



BAKERS MANUFACTURING
ACADEMY

COURSE CATALOG

*American Bakers Association Member pricing and Non-Member pricing available.



WWW.AMERICANBAKERS.ORG/ACADEMY | ACADEMY@AMERICANBAKERS.ORG



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FACILITY-BASED TRAINING SOLUTIONS

The flexibility of the Bakers Manufacturing Academy (BMA) allows entire corporations to integrate our training enterprise-wide by activating each bakery/facility location and enroll their workforce into programs that work best for their employee training goals.

THROUGH BMA, YOU CAN:

- Log in to the academy portal to enroll employees in educational programs
- Track student participation
- View certificates and badges earned, view and download progress reports
- Engage with employees through the academy portal, receive notifications, and more

THE ACADEMY PORTAL OFFERS:

ONLINE PORTAL

Companies and employees access the portal through individual username and password logins. Profiles are unique to your company and allow employees and training managers to access your facilities accounts immediately. Training managers can enroll students, review accounts, pay invoices through the portal.

VARIETY

Courses are available in a wide array of wholesale baking product categories and skill levels that allows companies to enroll individual employees or bulk enrollments.

INDUSTRY RELEVANCE

Written and developed by baking industry experts assuring course content is relevant and accurate.

COST EFFECTIVENESS

Member and non-member rates, educational programs meet your training and budget obligations.

CURRICULUM CERTIFICATES

Once an employee completes a course, they receive a certificate of graduation available for download through the portal. Training managers can also verify and download students completed courses and certificate through the online portal.



TURN YOUR
CHALLENGES
INTO
SOLUTIONS

GET STARTED TODAY



Academy@americanbakers.org



americanbakers.org/academy

HOW TO GET STARTED

The Academy sign-up process differs whether you are an individual learner or represent a group at a baking facility/bakery. Here's how to sign up.

ENROLLMENT CATEGORIES:

A bakery or facility can fill out the enrollment form to use the academy portal and enroll as many employees as you wish, at any time. Enrolling as a company allows access to all the educational programs, enable you to track employee participation, view graduate certificates and badges, download reports, engage with employees through the academy portal, receive notifications, and more.

Getting started: Submit a [Facility Enrollment Form](#)

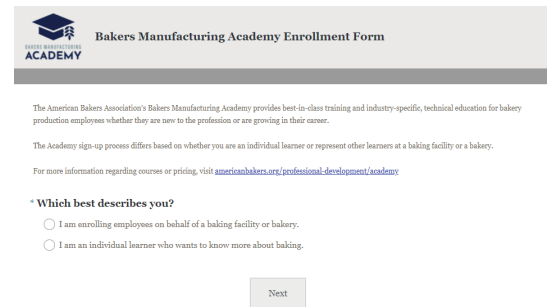
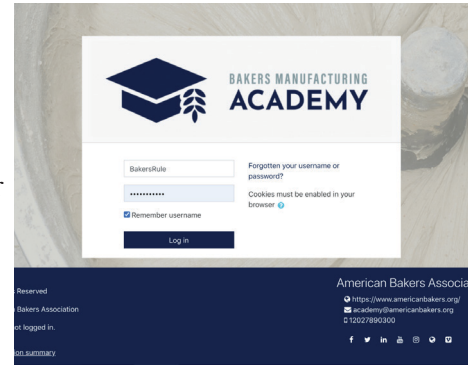
**It is FREE to activate your facility. You will receive your login information and Academy user guide to begin enrolling employees immediately.*

**While non-members and members of partner associations can enroll in courses, further instructions on access will be sent upon submission.*

Individuals can enroll in any of the available educational programs without having to go through a bakery/facility.

Getting started:

- 1: Visit the [Bakers Manufacturing Academy](#) and create an account.
2. Your account needs to be approved by an ABA staff member. You will receive an email notifying you of approval.
3. Once a team member approves your account and grants you access, you will then be sent instructions. You will be required to pre-pay for a course before starting a course.



