

NUTRITION MAJOR - FOOD FUNCTION AND SAFETY (B.SC. (NUTR.SC.)) (90 CREDITS)

Offered by: Human Nutrition (Faculty of Agricultural and Environmental Sciences)

Degree: Bachelor of Science (Nutritional Sciences)

Program credit weight: 90

Program Description

This Major offers a core emphasis on the scientific fundamentals of nutrition and metabolism throughout the lifespan from the molecular to the organismal level. The concentration in food function and safety covers the ranges from health effects of phytochemicals and food toxicants, food chemistry and analysis, food safety, product development and influence of constituents of food on health. This degree does not lead to professional licensure as a Dietitian/Nutritionist. Graduates are qualified for careers in the biotechnology field, pharmaceutical and/or food industries, government laboratories, and the health science communications field. Graduates often continue on to graduate studies preparing for careers in research, medicine, and dentistry or as specialists in nutrition.

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.

Note: For information about Fall 2025 and Winter 2026 course offerings, please check back on May 8, 2025. Until then, the "Terms offered" field will appear blank for most courses while the class schedule is being finalized.

Required Courses (63 credits)

All required courses must be passed with a minimum grade of C.

Expand allContract all

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 251	Food Chemistry 1.	3
FDSC 300	Principles of Food Analysis 1.	3
FDSC 305	Food Chemistry 2.	3
FDSC 525	Food Quality Assurance.	3
LSCI 204	Genetics.	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 322	Applied Sciences Communication.	3
NUTR 337	Nutrition Through Life.	3
NUTR 344	Clinical Nutrition 1.	4
NUTR 401	Emerging Issues in Nutrition.	1
NUTR 450	Research Methods: Human Nutrition.	3
NUTR 512	Herbs, Foods and Phytochemicals.	3

Complementary Courses (12 credits)

12 credits of complementary courses are selected as follows:

Common Complementary Courses

6 credits selected from:

Expand allContract all

Course	Title	Credits
ANSC 433	Animal Nutrition and Metabolism.	3
ANSC 560	Biology of Lactation.	3
FDSC 537	Nutraceutical Chemistry.	3
FDSC 545	Advances in Food Microbiology.	3
NUTR 501	Nutrition in the Majority World.	3
NUTR 503	Nutrition and Exercise.	3
NUTR 505	Public Health Nutrition.	3
NUTR 507	Advanced Nutritional Biochemistry.	3
NUTR 511	Nutrition and Behaviour.	3
NUTR 537	Advanced Human Metabolism.	3
NUTR 545	Clinical Nutrition 2.	4
NUTR 546	Clinical Nutrition 3.	4
NUTR 551	Analysis of Nutrition Data.	3
PARA 438	Immunology.	3

6 credits selected from:

Expand allContract all

Course	Title	Credits
AGRI 510	Professional Practice.	3
ANSC 350	Food-Borne Pathogens.	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 405	Food Product Development.	3
FDSC 442	Food Microbiology.	3
FDSC 516	Flavour Chemistry.	3
FDSC 520	Biophysical Chemistry of Food.	3
FDSC 537	Nutraceutical Chemistry.	3
FDSC 540	Sensory Evaluation of Foods.	3
NUTR 430	Directed Studies: Dietetics and Nutrition 1.	3

Elective Courses (15 credits)

15 credits of electives are taken to meet the minimum credit requirement for the degree. Reciprocal agreement allows all students to take a limited number of electives at any Quebec university.

With prior approval students can take electives at any Canadian or international university.