FOOD SCIENCE - FOOD SCIENCE OPTION HONOURS (B.SC. (F.SC.)) (90 CREDITS)

Offered by: Food Science&Agr.Chemistry (Faculty of Agricultural and Environmental Sciences)

Degree: Bachelor of Science (Food Science)

Program credit weight: 90

Program Description

Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

In addition to satisfying the research requirements, students must apply for the Honours program in March or April of their U2 year. It is the responsibility of the student to find a professor who is willing to support and supervise the research project. No student will be accepted into the program until a supervisor has agreed to supervise the student. Applicants must have a minimum CGPA of 3.3 to enter the Honours program and they must earn a B grade (3.0) or higher in the courses making up the Honours program. Students are required to achieve a minimum overall CGPA of 3.3 at graduation to obtain honours. Students can use their electives to complete the Honours program. The courses credited to the Honours program must be in addition to any required or complementary courses taken to satisfy the requirements of the student's major and specialization.

The Honours program consists of 12 credits of courses that follow one of two plans listed below.

Students who meet all the requirements will have the name of their program changed to include the word "Honours."

A brief description of the research activities involved will be documented and signed by the Program Director of the student's major, the supervisor of the research project, and the student.

This program is intended for those students interested in the multidisciplinary field of food science. The courses are integrated to acquaint the student with food processing, food chemistry, quality assurance, analytical procedures, food products, standards, and regulations. The program prepares graduates for employment as scientists in industry or government, in regulatory, research, quality assurance, or product development capacities.

Graduates have the academic qualifications for membership in the Canadian Institute of Food Science and Technology (CIFST). Graduates of the Food Science Major with Food Science Option can also qualify for recognition by the Institute of Food Technologists (IFT).

The Food Science Option is completed after 90 credits with free elective courses.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this Course Catalogue for prerequisites and minimum credit requirements. For information on academic advising, see: http://www.mcgill.ca/macdonald/studentinfo/advising

Degree Requirements – B.Sc.

This program is offered as part of a Bachelor of Science (B.Sc.) degree.

To graduate, students must satisfy both their program requirements and their degree requirements.

- The program requirements (i.e., the specific courses that make up this program) are listed under the Course Tab (above).
- The degree requirements—including the mandatory Foundation program, appropriate degree structure, and any additional components—are outlined on the Degree Requirements page.

Students are responsible for ensuring that this program fits within the overall structure of their degree and that all degree requirements are met. Consult the Degree Planning Guide on the SOUSA website for additional guidance.

Required Courses (51 credits)

Note: If an introductory CEGEP-level Organic Chemistry course has not been completed, then FDSC 230 Organic Chemistry. must be completed as a replacement.

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| Course | Title | Credits |
|------------|---|---------|
| AEMA 310 | Statistical Methods 1. | 3 |
| AGRI 510 | Professional Practice. | 3 |
| BREE 324 | Elements of Food Engineering. | 3 |
| FDSC 200 | Introduction to Food Science. | 3 |
| FDSC 213 | Analytical Chemistry 1. | 3 |
| FDSC 251 | Food Chemistry 1. | 3 |
| FDSC 300 | Principles of Food Analysis 1. | 3 |
| FDSC 310 | Post Harvest Fruit and Vegetable Technology | . 3 |
| FDSC 319 | Food Commodities. | 3 |
| FDSC 330 | Food Processing. | 3 |
| FDSC 400 | Food Packaging. | 3 |
| FDSC 442 | Food Microbiology. | 3 |
| FDSC 495D1 | Food Science Seminar. | 1.5 |
| FDSC 495D2 | Food Science Seminar. | 1.5 |
| FDSC 525 | Food Quality Assurance. | 3 |
| LSCI 211 | Biochemistry 1. | 3 |
| LSCI 230 | Introductory Microbiology. | 3 |
| NUTR 207 | Nutrition and Health. | 3 |

Additional Required Courses - Food Science Option (21 credits)

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| Course | Title | Credits |
|----------|---|---------|
| FDSC 233 | Physical Chemistry. | 3 |
| FDSC 305 | Food Chemistry 2. | 3 |
| FDSC 315 | Separation Techniques in Food Analysis 1. | 3 |

| FDSC 334 | Analysis of Food Toxins and Toxicants. | 3 |
|----------|--|---|
| FDSC 405 | Food Product Development. | 3 |
| FDSC 516 | Flavour Chemistry. | 3 |
| FDSC 540 | Sensory Evaluation of Foods. | 3 |

Honours Courses

Students choose either Plan A or Plan B.

Honours Plan A

Two 6-credit Honours research courses in the subject area of the student's major, chosen in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

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| Course | Title | Credits |
|----------|-----------------------------|---------|
| FAES 401 | Honours Research Project 1. | 6 |
| FAES 402 | Honours Research Project 2. | 6 |

Honours Plan B

A minimum of two 3-credit Honours courses and 6 credits in 400- or 500-level courses, from the Faculty of Agricultural and Environmental Sciences, selected in consultation with the Program Director of the student's major. The topic of the Honours research project must be on a topic related to their major and selected in consultation with the Program Director of the student's major and the professor who has agreed to supervise the research project.

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| Course | Title | Credits |
|----------|--------------------|---------|
| FAES 405 | Honours Project 1. | 3 |
| FAES 406 | Honours Project 2. | 3 |

Elective Courses (6 credits)

Electives are selected in consultation with an academic adviser, to meet the minimum 90-credit requirement for the degree. A portion of these credits should be in the humanities/social sciences.