ABA MEMBER AND PARTNER ASSOCIATION PRICING

ABA Members and partner associations Retail Bakers of America and the Baking Association of Canada receive specially-discounted ABA-Member pricing. Non-members may also enroll at increased rates.



BEGINNER TRAINING

Economical training solutions reduce in-bakery onboarding time, establish good behaviors early on and prevent bad batches. These courses are for new hires, department transfers, and cross-trained employees.

BAKING BASICS 101

Cost: ABA Members: \$50 | Non-Member: \$100

This onboarding course complements already established facility training. Students learn fundamental knowledge, skills, areas of responsibility, and behaviors essential to the operating environment within baking facilities.

LEARNING OBJECTIVES

- ✓ Workplace Safety – General Safety Guidelines that include: Machine Guards, PPEs, Equipment Safety, Work Area Safety and Sanitation tips.
- ✓ Food Safety & Hygiene – Universal Terminology, general practices, definitions, and importance of GMPs, HACCP, Allergen Control, FSMA, Hygiene (personal and behavior).
- ✓ Technical Training – Soft skills, areas of responsibility, and recommended guidelines that includes communication, equipment safety, and department operator responsibilities.

FEATURES

- Duration: 1^{1/2}-1 hour, up to two-weeks to finish
- Available Languages: English, Spanish, Portuguese (Brazil)
- Printable Glossary of Terms
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees
- *Past Enrollment Titles: Line Operator, Process Tech, Production lead, QA Tech, Shift Leader, Production Manager, Supervisor, Line Lead, Tech Sales*

Production Categories: Bread, Cookies/Crackers, Sweet Goods, Tortillas

ENTRY-LEVEL TRAINING PROGRAM

Cost: ABA Members: \$150 | Non-Member: \$300

Teaches foundational knowledge to all employees new to cookie and cracker plant operations. The course modules include four lessons; Ingredients, Mixing, Forming, Baking.

LEARNING OBJECTIVES

- ✓ Ingredients – The importance of the storage, usage, and details of the many ingredients used in cookie and cracker manufacturing.
- ✓ Mixing – How temperature, time, and other mixing variables impact ingredients.
- ✓ Forming – When mixed ingredients are formed into three basic categories of baking products.
- ✓ Baking – Describe the baking process, different types of ovens, and oven operations.

FEATURES

- Duration: 4-5 hours, up to six-weeks to finish
- Available Languages: English, Spanish
- Final Test: 100% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, supplier employees, department transfers
- *Past Enrollment Titles: Line Operators, Prescale, Mixing Lead, Senior R&D Scientist, Oven Captain, Food Science Intern, QA, Production Supervisor, VP Operations, R&D*

Production Categories: Cookies/Crackers

BREAD BASICS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

Course covers ingredients, product processes, and processing checkpoints to produce a quality baked good.

LEARNING OBJECTIVES

- ✓ Understand production variables and troubleshoot corrective actions in the areas of ingredients, production, distribution, and product changes.
- ✓ Identify production standards including mixing times, sponge temperatures, FDT, level of absorption & accurate scaling of ingredients per the formula.
- ✓ Identify quality factors in distribution from storage temperatures to code dating and stock rotation.
- ✓ Understand common quality changes during production.

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Printable Glossary of Terms
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees

Production Categories: Breads, Sweet Goods

BREAD INGREDIENTS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

Foundational knowledge on setting specifications, in-process production checkpoints, and develop bread quality baked goods.

LEARNING OBJECTIVES

- ✓ Cover functional ingredients in varying proportions to produce a variety of baking products, and manipulate them to gain a consistent quality.
- ✓ Define and outline major ingredients; flour and water.
- ✓ Define and outline minor ingredients; sugar, fats, and eggs.
- ✓ Define and outline micro ingredients; yeast, salt, vital wheat gluten, dough conditioners, mold inhibitors.
- ✓ Foundational knowledge of functional ingredient types, benefits, control, handling conditions, common reducing agents, and enzymes.

