AMATI ACADEMY

CURRICULUM VERSION 1.0

Practical Training for Cabinet, Furniture, and Interior Production

Version	1.0
Date	September 2026
Status	Pre-Operational Development Baseline
Curriculum Developer	Amir Ataie
Estimated Core Pathway	Approximately 100 instructional hours

PROGRAM STATUS

AMATI Academy is a prospective training initiative. This document establishes the initial complete curriculum baseline for future pilot delivery, instructor preparation, evaluation, and evidence-based development. AMATI Academy is not yet operating under this curriculum. This document does not represent completed classes, enrolled participants, trained AMATI instructors, or achieved training outcomes. External relationships are described separately and only to the extent supported by documentation. Future public enrollment and program delivery will begin only after any applicable state authorization or exemption status and location-specific operational and safety requirements are confirmed.

1. PROGRAM PURPOSE AND SCOPE

AMATI Academy is designed to provide structured, hands-on training across the complete cabinet, furniture, and interior-production workflow.

The curriculum connects project planning, measurement, digital modeling, production documentation, materials, hardware, machinery, machining, assembly, workshop organization, safety, quality control, and continuous improvement so participants understand how individual operations function as one coordinated production system.

The program emphasizes modern panel-based production while incorporating relevant solid-wood methods and systematic production practices suitable for workshops with or without CNC equipment.

Core subjects

- Project measurement and planning
- Preliminary and detailed 3D modeling
- Production drawings
- Part naming and labeling
- Part lists
- Material and hardware selection
- Edge-banding specifications
- Cutting optimization
- Workshop organization
- Machinery and tool use
- Cutting and stock preparation
- Edge banding
- Machining and joinery
- Assembly planning and assembly
- Modern hardware installation and adjustment
- Surface preparation
- Quality control and final inspection
- Production efficiency
- Material efficiency and waste reduction
- Standardized work
- Employee development and cross-training
- Digital production workflow
- Systematic non-CNC production methods
- Introductory CNC workflow concepts
- Continuous improvement

The curriculum does not include taxation, payments, licensing advice, legal advice, contract law, or other U.S.-specific professional business-management subjects.

On-site installation is outside the core curriculum. Production preparation relevant to later installation, including dimensions, tolerances, component identification, and hardware preparation, may be addressed where technically necessary.

Instructor-development and train-the-trainer courses are planned as a separate development area built on the technical competencies established in this curriculum and are not included in the Version 1.0 participant hours.

2. TARGET PARTICIPANTS

- New entrants seeking a structured practical foundation
- Existing cabinet, furniture, and interior-production workers updating technical skills
- Workers transitioning toward more systematic digital and production workflows
- Employees seeking broader understanding of the complete production process
- Owners and supervisors participating in selected workflow, organization, technology, or employee-development modules
- Future instructors who first require competency in the relevant technical subject matter

Modules may be completed individually when prerequisites are satisfied or taken as the full core pathway.

3. PROGRAM FORMAT, DURATION, AND PREREQUISITES

Delivery is primarily practical and instructor-led.

Typical format

• Short-term intensive modules	• Generally 1-2 course meetings per week
• One- or two-day delivery for focused subjects	• Multiple sessions for broader subjects
• Instructor explanation and demonstration followed by supervised practical application	• Computer-based exercises connected to physical production exercises
• Small-group rotations during machine-intensive training	• Digital resources supporting preparation, demonstration, technical reference, and curriculum updates without replacing required hands-on practice

Full core pathway	Approximately 100 instructional hours
Recommended class size	Approximately 10-15 participants
Training language	Primary instruction in English; additional language support, including Persian, may be provided where appropriate

The initial time allocation is a development estimate and may be refined through documented pilot findings without reducing required competencies.

Prerequisites

- Module 1 safety orientation is required before participation in hands-on machine or power-tool exercises.
- Modules are sequenced so planning and digital-production skills support later manufacturing exercises.
- A participant entering an advanced module without completing earlier modules must demonstrate the prerequisite knowledge or practical competency relevant to that module.
- Completion of prior training does not replace machine-specific safety instruction for the equipment actually used during delivery.

