

IGP–KSU Baking Basics Training: Breads, Cakes, and Cookies

IGP Institute, Kansas State University, Manhattan, Kansas

Baking Basics is a course designed to give a broad overview of the ingredients and processes needed to make some of the popular baked products in today's markets. Participants will discover unique aspects of making breads, cakes, and cookies, with lectures and hands-on sessions.

Course Objectives

- Identify the basic function of ingredients, including their effects and purposes in the baking process of breads, cakes, and cookies
- Recognize key pieces of equipment used in baking processes and understand their role in the process
- Use key production steps to make breads, cakes, and cookies

Who Should Attend

People new to baking or taking on new roles in:

- Research and Development
- Quality Assurance
- Non-production employees including accounting, sales, or support staff
- Technical Sales/Service
- Engineering

People who work for:

• Flour milling companies and other ingredient suppliers

KANSAS STATE

- Equipment manufacturers
- Baking companies





IGP Institute Department of Grain Science and Industry

1980 Kimball Avenue, 102 IGP Institute Conference Center | Manhattan, KS 66506–7000 Tel. 785-532-4070 | Fax 785-532-6080 | *www.grains.k-state.edu/igp* | *igp@ksu.edu*

Agenda

Day 1

8:00 Welcome and orientation

- Basic Terminology
- Explain baker's percentage used in formulation
- Define the most common terms and concepts of the baking industry

Four and Flour Quality

- Identify the different types of wheat and flour used in baking
- Discuss flour types used for various baked products
- Discuss key quality parameters and test methods used to assess flour quality

Cake Ingredients and processing

- Describe the different types of cakes
- Discover the functional role of cake ingredients
- Describe cake mixing, depositing, and baking
- Relate the importance of specific gravity for cake production

12:00 Lunch

- Hands-on baking
- Make cakes with different types of flour
- Make different types of cakes

5:00 Adjourn

Day 2

8:00 Evaluation of products from the previous day – Q&A

- Function of ingredients in bread
- Describe the function and applications of ingredients used in bread production

Bread making

- Identify the processing conditions and equipment for mixing, fermentation, make-up, proofing, cooling, slicing, and packaging of pan bread
- Explain the different dough systems used to produce baked goods

12:00 Lunch

- Hands-on baking
- Make pan bread with different flours

5:00 Adjourn

Day 3

8:00 Evaluation of product from previous day – Q&A

- Cookie ingredients
- Define the main types of cookies
- Explain ingredient functionality of basic and optional ingredients commonly found in cookies
- Discuss how variations in ingredients affect both process and product

Cookie Processing

• Discussion of processing steps for rotary cookie products, including mixing, rotary moulding, baking, and the impact of the process on the finished product

12:00 Lunch

- Hands-on baking
- Make and evaluate cookies with different types of flour
- Course wrap-up and review
- Answer questions

5:00 Adjourn



 IGP Institute

 Y
 Department of Grain Science and Industry

1980 Kimball Avenue, 102 IGP Institute Conference Center | Manhattan, KS 66506–7000 Tel. 785-532-4070 | Fax 785-532-6080 | *www.grains.k-state.edu/igp* | *igp@ksu.edu*