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Printable Glossary of Terms
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees

Production Categories: Breads

BREAD PROCESSING - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool teaching the fundamentals of bread processing including mixing dough attributes, the stages of mixing, factors that affect mixing, and the type of mixers used in bread production.

LEARNING OBJECTIVES

- ✓ Mixing – What is mixing, stages of mixing, factors that affect mixing, types of mixers
- ✓ Fermentation – What is fermentation, fermentation reactions, yeast reactions in dough systems
- ✓ Dividing – Purpose, common equipment, important common attributes
- ✓ Rounding - Purpose, common equipment, important common attributes
- ✓ Baking Process - Purpose, setting structure, ideal temperatures, bake loss
- ✓ Cooling and Packaging - Purpose, common equipment, cooling time, slicing temperatures, slicing parameters and types, and bagger systems

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees

Production Categories: Breads

DOUGH SYSTEMS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool teaching the fundamental processes, advantages, and disadvantages of the different methods used by how mixing and fermentation are accomplished in the production of bread.

LEARNING OBJECTIVES

- ✓ Foundational knowledge of sponge and dough systems and explains the advantages and disadvantages
- ✓ Foundational knowledge of straight dough processes and explains the advantages and disadvantages
- ✓ Liquid ferment systems and how to gain product uniformity, control of fermentation, minimum requirements, processing times and temperatures
- ✓ Foundational knowledge of continuous mix systems and explains the advantages and disadvantages
- ✓ Foundational knowledge of no-time dough systems and how to use reducing agents to get proper gluten development, yeast conditioning, gas retention, and disadvantages of no-time doughs
- ✓ Overview of high-speed mixing advantages and disadvantages

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Breads

CAKE DOUGHNUTS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of cake doughnut production that includes mixing dough attributes, mixing, floortime, depositing, equipment, and post-baking processing.

LEARNING OBJECTIVES

- ✓ Foundational knowledge of water absorption and its effects during production
- ✓ Foundational knowledge of mixing processes and explains the advantages and disadvantages
- ✓ Cake doughnut depositing pressure, gravity feed, proper care and storage, and common adjusting depositor weights
- ✓ Explains rise time and effects of rise time on doughnut shape
- ✓ An understanding of break point and the effects of break and flow during production
- ✓ How warm batter temperature, under-mixing, excess floor time, rough cutting of batter, low fryer temperature, longer frying time are factors affecting increased fat absorption

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Sweet Goods

YEAST RAISED DOUGHNUTS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of the different formulation adjustments of doughnut manufacturing.

LEARNING OBJECTIVES

- ✓ Covers the specialization of doughnut manufacturing that includes hand make-up, roll belt or cut doughnuts, and automatic pressure vacuum cut doughnuts.
- ✓ Mixing of yeast raised doughnuts to produce a uniform, smooth, and sheeting on make up
- ✓ Common fermentation time
- ✓ Dockering the dough and usage of rotary docker to reduce blisters and chance of rollover
- ✓ Proofing times and automatic proofer systems
- ✓ Frying and post-baking operations

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Printable Glossary of Terms
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees

Production Categories: Sweet Goods

FLOUR TORTILLAS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of ingredients, formulations, and processes to manufacture flour tortillas.

LEARNING OBJECTIVES

- ✓ Address key tortilla characteristics that include rollability, shape, texture, and sticking
- ✓ Covers typical tortilla formulation and the functionality of ingredients. These ingredients play an important role in the performance of the dough piece through the process.
- ✓ Overview of the methods of flour tortilla production that includes hot press, hand stretch, and die cut
- ✓ Explains tortilla ovens and how heat is transferred through conduction
- ✓ Overview of cooling and packaging processes

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Tortilla

SWEET DOUGH - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of ingredients, formulations, and processes to manufacture sweet dough products.