4. TRAINING RESOURCES

Equipment presently available at the proposed primary workshop

- Sliding table saw
- Automatic edge bander
- Industrial spindle moulder/shaper with sliding table
- Band saw
- Jointer-planer
- Sliding miter saw
- Portable woodworking machines and power tools
- Hand tools
- Measuring and layout equipment
- Computer/laptop systems
- LCD/display equipment

Primary software

- SketchUp Pro
- OpenCutList

Representative training materials

- Particleboard
- MDF
- Plywood
- Decorative and veneered panels
- Solid wood where appropriate
- Edge-banding materials
- Adhesives
- Fasteners
- Hinges
- Drawer-slide systems
- Connectors
- Shelf and specialty hardware

Specific manufacturers, products, machines, materials, or hardware systems may be used as instructional examples according to technical relevance and availability. Their inclusion does not imply sponsorship, endorsement, partnership, or formal affiliation.

CNC equipment is not required for Curriculum Version 1.0. The curriculum includes digital-production and CNC workflow concepts. Hands-on CNC operation may be developed separately when suitable equipment, qualified instruction, appropriate safety arrangements, and a suitable training location are available.

Specialized training requiring equipment not available at the primary workshop may be conducted at other suitable workshops or institutions when appropriate equipment, qualified instruction, safety arrangements, and documented access are available.

5. SAFETY FRAMEWORK

Safety is integrated into every relevant module.

Before supervised machine operation, participants receive machine-specific instruction addressing applicable hazards, protective measures, manufacturer guidance, and safe operating procedures.

- Machine guarding
- Point-of-operation hazards
- Kickback prevention
- Material feeding and support
- Push devices, jigs, and work-holding methods
- Emergency controls
- Tool and cutter condition
- Dust extraction and housekeeping
- Eye and hearing protection
- Respiratory-protection requirements where applicable
- Portable-tool safety
- Material handling
- Adhesive and chemical safety information
- Hazardous-energy awareness
- Emergency procedures

Training procedures are developed with reference to current manufacturer instructions and applicable federal and California workplace-safety requirements in effect at the time of delivery.

Required guards and safety systems are not intentionally bypassed or defeated as part of normal training.

Servicing or maintenance activities involving hazardous-energy exposure are outside ordinary participant machine-operation exercises and are performed only under the applicable location's energy-control procedures by appropriately authorized persons.

During future delivery, completion of required machine-specific safety instruction is documented before a participant is authorized to perform supervised machine exercises.

This curriculum does not itself confer OSHA certification, state licensure, accreditation, or third-party safety certification.

6. ASSESSMENT, COMPETENCY, AND TRAINING RECORDS

Assessment is competency-based rather than attendance-based.

Assessment methods

- Practical task evaluation
- Instructor observation
- Machine-operation checks
- Digital exercises
- Production-document review
- Measurement and quality checks
- Problem-solving exercises
- Knowledge checks where appropriate
- Final integrated practical project

Documented criteria may include

- Safety
- Correct work sequence
- Dimensional accuracy
- Quality
- Repeatability
- Function
- Documentation
- Ability to identify and correct problems

Dimensional tolerances and quality requirements are defined in the applicable exercise or project documentation according to the drawing requirements, material, hardware specifications, production method, and equipment capability rather than through one universal tolerance for all work.

Competency result	Competent
If competency is not yet demonstrated	Needs Additional Practice

A participant who does not yet demonstrate a required competency receives additional instruction or practice before reassessment. Safety-critical requirements are mandatory. Unsafe performance cannot be offset by stronger performance in another area.

Standard training records are designed to include

- Participant Training Record
- Module Competency Record
- Practical Assessment Checklist
- Machine-Specific Safety Instruction Record
- Final Practical Project Assessment
- Final Quality-Control Record

Any future completion documentation will identify training actually completed and competencies demonstrated. It will not represent state licensure, institutional accreditation, or third-party certification unless separately authorized.

7. MODULE SEQUENCE

MODULE 1 | Production Workflow and Workshop Safety

Estimated duration 5 hours

Objectives

Understand the complete production sequence and identify major workshop hazards, safety systems, work zones, and organizational principles.

Topics

- Production workflow
- Workshop zones
- Material movement
- Machine-safety fundamentals
- PPE
- Dust control and housekeeping
- Emergency procedures
- Introduction to standardized work

Practical work

Workshop safety review, hazard-identification exercise, and production-flow mapping.

Assessment

Safety knowledge and hazard-identification check.

MODULE 2 | Measurement, Project Analysis, and Production Planning

Estimated duration 6 hours

Objectives

Record accurate project dimensions, identify critical constraints, and translate project requirements into an organized production plan.

Topics

- Measurement methods
- Reference points
- Clearances
- Material thickness
- Hardware allowances
- Tolerance planning
- Production sequence
- Assembly planning
- Measurement documentation

Practical work

Measure a training area or sample project and prepare a dimension record and preliminary production sequence.

