CUSC-425: Modern and Industrial Cooking Tools, Techniques, and Ingredients

In this course, students will study the use of industrial-scale cooking equipment and its applications in product development and food processing. Through the use of bench-top equipment, they'll conceptualize and model the steps from product ideation, development, and launch. Field trips to large-scale facilities and commissaries will help illustrate the application of equipment and the logistics of their use. Centrifuges, homogenizers, vacuum filters, freeze dryers, rotary evaporators, pasteurizers, and other specialized equipment that have moved from scientific laboratories to professional kitchens will be covered.

Credits 3

Prerequisites

Culinary Science: Principles and Applications (CUSC-200), College Algebra (MTSC-110) or Calculus I (MTSC-205), Science Fundamentals (MTSC-115), Introduction to Statistics (MTSC-200), Culinary Chemistry (CUSC-310), Dynamics of Heat Transfer and Properties of Food (CUSC-315), Flavor Science and Perception (CUSC-320), and Research Methods: Scientific Evaluation of Traditional Cooking Techniques (CUSC-325).