LEARNING OBJECTIVES

- ✓ Foundational knowledge functionality of ingredients
- ✓ Overview of sweet dough processing dough systems
- ✓ Mixing - purpose, cleanup, mixing times, and dough temperatures
- ✓ Fermentation - purpose and conditioning aspects
- ✓ Retarding overview
- ✓ Proofing overview
- ✓ Baking - temperature, bake time, baking sequence, and equipment make up line

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Bread, Sweet Goods

LAMINATED DOUGHS - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of the operational techniques used to manufacture laminated products and is specific to croissants, Danish pastry, and puff pastry laminated doughs.

LEARNING OBJECTIVES

- ✓ Overview of lamination and the processing attributes to create the desired number of layers for product consistency and flakiness
- ✓ Understanding of croissant formulation, typical mixing processes, common methods of folding make up, proofing, and baking temperatures ranges and processing times
- ✓ Understanding of Danish pastry formulation, typical mixing processes, common methods of folding make up, proofing, and baking temperatures ranges and processing times
- ✓ Understanding of puff pastry formulation, typical mixing processes, common methods of folding make up, proofing, and baking temperatures ranges and processing times

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Bread, Sweet Goods

BATTER CAKES - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the fundamentals of formulation, mixing, equipment, and baking processing of cake production.

LEARNING OBJECTIVES

- ✓ Define the three major types of cakes that includes batter cakes, foam cakes, and chiffon cakes
- ✓ Understanding high levels of cake ingredients such as sugar, shortening, eggs, milk, and flavorings and functionality
- ✓ Understanding cake leavening and classifications
- ✓ Purposes of mixing, mixing steps, and air incorporations, effects of over and under mixing, and mixer types
- ✓ Overview of cake baking, optimum baking temperatures, and depanning

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New hires or department transfers

Production Categories: Sweet Goods

BREAD SCORE - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

This lesson serves as an onboarding tool that teaches the systematic and quantitative method for evaluating products relative to a standard and how the evaluation of products through scoring requires time and practice for proficiency.

LEARNING OBJECTIVES

- ✓ Understanding of scoring bakery products using subjective and objective methods
- ✓ How do you establish or set the standards for evaluating the product
- ✓ What external and internal characteristics are “perfect”?
- ✓ Scoring overview that includes why scoring is important, setting up to score, tools and techniques, scoring parameters, and objective measurements

FEATURES

- Duration: 1 hour, up to two-weeks to finish
- Available Languages: English
- Printable Glossary of Terms
- Final Test: 80% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, or supplier employees

Production Categories: Bread

SPECIALIZED TRAINING

The lessons provide insight into the various processes on the line, which are broken into steps or conversions including the formula, mixing and forming, baking fundamentals, and cooling, delivery, and packaging. Each lesson emphasizes the importance of having the operator follow an exact process, explaining why certain steps must be followed precisely to produce specific products.

WIRE CUT COURSE

Cost: ABA Members: \$250 | Non-Member: \$300

This program is intended for individuals responsible for producing wire cut cookies. It's also useful for those who want to gain insight into a process normally learned over time through experience.

LEARNING OBJECTIVES

- ✓ Define the term wire cut, development process, key conversions that occur within each step of the process
- ✓ Wire Cut ingredient functionality and potential allergens
- ✓ Pre and post operation check points, and additional safety and sanitation processes
- ✓ Understand mixer types, processes, and methods to achieve desired dough temperatures
- ✓ Understand the form and function of different parts of a wire cut machine and die assembly
- ✓ The baking processes that include bake time and profile
- ✓ Understanding cooling time, conveyors, and types of packaging

FEATURES

- Duration: 2 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Process Engineer- R&D, Food Scientist, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Cookies/Crackers

SANDWICHING COURSE

Cost: ABA Members: \$250 | Non-Member: \$300

This program is intended for individuals responsible for producing Sandwich products. It's also useful for those who want to gain insight into a process normally learned over time through experience.

