

# Baking / Pastry Arts

Program Number: 31-314-1

## One-Year Technical Diploma

Hospitality Program Cluster

Center for Business and Applied Arts

Program offered at Madison Campuses

For information call: (608) 246-6003 or  
(800) 322-6282 Ext. 6003

### About the Program

The Baking/Pastry Arts Program provides students with a comprehensive hands-on experience in baking and pastry arts. Students will obtain the practical and theoretical training necessary to produce quality bakery products from scratch. An emphasis is placed on decorative pastry arts including cake decorating, sugar and chocolate work, and plated dessert presentations. Through their experiences in the bakery store, students will learn effective merchandising and sales training techniques.

This program is designed to be completed in two semesters plus the summer internship. Due to the limited availability of the courses and the small size of the program, students may not attend on a part-time basis.

The program is accredited by the Retail Bakers of America and the American Culinary Federation Educational Institute. After completion of the B/PA program and with 1000 hours of work experience in the baking industry, students can take the Retail Bakers of America's Certified Journey Baker written exam. This is the beginning level of certification leading up to a Master Baker qualification. The purpose of RBA certification is to raise the professional standards and verify the work, skill and knowledge professional bakers bring to the marketplace and improve job opportunities and income for certified bakers and decorators.

Graduates of this program typically earn \$12 to \$15 per hour.

### Unique Requirements for Admissions

High school diploma or GED. A COMPASS or equivalent assessment test is required prior to registration. Competency in Windows, Internet and basic word processing is necessary for success in this program.

Students must have appropriate competency in math, reading and writing to succeed in this program. If remedial course work is recommended, it is suggested that these courses be completed before beginning the Baking/Pastry Arts program courses.

Potential students must be physically able to lift 50# on a routine basis and stand for a minimum of eight hours per day. They should also have good communication and social skills to be successful in this program.

## Curriculum

The courses listed below outline the requirements for graduation for students entering this program in the 2011-2012 academic year. Requirements for graduation may vary depending on the semester in which a student is admitted to their program. Current/continuing students should consult their degree progress report available through their student center account for specific graduation requirements. Program requirements are subject to change.

		Hrs/week
Summer (prior to start of program)	Credits	Lec-Lab
31-314-300	Baking Boot Camp*	1 1-1
<b>First Semester**</b>		
10-109-124	Fundamentals of Food Preparation*	2 1-2
31-314-315	Baking Lab 1*	3 0-6
31-314-325	Baking Lab 2*	3 0-6
31-314-365	Chocolate Basics*	1 0-2
31-314-370	Chocolate Candies*	1 0-2
31-314-375	Experimental Baking*	1 0-2
31-314-384	Cake Decorating*	2 0-4
10-316-101	Principles of Sanitation*	1 1-0
31-314-310	Baking Theory*	1 2-0
	<b>Semester Total</b>	<b>15</b>
<b>Second Semester**</b>		
31-314-335	Specialty Cakes and Miniatures*	3 0-6
31-314-345	Artisan Breads and Breakfast Pastries*	3 0-6
31-314-355	Bakery Production*	3 0-6
31-314-372	Chocolate & Sugar Confections*	1 0-2
31-314-388	Advanced Cake Decorating*	2 0-4
10-316-152	Nutrition*	2 2-0
	<b>Semester Total</b>	<b>14</b>
<b>Interim</b>		
31-314-389	Bakery Seminar*	1 2-0
<b>Summer</b>		
31-314-390	Bakery Internship*	2 0-8

\*Courses only offered in semester shown.

\*\*All courses must be taken concurrently each semester.



## Program Courses

### 31-314-300 Baking Boot Camp 1 credit

This course is required for all students accepted into the Baking/Pastry Arts program and is taken during the summer prior to their fall enrollment. This short course offers the students an introduction to the requirements and demands of the program and to a career in the baking industry. Students spend time in the classroom and baking lab, as well as participate in a required field trip to a bakery.

### 31-314-315 Baking Lab 1 3 credits

Students develop a foundation of baking principles through hands-on application of production equipment in a state-of-the-art baking lab. Students will prepare a variety of standard bakery products to obtain knowledge of many baking processes. Safe use of bakery equipment and proper sanitation procedures are emphasized. Prerequisites or concurrent enrollment: 31-314-310, 10-316-101 and appropriate Math Placement test score or equivalent course.

### 31-314-325 Baking Lab 2 3 credits

Students develop manual baking skills and a working knowledge of the production and finish various straight yeast doughs such as breads and rolls; sweet dough; pate choux, pastry cream, cheesecakes, and frozen desserts. Students learn both handcrafted and machine methods in the make-up of these products. Prerequisites or concurrent enrollment: 10-316-101, 31-314-310 and appropriate Math Placement test score or equivalent course.

### 31-314-335 Specialty Cakes and Miniatures 3 credits

This course covers all aspects of specialty cake baking, constructing, and assembly. Production includes various types of foam cakes, creamed cakes, icings and fillings, along with dessert sauces, and plating techniques. European classic tortes as well as contemporary entremets and petit gateau will be demonstrated with lab time for practice. A final project is the creation of a dessert buffet. Prerequisites: 10-316-101 and 31-314-315.

