

Area of Interest: Health Sciences

Environment, Health and Safety Management

Ontario College Graduate Certificate

Program Code: 1534X01FWO

1 Year

Ottawa Campus

Our Program

Build strategic leadership skills to protect people and the environment.

This Environment, Health and Safety Management (EHSM) Ontario College Graduate Certificate program is designed to provide you with a comprehensive understanding of the standards and practices for protecting people and the environment in and around workplaces. Furthermore, you gain experience in how to effectively manage environment, health and safety aspects within various organizational settings and contexts.

Through a blend of coursework, case studies and practical exercises, you explore topics such as regulatory compliance, risk management, sustainability strategies and crisis preparedness. With a focus on fostering leadership skills and strategic thinking, the program empowers you to develop and implement robust EHS training programs that prioritize the well-being of employees, communities and the environment.

You benefit from a curriculum that integrates research with real-world insights and best practices. Whether you have exposure to the field and are looking to enhance your expertise or you are seeking to enter the EHSM profession, this program provides the expertise and tools necessary to excel in this dynamic and evolving field. You emerge with the skills and confidence to drive positive change within organizations, manage risks effectively and contribute to a safer, healthier and more sustainable future for all. Upon graduation, you may find employment within a wide range of work environments and industries, such as:

- manufacturing and industrial companies
- construction and engineering firms
- healthcare facilities
- government agencies
- consulting firms
- energy and utilities
- transportation and logistics
- education and research institutions
- non-profit organizations and NGOs
- technology and software companies

Employment

Graduates of this program can pursue roles such as Environment, Health and Safety Consultant/Advisor, Environment, Health and Safety Trainer/Technician/Officer as well as Occupational Health and Safety Associate/Specialist/Coordinator/Manager.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Plan and perform workplace inspections and audits to ensure compliance with occupational health and safety, environmental legislation, organizational policies and practices.
- Design, deliver and evaluate evidence-based training programs to promote positive organizational outcomes in occupational health, safety and the environment.

Program of Study

Level: 01	Courses	Hours
ENL1200	Communications for Environment, Health and Safety	42.0
LAW1400	Law and Ethics for Environment, Health and Safety	56.0
MGT4500	Project Management Fundamentals	42.0
SAF1000	Applied Environment, Health and Safety Fundamentals	70.0
SAF1100	Hazard and Risk Management for Environment, Health and Safety	56.0
SAF1200	Environment, Health and Safety Management Systems	56.0
Level: 02	Courses	Hours
SAF2000	Occupational Hygiene for Environment, Health and Safety	42.0
SAF2100	Environment, Health and Safety Training	56.0
SAF2200	Inspections and Investigations for Environment, Health and Safety	42.0
SAF2300	Environment, Health and Safety in Construction	56.0
SAF2400	Industrial Processes for Environment, Health and Safety	56.0
SAF2500	Environment, Health and Safety Capstone Project	70.0

Fees for the 2025/2026 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at <http://www.algonquincollege.com/fee-estimator>

Further information on fees can be found by visiting the Registrar's Office website at <http://www.algonquincollege.com/ro>

Fees are subject to change.

Additional program related expenses include:

Textbooks cost approximately \$900.

Admission Requirements for the 2026/2027 Academic Year

Program Eligibility

- Ontario College Diploma, Advanced Diploma, Degree in Science, Technology, Engineering or related field.
- Applicants with international transcripts must provide proof of the subject specific requirements noted above and may be required to provide proof of language proficiency.

- Applicants with international transcripts must provide proof of the subject specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).

- IELTS-International English Language Testing Service (Academic) Overall band of 6.5 with a minimum of 6.0 in each band OR TOEFL-Internet-based (iBT)-overall 88, with a minimum of 22 in each component: Reading 22; Listening 22; Speaking 22; Writing 22 OR Duolingo English Test (DET) Overall 120, minimum of 120 in Literacy and no score below 105.

Application Information

ENVIRONMENT, HEALTH AND SAFETY MANAGEMENT Program Code 1534X01FWO

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca
60 Corporate Court
Guelph, Ontario
N1G 5J3
1-888-892-2228

Applications are available online <http://www.ontariocolleges.ca/> .

Applications for Fall Term admission received by February 1 will be given equal consideration. Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants applying from out-of-country can obtain the International Student Application Form at <https://algonquincollege.force.com/myACint> or by contacting the Registrar's Office.

For further information on the admissions process, please visit:
Admissions - Registrar's Office
<https://algonquincollege.com/ro/admissions>

Course Descriptions

ENL1200 Communications for Environment, Health and Safety

Effective communication and accurate reporting are essential components of successful Environment, Health and Safety (EHS) management. Students develop the necessary skills and strategies for communicating EHS information within organizations, with regulatory agencies, and to the public in both written and oral format. Students convey complex technical information clearly and persuasively while ensuring compliance with reporting requirements. Students communicate and report EHS information accurately, promote organizational compliance, and foster a culture of safety and environmental stewardship.

Prerequisite(s): none
Corerequisite(s):none

LAW1400 Law and Ethics for Environment, Health and Safety

At the heart of the Environment, Health and Safety (EHS) profession are the requirements and obligations established by law. Students examine the legal and ethical frameworks governing health, safety, and environmental practices in various industries. They explore the intersection of law, ethics, and environmental health, with a focus on understanding regulations, compliance, and best practices. Students develop a comprehensive understanding of the legal and ethical dimensions of Environment, Health and Safety management, equipping them with the knowledge and skills necessary to navigate complex regulatory landscapes and promote sustainable practices in various professional settings.