LEARNING OBJECTIVES

- ✓ Define the term sandwiching, development process, key conversions that occur within each step of the process
- ✓ Sandwich creme ingredient functionality and potential allergens
- ✓ Pre and post operation check points, and additional safety and sanitation processes
- ✓ Understand the important attributes of crème consistency that facilitate the sandwiching process and provide a quality crème sandwich
- ✓ Understand the importance for proper cooling of the base cake, proper delivery, transfer, and how the base cake is correctly oriented into the sandwiching feed system
- ✓ Understand the form and function of each of the different types of sandwiching equipment

FEATURES

- 4-5 hours, up to six-weeks to finish
- Available Languages: English, Spanish
- Final Test: 100% Final GPA to receive certificate

WHO SHOULD ENROLL

- New production, supplier employees, or department transfers
- *Past Enrollment Titles: Process Engineer- R&D, Food Scientist, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Cookies/Crackers

ROTARY COURSE

Cost: ABA Members: \$250 | Non-Member: \$300

This lesson teaches the correct procedures and steps required to produce a rotary moulder product.

LEARNING OBJECTIVES

- ✓ Define the term rotary, development process, key conversions that occur within each step of the process
- ✓ Rotary cookie ingredient functionality and potential allergens
- ✓ Pre and post operation check points, and additional safety and sanitation processes
- ✓ Understand mixer types, processes, and methods to achieve desired dough temperatures
- ✓ Understand the form and function of different parts of a rotary machine and die assembly
- ✓ The baking processes that include bake time and profile
- ✓ Understanding cooling time, conveyors, and types of packaging

FEATURES

- Duration: 2 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Process Engineer- R&D, Food Scientist, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Cookies/Crackers

SHEETING AND LAMINATING

Cost: ABA Members: \$250 | Non-Member: \$300

This program is intended for individuals on the line who are responsible for producing sheeted crackers, department transfers, and suppliers.

LEARNING OBJECTIVES

- ✓ Define the sheeting and laminating process.
- ✓ Review the integrated dough ingredients that are critical to producing a sheeted product.
- ✓ Overview of dough mixing stages, two-stage mixing process, lamination process, laytime requirements, and how mixing affects the lamination process
- ✓ Understand how to use the equipment, and how to select the best equipment for the type of product you are producing.
- ✓ Baking operator procedures, process of baking, types of ovens and heat sources, heat profile, common oven temperature guidelines, and oven equipment
- ✓ Importance of caring for a product post-bake and how to select the appropriate equipment for your product.

FEATURES

- Duration: 4-5 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Process Engineer- R&D, Food Scientist, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Cookies/Crackers

TORTILLA COURSE

Cost: ABA Members: \$50 | Non-Member: \$100

The course focuses on unique product characteristics, ingredients, and processing variations used in the production of flour and corn tortillas.

LEARNING OBJECTIVES

- ✓ Explain product characteristics of flour, wheat, and corn tortillas
- ✓ Describe different production techniques for processing flour and corn tortillas.
- ✓ Identify acceptable benchmarked ranges of production settings for tortillas (equipment settings, times, temperatures, relative humidity, pH/TTA).
- ✓ Identify acceptable benchmarked ranges of production settings for tortillas (equipment settings, times, temperatures, relative humidity, pH/TTA).
- ✓ Identify common defects and probable causes

FEATURES

- Duration: 3 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Senior Vice President, Site Leader, Senior R&D Bakery Technologist, Food Scientist, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Tortillas

VARIETY HEARTH BREADS

Cost: ABA Members: \$50 | Non-Member: \$100

The course focuses on unique product characteristics, ingredients, and processing variations used in the production of wheat, whole wheat, multi-grain, rye, and raisin breads.

