FOOD SCIENCE/ NUTRITIONAL SCIENCE MAJOR (CONCURRENT) (B.SC. (F.SC.)) AND (B.SC. (NUTR.SC.)) (122 CREDITS)

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

Degree: Bachelor of Science (Food Science)

Program credit weight: 122

Program Description

The concurrent program B.Sc.(F.Sc.) and B.Sc.(Nutr.Sc.) is designed to give motivated students the opportunity to combine the two fields. The two disciplines complement each other with Food Science providing the scientific foundation in the fundamentals of food science and its application in the food system, while Nutritional Sciences brings the fundamental knowledge in the nutritional aspects of food and metabolism. The program aims to train students with the fundamental knowledge in both disciplines to promote the development of healthy food products for human consumption. The overall program is structured and closely integrated to satisfy the academic requirements of both degrees as well as the professional training or exposure to industry.

Refer to "Faculty Information and Regulations" > "Minimum Credit Requirements" in this publication 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 (80 credits)

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| Course | Title | Credits |
|----------|---|---------|
| AEMA 310 | Statistical Methods 1. | 3 |
| ANSC 234 | Biochemistry 2. | 3 |
| ANSC 323 | Mammalian Physiology. | 3 |
| ANSC 424 | Metabolic Endocrinology. | 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 305 | Food Chemistry 2. | 3 |
| FDSC 310 | Post Harvest Fruit and Vegetable Technology | ·. 3 |
| FDSC 315 | Separation Techniques in Food Analysis 1. | 3 |
| FDSC 319 | Food Commodities. | 3 |
| FDSC 330 | Food Processing. | 3 |
| FDSC 334 | Analysis of Food Toxins and Toxicants. | 3 |
| FDSC 400 | Food Packaging. | 3 |
| FDSC 442 | Food Microbiology. | 3 |
| FDSC 497 | Professional Seminar: Food. | 1.5 |
| FDSC 525 | Food Quality Assurance. | 3 |
| LSCI 211 | Biochemistry 1. | 3 |
| LSCI 230 | Introductory Microbiology. | 3 |
| NUTR 207 | Nutrition and Health. | 3 |
| NUTR 214 | Food Fundamentals. | 4 |
| NUTR 307 | Metabolism and Human Nutrition. | 3 |
| NUTR 337 | Nutrition Through Life. | 3 |
| NUTR 344 | Clinical Nutrition 1. | 4 |
| NUTR 497 | Professional Seminar: Nutrition. | 1.5 |
| NUTR 512 | Herbs, Foods and Phytochemicals. | 3 |

Complementary Courses (30 credits)

Complementary courses are selected as follows:

At least 9 credits selected from:

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|-----------------------|--|---------|--|--|
| Course | Title | Credits | | |
| AGEC 200 | Principles of Microeconomics. | 3 | | |
| AGEC 201 | Principles of Macroeconomics. | 3 | | |
| AGEC 330 | Agriculture and Food Markets. | 3 | | |
| AGEC 430 | Agriculture, Food and Resource Policy. | 3 | | |
| AGEC 442 | Economics of International Agricultural Development. | 3 | | |
| AGEC 450 | Agribusiness Management. | 3 | | |
| NUTR 342 | Applied Human Resources. | 3 | | |

At least 9 credits selected from:

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| Course | Title | Credits |
|----------|------------------------------------|---------|
| ANSC 551 | Carbohydrate and Lipid Metabolism. | 3 |
| ANSC 552 | Protein Metabolism and Nutrition. | 3 |
| ENVR 203 | Knowledge, Ethics and Environment. | 3 |
| FDSC 516 | Flavour Chemistry. | 3 |
| FDSC 536 | Food Traceability. | 3 |
| FDSC 537 | Nutraceutical Chemistry. | 3 |
| NUTR 322 | Applied Sciences Communication. | 3 |
| NUTR 341 | Global Food Security. | 3 |
| NUTR 503 | Nutrition and Exercise. | 3 |

12 credits selected from:

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| Course | Title | Credits |
|----------|--------------------------------|---------|
| FDSC 480 | Food Industry Internship. | 12 |
| NUTR 480 | Nutrition Industry Internship. | 12 |

Elective Courses (12 credits)

Electives are selected in consultation with an academic adviser.

^{*} Not all courses may be offered every year, please consult with your adviser when planning your program.