

# Bachelor of Science

## Nutritional and Nutraceutical Sciences



### ABOUT THE PROGRAM

The Bachelor of Science in Nutritional and Nutraceutical Sciences (NANS) is concerned with understanding the contribution of food, beverage and nutritional supplement consumption to growth, development of optimal biological function, maintenance of health, and treatment of disease. This major also explores how we can use nutrients, minerals, and food's chemical properties to develop innovative products that will benefit humans, animals, and the environment. NANS is an exciting and unique major in Canada and provides students with a broad and basic grounding in biology of nutrition, physiology, pathology, pharmacology, and nutraceuticals.

### WHY CO-OP?

As a co-op student, you will gain relevant work experience, build professional networks, and develop essential transferable skills needed to succeed in the workplace, all while getting paid and earning your university degree. Guelph's co-op program is unique due to the exceptional level of support provided to students, through peer helpers and Career Advisors, a job search preparatory course, and a personal connection with a Co-op Coordinator to assist you during the employment process and during work terms.

### COURSE SEQUENCING

The Nutritional and Nutraceutical Sciences (NANS) program has one 4-month and one 12-month work term. This sequence meets the Co-operative Education and Work-Integrated Learning Canada (CEWIL) accreditation requirements.

YEAR	FALL	WINTER	SUMMER
ONE	Academic	Academic	Off
TWO	Academic	Academic	Work
THREE	Academic	Academic	Work
FOUR	Work	Work	Off
FIVE	Academic	Academic	

## **SAMPLE JOBS**

### **Recipe Developer and Nutrition Expert**

Students will create delicious meals, write clear and concise recipe instructions that are easy to follow, and add nutritional information to recipes.

### **R&D Co-op in Sports Nutrition**

The student will conduct day-to-day quality control, quality analysis and/or R&D tasks in the manufacturing processes for current and new dry mix sports beverages.

### **Laboratory Assistant**

The candidate will analyze samples obtained from a human clinical trial, by assisting with sample extractions and analysis of gut microbiota and metabolites. They will be involved in a multidisciplinary research team to support the development of new knowledge on dietary effects on the gut microbiota, intestinal health, and disease.

Additional Sample Jobs: Sensory Evaluator, Product Developer, Quality Assurance Co-op Student, Research Assistant

## **SAMPLE EMPLOYERS\***

- Agriculture & Agri-Food Canada
- Apotex
- Ferrero Canada
- Canadian Food Inspection Agency
- Royal Canin Canada Company

\*Sample co-op employer list only. Employers will vary depending on recruitment needs. During a job search, students are encouraged to be actively engaged and are also supported in establishing and maintaining their own personal contacts.

## **SALARY INFORMATION**

Students receive compensation from their employer for co-op work terms. The rate of pay will vary depending on a number of factors including the industry, the student's program of study, and work term level. For your reference, a Co-operative Education Salary Guide is available on our website, which provides hourly rates (averages and ranges) for each degree program.

## **SKILLS & KNOWLEDGE ACQUIRED**

- Knowledge of the impact of human nutrition, nutri-pharmacology and nutri-toxicology on health and performance.
- An understanding of the science of prospective health; the pivotal role of individual nutrigenomic and nutri-epigenetic analyses and the critical role of evidence-based, lifestyle medicine in the effective application of this prospective health approach to healthcare.
- Understanding of the interactions of nutrition and exercise on the metabolic control of health and disease.