LEARNING OBJECTIVES

- ✓ Define and identify unique finished product attributes of hearth and sourdough breads
- ✓ Describe key processing points for producing hearth and sourdough breads
- ✓ Understand the requirements and the characteristics created when using steam on Hearth bread products
- ✓ List acceptable benchmarked ranges of production settings for sourdough pan breads
- ✓ Recall ingredients and percentages in sourdough bread formula
- ✓ Discuss differences in processing of sourdough breads compared to white pan bread

FEATURES

- Duration: 3 - 4 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 100% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Engineering Manager, Production Supervisor, Systems Integration Engineer, Quality Assurance, Production Shift Manager, Line Operator, R&D Manager, Line Supervisor*

Production Categories: Bread

HAMBURGER/HOTDOG BUNS COURSE

Cost: ABA Members: \$50 | Non-Member: \$100

This course covers the unique process variations for hamburger/hotdog bun production and includes acceptable benchmark ranges variations regarding formulations, product characteristics, and processing conditions needed.

LEARNING OBJECTIVES

- ✓ Identify unique product characteristics of hamburger and hot dog buns.
- ✓ Identify ingredient changes for hamburger/hot dog buns formulations.
- ✓ Identify unique process variations for hamburger/hot dog bun production (mixing, dividing, rounding, proofing, moulding, topping, baking, cooling, and packaging).
- ✓ Identify acceptable benchmarked ranges of production settings for hamburger/hot dog buns (equipment settings, times, temperatures, relative humidity, pH/TTA).
- ✓ Identify characteristics of “good” finished product – internal and external characteristics.

FEATURES

- Duration: 3 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 100% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers
- *Past Enrollment Titles: Quality Assurance, Production Shift Manager, Line Operator, R&D Manager*

Production Categories: Bread

BREAD QUALITY - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

The course focuses on the tests and finished product evaluation process used to ensure the quality and consistency of the flour and finished product. The course is comprised of six (6) modules and covers tests conducted on flour that are included on the Flour Certificate of Analysis (COA) and those used to determine the rheological properties of flour, using pH and TTA measurements, and moisture and texture tests. It also covers a process and form used to conduct finished product evaluation and common faults seen in pan breads.

LEARNING OBJECTIVES

- ✓ Use ash, moisture, protein, and falling number test results to identify needed corrections to the process or formulation.
- ✓ Compare typical dough rheology tests.
- ✓ Determine possible corrections for off-target pH/TTA readings.
- ✓ Identify quality attributes of white pan bread.
- ✓ Identify common finished product faults for white pan bread.

FEATURES

- Duration: 5 hours, up to six-weeks to finish
- Available Languages: English & Spanish
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers

Production Categories: Bread

BREAD TROUBLESHOOTING - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

The course presents a systematic approach to identify root causes of common problems and common ways to handle changes to the schedule such as add, cuts, and emergency doughs.

LEARNING OBJECTIVES

- ✓ Order steps in a troubleshooting model.
- ✓ Apply knowledge of ingredients, manufacturing process, and finished product attributes to identify potential causes for common quality problems.
- ✓ Define terms and reasons for adds and emergency doughs.
- ✓ Identify best practices related to adds and emergency doughs.
- ✓ Identify specific changes to modify doughs.
- ✓ Explain the advantages and disadvantages of adds and emergency doughs.
- ✓ Explain reasons and methods to perform cuts.

FEATURES

- Duration: 2 hours, up to six-weeks to finish
- Available Languages: English & Spanish
- Final Test: 90% Final GPA to receive certificate

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers

Production Categories: Bread

VARIETY PAN BREAD - COMING SOON

Cost: ABA Members: \$50 | Non-Member: \$100

The course focuses on unique product characteristics, ingredients, and processing variations used in the production of wheat, whole wheat, multi-grain, rye, and raisin breads. For each variety, acceptable ranges of production settings are explained. Key characteristics and terminology is defined in the specialty grain ingredients, grain breads, and raisin breads.

