Applied Food Science - B.S.

The Applied Food Science bachelor's degree program combines the strengths of culinary arts and food science to prepare students for careers working in food product research and development, quality assurance, production management, and food technologist positions. The program is open to individuals already holding an associate degree from Johnson & Wales University's College of Culinary Arts as well as graduates from other culinary arts and baking & pastry arts associate degree programs.

Upon completion of the program, graduates are expected to:

- Apply food chemistry and scientific principles to the innovation and development of food and food products.
- Demonstrate practical proficiency of applied food sciences in a food analysis laboratory.
- Apply principles of food technology and processing in food systems.
- Apply food safety and microbiological knowledge to identify and solve problems related to food and food products.
- Demonstrate effective oral and written communication skills.

Major curriculum classes are conducted in both academic and laboratory environments focusing on core competencies prescribed by the Institute of Food Technologists. These include food chemistry and analysis, food safety and microbiology, food processing and engineering, and applied food science. The student's experience is complemented by the university's Arts & Sciences Core Curriculum to provide breadth of learning through the natural sciences, social sciences and humanities.

All students interested in entering the Applied Food Science degree program must complete and submit an application to the program lead faculty member. While application typically takes place during the first year of study, students may apply at any point during their academic career at Johnson & Wales University. Selection is based on previous academic performance, industry experience and professional recommendations. Students must have a minimum GPA of 3.0.

Applied Food Science

A four-year program leading to the bachelor of science degree for two-year baking & pastry arts or culinary arts program graduates

First two years:		62
in Baking & Pastry Arts		
	OR	
in Culinary Arts		
Third and fourth years:		
Major Courses		
FSC3010	Food Quality Assurance	3
FSC3020	Food Chemistry	3
FSC3040	Food Ingredients & Formulations	3
FSC3050	Fermentation Science & Functional Foods	3
FSC3060	Principles of Food Microbiology	3
FSC3065	Principles of Food Microbiology Laboratory	1.5
FSC4010	Sensory Analysis	3
FSC4020	Principles of Food Processing	3
FSC4040	Product Research & Development	3
Related Professional Studies		
BIO2201	General Microbiology	3
BIO2206	General Microbiology Laboratory	1
CAR0010	Career Management	1
CHM2040	Introduction to General and Organic Chemistry	3
A&S Core Experience		
Integrative Learning		3
One ILS course at the 4000 level		
Arts and Humanities		6
PHIL3240	Ethics: A Global Perspective	
One course from ART, HIST, HUM, LIT or REL		
Mathematics		3
MATH2001	Statistics I	
Social Sciences		6
PSYC1001	Introductory Psychology	
One course from ANTH, ECON, GEND, LEAD, PSCI, RES or SOC		
A&S Electives *		3
One course with an EASC attribute		
Free Electives #		
9 credits selected from 1000-4999 numbered offerings within the university		9
Total Credits		**63.5**
Four-Year Credit Total		**125.5**

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 advisor before scheduling free elective credits.

* Students should select SCI1015 as their associate degree's A&S elective as it is a prerequisite to some of the required courses in this program.