Assessment

Measurement accuracy and completeness of planning documentation.

MODULE 3 | Preliminary 3D Modeling

Estimated duration 6 hours

Primary software

SketchUp Pro

Objectives

Create a simplified digital model that communicates project dimensions, proportions, layout, and design intent efficiently before detailed production modeling begins.

Topics

- Basic SketchUp workflow
- Dimensions
- Layout
- Efficient revisions
- Rapid box modeling
- Proportions
- Basic visual presentation
- Difference between preliminary and production models

Practical work

Create a preliminary model from Module 2 information and revise it following a defined design change.

Assessment

Dimensional accuracy, organization, clarity, and efficient revision.

MODULE 4 | Detailed Production Modeling and Documentation

Estimated duration 10 hours

Objectives

Convert a preliminary model into organized production information suitable for manufacturing.

Topics

- Production-accurate modeling
- Unit identification
- Material thickness
- Door and drawer clearances
- Sections and views
- Components and assemblies
- Tags
- Grain direction
- Hardware allowances
- Production drawings
- Part naming
- Material assignment
- Edge requirements
- Dimensions
- Assembly information

Practical work

Develop a production-ready model and drawing set.

Assessment

Model organization, dimensional accuracy, part consistency, completeness, and practical usability of production documentation.

MODULE 5 | Materials, Hardware, and Production Requirements

Estimated duration 6 hours

Objectives

Select appropriate materials and hardware and understand how those choices affect machining, assembly, durability, quality, material use, and production planning.

Topics

- Particleboard
- Plywood
- Solid wood where relevant
- Edge banding
- Material thickness
- Hinges
- Connectors
- Modern specialty systems
- MDF
- Decorative and veneered panels
- Laminates
- Adhesives
- Grain and surface direction
- Drawer systems
- Shelf hardware
- Manufacturer technical information

Practical work

Select materials and hardware for a sample project and identify required machining, clearances, and installation requirements.

Assessment

Technical selection exercise and knowledge check.

MODULE 6 | Part Lists, Labeling, Cutting Optimization, and Edge Specifications

Estimated duration 6 hours

Primary software

SketchUp Pro and OpenCutList

Objectives

Convert the digital model into clear and efficient production information.

Topics

- Part lists
- Material grouping
- Labels
- Reusable offcuts
- Part quantities
- Grain direction
- Cutting diagrams
- Production sequence
- Part naming
- Edge specifications
- Sheet optimization
- Revision control

Practical work

Generate a part list, labels, edge specifications, and cutting diagram for a training project. Compare alternative cutting arrangements where appropriate.

Assessment

Accuracy, completeness, material use, and practical usability of production information.

MODULE 7 | Workshop Organization, Workflow, and Standardized Work

Estimated duration 5 hours

Objectives

Identify unnecessary movement, searching, handling, waiting, rework, and material loss and organize work for more consistent and efficient production.

Topics

- Material receiving and storage
- Active-project material

- Reusable offcuts
- Tool locations
- Workstation organization
- Handoffs between operations
- Standardized work
- Employee development
- Hardware organization
- Workshop and portable-tool systems
- Production sequence
- Visual identification
- Cross-training
- Continuous improvement

Practical work

Analyze a workshop scenario, identify inefficiencies, and propose an improved workflow and simple standardized-work procedure.

Assessment

Practicality, reasoning, clarity, and expected effect of the proposed improvement.

MODULE 8 | Cutting and Stock Preparation

Estimated duration 10 hours

Primary equipment

Sliding table saw; sliding miter saw; band saw; jointer-planer where applicable

Objectives

Prepare materials, verify production information, perform supervised cutting and stock-preparation operations, and produce accurately identified components.

Topics

- Cut sequence
- Machine setup principles
- Stops and fences
- Kickback awareness
- Ripping and crosscutting
- Material handling
- Accuracy verification
- Reference edges
- Blade and cutter principles
- Panel and stock support
- Repeat cuts
- Solid-stock preparation where applicable
- Part identification

Practical work

Produce components from an approved cutting plan.

Safety checkpoints

- Machine guarding
- Push devices where required
- PPE
- Material support
- Emergency controls
- Safe feed
- Dust extraction

Assessment

Safe working method, dimensional accuracy, material handling, surface condition, and part identification.

MODULE 9 | Edge Banding, Machining, and Joinery

Estimated duration 10 hours

Primary equipment

Automatic edge bander; industrial spindle moulder/shaper where appropriate; portable routers; drills; suitable jigs and templates

Objectives

Prepare and machine components accurately, apply edge banding, and produce repeatable joinery and hardware features.