LEARNING OBJECTIVES

- ✓ Define whole grain, refined grain, multi-grain, and raisin breads.
- ✓ Identify ingredients and production characteristics to whole grain, refined wheat ingredients, characteristics unique to raisin pan bread.
- ✓ Describe grain characteristics and grain ingredients used in baked products.
- ✓ List particle size options of grains (flour, meal, grits, cracked, flaked) and describe impact on processing and finished product quality.
- ✓ Explain shelf-life issues of specialty grain ingredients (ingredient handling).
- ✓ Define and discuss differences in the processing of variety pan breads such as wheat, whole wheat, whole grain, multi-grain, rye, and raisin breads.
- ✓ List acceptable ranges, and benchmarks used variety pan breads processing and production settings for raisin pan breads (equipment settings, times, temperatures, relative humidity, pH/TTA).
- ✓ Identify different types and proper handling/temperatures of raisins added to raisin breads.

FEATURES

- Duration: 3 hours, up to six-weeks to finish
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate

PRE-REQUISITE: Specialized Variety Hearth Bread

WHO SHOULD ENROLL

- Established production, supplier employees or department transfers

Production Categories: Bread

ADVANCED TRAINING

Graduates of the courses will possess the technical knowledge and best practice information necessary to supervise, bakery shift, department, or facility.

COOKIE & CRACKER MANUFACTURING COURSE

Cost: ABA Members: \$1995 | Non-Member: \$3500

Designed by industry experts, the Course is the authoritative source on the cookie and cracker bakery operation. The course is a hybrid course, students receive two textbooks, and all testing components are available through the online academy portal. Students will develop a solid understanding of the main principles of an effective manufacturing process. The self-study program covers the complete cookie and cracker manufacturing process and emphasizes the practical application of material learned. The testing component includes multiple-choice questions and work project. The work projects are designed for students to utilize what they learn directly in the plant.

The course follows the manufacturing process flow:

- ✓ Ingredients — product purpose, physical and chemical characteristics, delivery, assembly and storage
- ✓ Mixing
- ✓ Baking
- ✓ Cooling
- ✓ Packaging
- ✓ Forming — typical and specialty products
- ✓ Safety and sanitation
- ✓ Equipment maintenance
- ✓ Quality systems
- ✓ Environmental management

FEATURES

- Hybrid Course with textbooks and online testing ability
- Duration: 6 months, up to two-years to finish.
- Available Languages: English
- Final Test: 90% Final GPA to receive certificate



PRE-REQUISITE: Beginner Entry-Level Training Program

WHO SHOULD ENROLL

- For those who want to manage or supervise and bakery shift, department, or facility
- *Past Enrollment Titles: Product Development, Manufacturing Manager, Biochemical Engineer, R&D Technologist, Region Sales Manager, Operations Manager, Food Technologist, QA, Production Coordinator, Team Leader Manufacturing, Continuous Improvement Engineer, Development Engineer 1*

Textbook Chapters:

1. Wheat and Wheat Flour
2. Carbohydrates — Physical and Chemical Properties
3. Sweetener Manufacturing and Related Compounds
4. Physical and Chemical Properties of Fats and Oils
5. Classification of Fats and Related Compounds
6. Dairy Products and Egg Products
7. The Leavenings Process
8. Emulsifiers and Antioxidants
9. Chocolate and Cocoa
10. Flavoring and Coloring Materials
11. Starch, Proteins, Enzymes, Salt, Fruits and Nuts
12. Ingredient Delivery and Storage
13. Ingredient Assembly
14. Mixing
15. Fermented Dough Products —
16. Soda Crackers
17. Chemically Leavened Crackers
18. Wire-Cut and Deposit Cookies
19. Extruded Cookies
20. Rotary Molder Cookies
21. Cutting Machine Products
22. Baking
23. Post-Baking Operations
24. Handling Cookies and Crackers from Cooling to Packaging Machines
25. Sugar Wafers and Ice Cream Cones
26. Marshmallow Products
27. Creme Sandwich Products
28. Enrobed Cookies
29. Packages and Packaging Equipment
30. Machinery Maintenance and Care
31. Sanitation and Safety
32. Quality Management
33. Environmental Management

Production Categories:
Cookies/Crackers



BREAD MANUFACTURING PROCESSING

Cost: ABA Members: \$250 | Non-Member: \$500

The course is a fully digitized course offered through the academy portal that focuses on each step of the manufacturing process, from scaling through the packaging of the finished product. The course is divided into two sections comprised of 20 modules.

