ | ✓ |
| 110401b | Energy Efficient Buildings | 24.0 | ✓ | ✓ |
| 110401c | Mechanical Air Movement and Control | 24.0 |  | ✓ |
| 110401d | Commercial HVAC Systems | 24.0 | ✓ | ✓ |
| 110401e | Commercial Air Filters and Sound Control | 24.0 | ✓ | ✓ |
| 110401f | Industrial Exhaust | 24.0 | ✓ | ✓ |
| 110401g | Commercial Kitchen Exhaust Systems | 24.0 | ✓ | ✓ |
| 110401h | Trigonometry | 24.0 | ✓ | ✓ |
| 110402a | Oblique Cylinders and Boot Tees | 24.0 | ✓ | ✓ |
| 110402b | Boots | 24.0 | ✓ | ✓ |
| 110402c | Conical Tees | 24.0 | ✓ | ✓ |
| 110402d | Bull Head Tees | 24.0 | ✓ | ✓ |
| 110402e | Advanced Radial Lines | 24.0 | ✓ | ✓ |
| 110402f | Pattern Development Shortcuts | 24.0 | ✓ | ✓ |
| 110403a | Cladding and Lagging | 24.0 | ✓ | ✓ |
| 110403d | Specialty Gas Metal Arc Welding (GMAW) Metal Inert Gas (MIG) Welding | 24.0 | ✓ | ✓ |
| 110404b | Estimating and Pricing | 24.0 | ✓ | ✓ |
| 110404c | Bidding Procedures | 24.0 | ✓ | ✓ |
| 110405a | Commercial HVAC Equipment | 24.0 | ✓ | ✓ |
| 110405b | Troubleshooting Commercial HVAC Equipment | 24.0 | ✓ | ✓ |
| 110405c | Split Systems | 24.0 | ✓ | ✓ |
| 110405d | Air Balancing | 24.0 | ✓ | ✓ |

Additional Modules

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| --- | --- | --- | --- | --- |
| **Module Number** | **Module Name** | **New Version**1 | **Maintenance Updates\*** | **Rebrand Updates**  |
| A110102d | Pattern Development Exercises | 24.0 | ✓ | ✓ |
| A110202j | Pattern Development Exercises | 24.0 | ✓ | ✓ |
| A110302c | Pattern Development Exercises | 24.0 | ✓ | ✓ |
| A110402d | Pattern Development Exercises | 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 edition 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)