Topics

- Panel preparation
- Edge-bander setup principles
- Drilling
- Joinery systems
- Jigs and templates
- Feed direction
- Repeatability
- Edge-material selection
- Edge quality
- Grooves and rebates where appropriate
- Hardware machining
- Shaper principles
- Work holding

Practical work

Edge-band and machine training-project components and complete an instructor-selected joinery or repeat-machining exercise.

Safety checkpoints

- Machine guarding
- Tool condition
- PPE
- Work holding
- Heat and adhesive hazards
- Feed direction
- Dust extraction

Assessment

Safe working method, edge quality, dimensional accuracy, fit, and repeatability.

MODULE 10 | Systematic Non-CNC Production and CNC Workflow Concepts

Estimated duration 6 hours

Objectives

Use digital information, standardized setups, stops, jigs, templates, and repeatable methods to improve conventional-machine production and understand the relationship between conventional and CNC workflows.

Topics

- Digital-to-shop workflow
- 32-mm system principles
- Drilling templates
- Batch processing
- Repeatability
- Introductory CNC workflow concepts
- Technical equipment-selection considerations
- Standard dimensions
- Stops and fences
- Jigs
- Part tracking
- Model-to-production data flow
- Capabilities and limitations of conventional and CNC production

Practical work

Produce repeated components using a standardized jig, stop, template, or drilling method and compare the workflow with a conceptual CNC-based process.

> The curriculum does not represent conventional machinery as equivalent to CNC capability. The purpose is to teach systematic, repeatable, and organized production methods where CNC equipment is not available.

Assessment

Repeatability, dimensional consistency, process planning, and understanding of production workflow.

MODULE 11 | Assembly and Modern Hardware

Estimated duration 10 hours

Objectives

Plan an efficient assembly sequence, assemble components accurately, and install and adjust current cabinet and furniture hardware.

Topics

- Assembly planning
- Assembly sequence
- Mechanical connectors
- Adhesives
- Squareness
- Drawer systems
- Clearances
- Functional testing
- Part identification
- Dowels
- Appropriate proprietary connection systems where available
- Clamping
- Hinges
- Shelf hardware
- Adjustment

Practical work

Assemble a cabinet or comparable training unit and install and adjust selected hardware.

Assessment

Assembly sequence, squareness, alignment, hardware function, fit, and overall assembly quality.

MODULE 12 | Surface Preparation, Quality Control, and Final Inspection

Estimated duration 6 hours

Objectives

Inspect work systematically, identify defects, prepare surfaces appropriately, complete corrective work where practical, and perform a documented final-quality review.

Topics

- Inspection checkpoints
- Edge quality
- Door and drawer gaps
- Sanding principles
- Final inspection documentation
- Dimensions
- Surface condition
- Function
- Basic finish-system awareness
- Squareness
- Hardware alignment
- Surface preparation
- Corrective action

Practical work

Inspect a training unit, identify defects, prepare corrective actions, correct selected defects where appropriate, and complete a final inspection record.

> Higher-exposure finishing operations are not included in core practical exercises unless appropriate equipment, ventilation or other exposure controls, PPE, product-specific safety information, and qualified supervision are available.

Assessment

Defect identification, quality judgment, correction quality, and final documentation.

8. FINAL INTEGRATED PRACTICAL PROJECT

Estimated duration	14 hours
Format	Individual or small supervised team where equipment or project scale requires it; required competencies are assessed individually

Participants completing the full core pathway complete an instructor-approved cabinet, furniture, closet, vanity, or interior-production unit of suitable complexity.

The project demonstrates the complete workflow

- Project dimensions and planning
- Production drawings
- Part list
- Material optimization
- Edge banding
- Hardware installation
- Final inspection
- Preliminary model
- Part naming
- Edge specifications
- Production sequence
- Machining
- Adjustment
- Detailed production model
- Material and hardware selection
- Cutting diagram
- Cutting
- Assembly
- Quality control

Required project records

- Project and measurement information
- Production drawings
- Completed physical work
- Brief process review identifying at least one opportunity for improved workflow, quality, repeatability, or material use
- Digital model
- Part and cutting information
- Final quality-control record

Competency is evaluated using the standards established in the applicable modules. A single overall examination score is not required. Each required competency must be demonstrated independently, and all safety-critical requirements must be satisfied.

9. INSTRUCTOR QUALIFICATIONS AND GUIDANCE

Future delivery requires instructors assigned to a module to have appropriate practical knowledge and demonstrated competency in the subject matter and equipment they teach.