The Course follows the manufacturing process flow:

- ✓ Explain the purpose of each step of the manufacturing process.
- ✓ Describe dough and finished product characteristics of over-or under
- ✓ Performing each step in the manufacturing process.
- ✓ Identify corrections for over-or under-performing each step in the manufacturing process.
- ✓ Identify critical quality production controls for each step in the manufacturing process.
- ✓ Identify common equipment used for each step in the manufacturing process.
- ✓ Explain each unique step of each dough system.
- ✓ Identify acceptable benchmark ranges for each dough system (unique ingredients, time, temperature, equipment, pH/TTA, etc.).
- ✓ Explain common adjustments for each dough system.
- ✓ Identify the advantages and disadvantages of each dough system
- ✓ Compare and contrast the dough systems.
- ✓ Describe how dough temperature (and age) affects the manufacturing process.
- ✓ Identify common adjustments to each manufacturing process step.

FEATURES

- Fully digitized through the Academy Portal
- Duration: 8 hours, up to six-weeks to finish.
- Available languages: English & Spanish
- Final Test: 80% Final GPA to receive certificate.



WHO SHOULD ENROLL

- For those who want to manage or supervise and bakery shift, department, or facility

Module Chapters:

Manufacturing Process – Part 1:

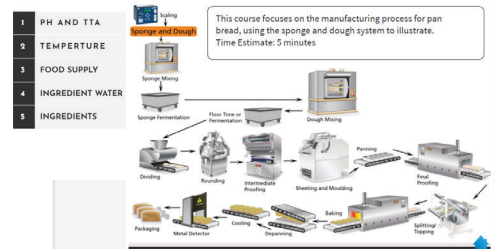
1. Manufacturing Introduction
2. Ingredient Scaling
3. Mixing
4. Fermentation
5. Dough Systems: Sponge and Dough
6. Dough Systems: Liquid Fermentation
7. Dough Systems Straight Dough
8. Dough Systems: No Time Dough
9. Dough Systems: Continuous Mix
10. Dough Systems: Compare Dough Systems

Manufacturing Process – Part 2:

11. Dividing
12. Rounding
13. Intermediate Proof
14. Sheeting and Moulding
15. Panning
16. Proofing
17. Topping and Splitting
18. Baking
19. Depanning and Cooling
20. Packaging

Production Categories: Bread

Review - Fermentation Rate



Revisión - Fermento líquido





DIGITAL BADGE SYSTEM

LEARN IT. EARN IT.

GRADUATE-BASED DIGITAL BADGES



COLOR LEVEL RATING SYSTEM



WHAT IS BAKERS MANUFACTURING ACADEMY DIGITAL BADGE?

A digital representation of your significant professional accomplishments, combined with a verifiable description of the specific knowledge and skills required to earn it.



LINKEDIN UNIVERSITY

The Bakers Manufacturing Academy is a registered University on LinkedIn.

What does that mean? Students can now mark themselves as a graduate of any of the academy's educational programs and be featured as alumni within the academy's company profile.

By updating one's profile and adding your education experience, you'll be harnessing the power of the LinkedIn platform and tap into an expansive network of professionals, companies, and groups within the baking industry and beyond.

Follow the Bakers Manufacturing Academy on LinkedIn by searching for 'Bakers Manufacturing Academy' or copy and pasting this link: <https://linkedin.com/school/bakersmanufacturingacademy/>

ALUMNI PLATFORM