Prerequisite(s): none
Corerequisite(s):none

MGT4500 Project Management Fundamentals

Managing projects is an essential component in today's business environment, and mastering concepts, tools, and techniques can help manage projects more efficiently. Students focus on the fundamental principles of project management: How to initiate, plan and execute a project that meets objectives and satisfies stakeholder's expectations. Through case studies and teamwork, students examine key project management principles, tools and techniques and learn the concepts behind the foundation of project management.

Prerequisite(s): none

Corerequisite(s):none

SAF1000 Applied Environment, Health and Safety Fundamentals

Professionals within the industry require a solid foundation in the understanding of systematic approaches to Environment, Health and Safety aspects of the worksite. Focus is on the application of legislation and guidelines, human factors, basics of personal protective equipment, and safety culture. Students develop a foundational understanding of key concepts and techniques essential for identifying, assessing, and managing environmental and occupational hazards.

Prerequisite(s): none

Corerequisite(s):none

SAF1100 Hazard and Risk Management for Environment, Health and Safety

The ability to identify potential hazards as well as to assess and manage associated risk is central to the role of an Environment, Health and Safety (EHS) professional. Students explore of the principles and practices of hazard identification, risk assessment, and risk management within the context of EHS management. Students develop the knowledge and skills necessary to identify potential hazards, assess associated risks, and implement effective risk mitigation strategies to promote safety and environmental protection. Students develop a comprehensive understanding of hazard and risk management principles and practices, equipping them with the skills necessary to identify, assess, and mitigate risks to promote safety, health, and environmental protection in various organizational settings

Prerequisite(s): none

Corerequisite(s):none

SAF1200 Environment, Health and Safety Management Systems

Organizations use management systems to provide structured frameworks and processes to effectively manage risks, comply with regulations, and continuously improve Environment, Health and Safety (EHS) performance. Through a comprehensive examination of EHS management systems, students develop foundational knowledge by focusing on the development, implementation, and continuous improvement of systems designed to promote organizational excellence in EHS performance. Students gain insights into various management system frameworks, tools, and techniques essential for effectively managing EHS risks and achieving regulatory compliance. Students develop the knowledge and skills necessary to design, implement, and maintain effective EHS management systems while contributing to organizational excellence in EHS performance and promote a culture of safety, health, and environmental stewardship.

Prerequisite(s): none

Corerequisite(s):none

SAF2000 Occupational Hygiene for Environment, Health and Safety

Occupational hygiene focuses on the identification, evaluation, and control of workplace hazards that can affect the health and well-being of workers. Occupational hygiene is performed regularly and systematically to evaluate and manage workplace hazards. Students develop a comprehensive understanding of occupational hygiene within the context of Environment, Health and Safety. Students delve into various aspects of occupational hygiene, including exposure assessment, risk management, and regulatory compliance.

Prerequisite(s): none
Corerequisite(s):none

SAF2100 Environment, Health and Safety Training

Building capacity within an organization provides a solid foundation for stakeholder awareness of a safe and healthy work environment. Students develop the knowledge and skills needed to design and implement effective Environment, Health and Safety training programs within organizations. Through a blend of theoretical knowledge and practical exercises, students learn how to design, deliver, and evaluate training initiatives that promote workplace safety, protect the environment, and ensure compliance with relevant regulations.

Prerequisite(s): none
Corerequisite(s):none

SAF2200 Inspections and Investigations for Environment, Health and Safety

Workplace inspections and investigations play a crucial role in maintaining safety and compliance within organizations. Students prepare, conduct, and document thorough inspections and investigations based on various workplace settings. Topics include regulatory compliance, enforcement, hazard identification, continuous improvement, interviewing techniques, and incident response. Through a combination of theoretical learning and practical exercises, students identify hazards, assess risks, and ensure compliance with relevant Environment, Health and Safety regulations.

Prerequisite(s): none
Corerequisite(s):none

SAF2300 Environment, Health and Safety in Construction

Workplaces depend on the well-being of workers, protection of the environment, and mitigation of risks associated with construction activities through comprehensive safety measures, regulatory compliance, and proactive hazard identification and management. Unique challenges and hazards present in construction projects are explored. Students acquire the knowledge and skills necessary to identify, assess, and manage environment, health and safety risks in construction activities. Students implement effective Environment, Health and Safety management practices ensuring the well-being of workers, protecting the environment, and complying with regulatory requirements.

Prerequisite(s): none
Corerequisite(s):none

SAF2400 Industrial Processes for Environment, Health and Safety

Industrial processes involve complex operations and activities that can pose significant risks to worker health and safety, the environment, and the surrounding community, necessitating effective management of hazards and compliance with regulatory requirements. Students examine the complex interactions between industrial operations, occupational health and safety, and environmental management. Emphasis is on the integration of health, safety, and environmental considerations into industrial operations to ensure the well-being of workers, protect the environment, and achieve regulatory compliance. Students explore the various aspects of industrial processes, their impacts on human health and the environment, and strategies for mitigating risks and promoting sustainability.

Prerequisite(s): none
Corerequisite(s):none

SAF2500 Environment, Health and Safety Capstone Project

The ability to address real-world problems or challenges, demonstrating preparedness for the Environment, Health and Safety (EHS) profession, provides the opportunity to showcase one's readiness for entry into professional practice. Students conduct a comprehensive evaluation of workplace hazards, and develop and implement effective safety protocols, training programs, and

emergency response plans. Students also assess the overall effectiveness of the EHS management system to ensure the protection of workers and the environment, and regulatory compliance within the organization.

Prerequisite(s): SAF1000 and SAF1100 and SAF1200
Corerequisite(s):none