Machine-based instruction requires familiarity with the specific equipment, manufacturer guidance, applicable guarding and safety procedures, and AMATI Academy's module requirements.

Instructors should

- Explain the purpose of each operation and how it connects to the overall workflow.
- Verify required machine-specific safety instruction before authorizing operation.
- Require participants to measure and inspect their own work.
- Teach repeatable methods rather than isolated shortcuts.
- Distinguish general technical principles from manufacturer-specific instruction.
- Maintain required training and competency records.
- Demonstrate new procedures before supervised participant practice.
- Use realistic production examples.
- Allow participants to identify and correct errors where this can be performed safely.
- Explain why a method is selected and when alternatives may be appropriate.
- Use consistent module assessment criteria.
- Document technical or instructional issues identified during delivery for later curriculum review.

- Stop an operation whenever safe control cannot be maintained.

Equipment, examples, and exercises may be adapted to a specific training location when the underlying learning objectives, competencies, assessment standards, and safety requirements remain unchanged.

10. PRE-PILOT VALIDATION

Before initial pilot delivery, the applicable training modules should undergo a documented readiness review.

- Confirmation of the actual training location and equipment to be used
- Confirmation of software versions, training materials, hardware, tools, and exercise requirements
- Completion of module-specific assessment checklists and exercise tolerances
- Confirmation of applicable authorization or exemption status and location-specific operational and safety requirements
- Verification of current manufacturer manuals, guards, controls, and relevant safety information
- Verification that practical exercises are feasible with available equipment and scheduled instructional time
- Confirmation of instructor competency for assigned modules and equipment
- Review of the final project workflow and required resources

Any substantive change identified during pre-pilot validation is documented through the curriculum development and change-control system before implementation.

11. CURRICULUM DEVELOPMENT AND UPDATE SYSTEM

Version 1.0 establishes the initial curriculum baseline.

The curriculum is modular so individual training areas can be revised when a genuine technical, instructional, safety, or production need is identified without unnecessarily rewriting the entire program.

A review or change may be triggered by

• New or materially changed machinery	• Software changes affecting workflow
• New or changed materials or hardware systems	• Manufacturer technical information
• Changes in applicable safety guidance	• Improved production methods
• Testing or technical comparisons	• Documented instructor observations
• Pilot-delivery findings	• Employer, educator, manufacturer, supplier, or other relevant industry feedback
Curriculum changes are made because of genuine findings or needs, not merely to create documentation.	

Each substantive revision records

• Affected module	• Previous content or method	• New content or method	• Reason for the change
• Supporting technical evidence or source	• Decision date	• Responsible reviewer	• Effective version

Minor revisions	Version 1.1, 1.2, and similar minor versions - limited revisions that do not materially change the overall curriculum structure
Major revisions	Version 2.0 and later major versions - substantial changes to program scope, structure, or major training methodology

Master record	A Curriculum Change Log tracks approved revisions

12. SUPPORTING DEVELOPMENT RECORDS

AMATI Academy maintains separate supporting development records as appropriate during pre-operational development and future curriculum review.

Technical Research and Development Log	Records meaningful research, testing, observations, and findings involving machinery, software, materials, hardware, workflow, safety considerations, and production methods.
Product and Technology Comparison Sheet	Compares relevant technical alternatives using practical criteria such as function, production application, compatibility, efficiency, limitations, safety considerations, and training relevance.
Industry and Supplier Contact Notes	Records relevant technical discussions, demonstrations, meetings, information, and feedback from manufacturers, suppliers, employers, educators, or other appropriate sources.
Curriculum Development Decision Log	Records significant curriculum-development decisions and the reason a method, technology, subject, or training approach was included, excluded, or modified.
Periodic Development Summary	Summarizes meaningful development activity, technical findings, decisions, completed work, and outstanding curriculum-development priorities during a defined review period.
Technical Review Log	Used after Version 1.0 to record formal review of existing curriculum content against relevant technical, equipment, software, hardware, material, safety, or production developments.
Curriculum Change Log	Records approved substantive curriculum changes and their supporting basis.
These records document genuine development activity and are not created retroactively to simulate research, changes, industry engagement, or program progress.	

13. VERSION RECORD

Document	AMATI Academy Curriculum Version 1.0
Date	September 2026
Status	Pre-Operational Development Baseline
Estimated Core Pathway	Approximately 100 instructional hours
Purpose	Establish the initial structured training baseline for pilot delivery, instructor preparation, competency assessment, and evidence-based development.