

Culinary Science & Product Development - B.S.

The Culinary Science & Product Development bachelor's degree program integrates food science with culinary arts, preparing students for careers as research chefs and food technologists in product development labs, test kitchens and culinary centers.

Upon completion of the program, graduates are expected to:

- Apply the skills and techniques of culinary arts across a broad range of food products and flavor profiles.
- Evaluate food safety practices in a food production kitchen and in a food manufacturing facility.
- Design, execute, interpret and report on food science experiments.
- Create food products that meet the needs of the consumer and describe the product development process from ideation through commercialization.
- Select the appropriate food processing, food analysis and quality assurance techniques and equipment used in the manufacturing of food products.

The Culinary Science & Product Development program begins with a focus on culinary or baking and pastry arts. Laboratory classes, offered throughout the program, provide students with an opportunity to continuously develop the craft. Credentialed faculty share professional expertise within state-of-the-art culinary and baking and pastry laboratories, providing an exceptional education for students. Students continue to develop their skills in a culinary or baking and pastry internship during their second year of study.

The program continues with foundational science courses that provide students with knowledge of science and the scientific method. The food product development process is introduced and reinforced in applied culinary science laboratories and the academic classroom. Topics in food regulations, labeling and food analysis prepare students for advanced coursework. Communication and presentation skills, important for succeeding in the product development industry, are stressed throughout the program and supported by an arts and sciences core curriculum.

The curriculum culminates with specifically designed culinary science courses that integrate culinary arts and basic sciences with applied food science coursework, which includes food ingredient technology, product design and development, and a required internship specific to food science, research and development or manufacturing, preparing students for careers within the profession.

Culinary Science & Product Development

A four-year program leading to the bachelor of science degree

Foundation Courses

Choose Culinary or Baking & Pastry Arts Foundation 18

Culinary Arts

CUL1100	Introduction to Culinary Skills and Techniques	
CUL1210	Breakfast & Lunch Cafe	
CUL1320	Elements of a la Minute Cooking	
CUL1410	Contemporary Cooking & Leadership Functions	
CUL2710	Banquets and Catering	
CUL2810	Global à la Carte	

Baking & Pastry Arts

BPA1701	Foundations of Baking and Pastry	
BPA1710	Principles of Cake Production and Design	
BPA1720	Plated Desserts	
BPA1730	Artisan Bread & Viennoiserie I	
BPA1740	Artisan Bread & Viennoiserie II	
BPA1750	Chocolate, Sugar and Confections	

Major Courses

ENG2010	Introduction to Technical Communication	3
CULS2010	Introduction to Food Product Development	3
CULS2210	Food Science	3
CULS3015	Food Ingredient Technology	3
CULS3025	Food Processing	3
CULS4035	Food Product Design and Development	3

Applied/Experiential Learning

CFIT2799	College of Food Innovation & Technology Intermediate Internship ^{1c}	6
or CFIT2699	College of Food Innovation & Technology Intermediate Internship	

CFIT4799	College of Food Innovation & Technology Advanced Internship [*]	12
Related Professional Studies		
BIO2201 & BIO2206	General Microbiology and General Microbiology Laboratory	4
CAR0010	Career Management	1
CHM1000 & CHM1006	Foundations in Chemistry and Foundations in Chemistry Laboratory	4
FSM1165	The Food Safety Manager ^{**}	1
FSM2025 or FSM2045	Food and Beverage Cost Control or Introduction to Menu Planning and Cost Controls	3
A&S Core Experience		
Communications Foundation Courses		9
ENG1020	English Composition	
ENG1021	Advanced Composition and Communication	
ENG1030	Communication Skills	
Integrative Learning		6
Two ILS courses, one at the 2000 level, one at the 4000 level		
Arts & Humanities		6
HIST3020	A Multicultural History of America	
One course from ART, HUM#, LIT, PHIL, or REL		
Mathematics		6
MATH1020	Fundamentals of Algebra (or higher, based on student's placement)	
MATH2001	Statistics I	
Science		3
SCI1050	Nutrition	
Social Sciences		6
ECON1001	Macroeconomics	
One course from ANTH [°] , LEAD, PSCL, PSYC, or SOC		
A&S Electives		6
CHM2050	Introduction to Organic Chemistry	
SCI1015	Introduction to Life Science	
Free Electives[#]		
12 credits selected from 1000-4999 numbered offerings within the university		12
Total Credits		121.0

* Students in the culinary science program must complete an internship in food science, research and development, or manufacturing.

** Students must pass a national exam that is recognized by the Conference for Food Protection as a graduation requirement.

^{1c}Typically, internships require a minimum of six credits. Students interested in a 9 or 12-credit internship can apply additional experiential learning and free elective credits, if available. Students are strongly encouraged to contact a faculty adviser before scheduling internship and free elective credits.

[#] In addition to classes, free elective credits may be applied to a number of options such as internship, study abroad, Directed Experiential Education courses and courses in a specialization or minor as relevant. For Accelerated Master's program students, up to three graduate-level courses may apply. Students are strongly encouraged to contact a faculty adviser before scheduling free elective credits.

Visit Courses by Subject Code for a listing of all campus courses.

[‡]HUM courses are not offered in North Miami or Online.

[^]BIO courses are not offered in North Miami.

[¶]CAD courses are only offered in Providence.

[±]CHM courses are not offered in North Miami or Online.

[°]PHY courses are not offered in Charlotte.

^{°°}ANTH courses are not offered in North Miami or Charlotte.

NOTE: Students must pass MATH0010 Basic Mathematics or have equivalent placement scores to enroll in required math course(s).

Students who graduate with a bachelor's degree must leave Johnson & Wales University with effective writing skills to fulfill the graduation writing requirement. These writing skills are assessed in ENG1021 Advanced Composition and Communication. Students who have met the requirement of ENG1021 Advanced Composition and Communication or ENG1027 Honors Advanced Composition and Communications: Civic Discourse outside of Johnson & Wales University must fulfill the graduation writing requirement through successful completion of ENG0001 Writing Workshop.

In collaboration with academic colleges across all four JWU campuses, JWU Global — Study Abroad programs offer a variety of international options

for major, minor, arts and sciences, and elective credit at many affordable price points for students during the academic year, break periods, and summer. Faculty-led, exchange, affiliate, and direct-enroll programs range in duration from one week to a full semester. Financial aid is applicable and scholarships are available. Visit the study abroad website for information, program descriptions and online applications. Where will you go?