### 31-314-345 Artisan Breads & Breakfast Pastries 3 credits

This course provides students with a working knowledge of the production of pre-fermented yeast doughs and sourdoughs. In addition, students produce Viennoiserie, both laminated such as croissant, Danish and Kringle, and non-laminated products as Brioche and Gibassier. Production methods and speed are emphasized. Cooked custards and crepes are also introduced. Prerequisite: 31-314-325.

### 31-314-355 Bakery Production 3 credits

The lab is used as a simulated bakery in this course with products being merchandised through the bakery store. Students make items with an emphasis on production speed to help understand the flow of a real bakery. Students are responsible for service case presentation as well as effective merchandising displays and customer service. Prerequisites: 10-316-101 and concurrent enrollment in all second semester baking/pastry arts courses.

### 31-314-365 Chocolate Basics 1 credit

Gives learners a basic introduction into the world of chocolate. The history and production of chocolate is discussed. Learners sample a wide variety of chocolates from different companies, as well as specific types of chocolate. Brownies, mousse, and hot chocolate are made using these different chocolates and the products are evaluated. After learning to temper chocolate, an assortment of truffles is produced. Prerequisites: 10-316-101, 31-314-310 and appropriate Math Placement test score or equivalent course.

### 31-314-370 Chocolate Candies 1 credit

This course builds on competencies learned in Chocolate Basics. Advanced techniques of candy making are practiced such as hand dipped centers, caramel making, and chocolate molds. Prerequisite: 31-314-365.

### 31-314-372 Chocolate & Sugar Confections 1 credit

Students learn to properly cook sugar and isomalt. Basic sugar techniques, such as poured, blown and pulled sugar are practiced. Gum paste amenities are created. Decorative chocolate techniques such as chocolate clay, piping and spraying are practiced. Students create a final chocolate showpiece. Prerequisites: 31-314-365 and 31-314-370.

### 31-314-375 Experimental Baking 1 credit

Provides the opportunity to discover functions of ingredients through lab experiments. Ingredient amounts and procedures are varied in specific formulas and results are observed to determine optimum formulation. Prerequisites: 31-314-310, 10-316-101 and appropriate Math Placement test score or equivalent course.

### 31-314-384 Cake Decorating 2 credits

Provides students with hands-on practice in the basics of production cake decorating and decorative bakery work, with attention given to the techniques of icing cakes. Cake Decorating areas include script, borders, drop and nail flowers, as well as the use of edible images. Students practice icing cakes and decorating them in a timely manner. Emphasis is placed on accuracy and speed of decorating to simulate industry conditions. Prerequisite: 31-314-310 and 10-316-101.

### 31-314-388 Advanced Cake Decorating 2 credits

Hands-on practice with advanced cake decorating techniques is provided. Rolled fondant, modeling with gum paste and marzipan, advanced airbrushing and tiered cake assembly are covered. Prerequisites: 31-314-384 and 10-316-101.

### 31-314-389 Bakery Seminar 1 credit

Covers current and relevant issues related to baking and pastry arts. Guest professionals provide expertise and knowledge about specific areas in the baking industry. In depth research is conducted on selected topics. A research paper is required. This interim course is taken in between the spring semester and the summer internship.

### 31-314-390 Baking Internship 2 credits

Provides an opportunity to gain practical work experience through supervised internships at an approved job site. Students develop written competency plans with individualized objectives that compliment and enhance instruction given in bakery labs. Prerequisite: completion of all core courses in the Baking/Pastry Arts program.

### 10-316-101 Principles of Sanitation 1 credit

Covers food service sanitation principles and the role of food service personnel in the prevention of contamination and food borne illness. Certification through the National Restaurant Association Educational Foundation is a requirement for completion and can be used to apply for state certification. Prerequisite: Appropriate Reading Placement test score or equivalent course.

### 31-314-310 Baking Theory 1 credit

Provides an in depth understanding of basic baking principles and knowledge of the functions and appropriate usage of the major ingredients used in production baking. Different types of bakery products are classified according to their characteristics. Ingredient cost-outs are calculated. Prerequisite: Appropriate Reading Placement test score or equivalent course.

### 10-316-152 Nutrition 2 credits

Provides information about nutrition as it applies to the food service industry. The six classes of nutrients are discussed as well as the latest guidelines set forth by governmental agencies and health organizations. Students learn about healthful cooking methods needed to modify and create menus for specific health concerns. The role of diet in disease prevention also is discussed.

## Career Potential:

- **Bakery Worker/ Assistant Pastry Chef**  
May work in a variety of commercial food service establishments such as retail bakeries, supermarket bakeries, restaurants or hotels, hospitals or nursing homes, catering operations and specialty shops.

With additional education and/or work experience, graduates may find employment as:

- Baker
- Bakery Manager
- Commercial Cake Decorator
- Bakery Owner

*More detailed and updated information on this program may be available at: [madisoncollege.org](http://madisoncollege.org). The college reserves the right to make changes in the regulations and courses announced in this publication without notice.*

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