OPENED

The University of Guelph serves the learning needs of people from a variety of age groups whose educational requirements may not match the program structure or services available through full-time undergraduate study. The adoption of the philosophy of lifelong learning, changes in the demographic characteristics of our communities, the explosion of new knowledge, and the effect of rapid technological advances on professional competence are major factors underlying the University’s commitment towards alternative approaches to providing education through open learning.

Open Learning and Educational Support (OpenEd)

Open Learning and Educational Support (OpenEd) is an integral part of the University of Guelph’s learner centred and research-intensive mission. As leaders in education, OpenEd creates innovative and relevant educational opportunities that meet the learning needs of a local and international audience. OpenEd is guided by learner-centred principles that are reflected in its diverse programs and rich learning experiences for traditional and lifelong learners. OpenEd intentionally integrates pedagogy with technology in the design, development and delivery of its educational programs. Through research and collaboration, it engages in scholarship to advance the teaching and learning mandate of the University of Guelph.

OpenEd supports University of Guelph educators and programs to improve curriculum, teaching practices, and the quality of student learning outcomes.

In partnership with academic departments, OpenEd works with faculty to create and maintain interactive and engaging online learning experiences using instructional design best practices, evidence-based pedagogical approaches, and appropriate educational technologies that support identified learning outcomes.

Additionally, OpenEd engages in a wide range of activities to develop, administer, and support educational technology at the institution, both in the classroom as well as in the online environment.

The Open Learning Program

The Open Learning program is an open-admission program that provides anyone, regardless of their academic background, with an opportunity to register for University of Guelph online degree-credit courses.

Students may choose to register in the Open Learning program for personal enrichment, professional development, eventual application to a degree program, or to satisfy requirements from another post-secondary institution.

Open Learning program students can expect to have the same workload, assignments and examinations as those in a degree program. Upon successful course completion, they will receive the same credit weight as students in a degree program.

Visit the page on the OpenEd website (https://opened.uoguelph.ca/) for more information.

Continuing Education Option

Students who are not interested in receiving credit for courses may register as continuing education students. Learners who select this option are not required to complete assignments or related exams.

Please contact the Open Learning program Counsellor (counsellor@OpenEd.uoguelph.ca) or visit the OpenEd website (https://opened.uoguelph.ca/) for more information.

Guaranteed Admission to a B.A. Program

Open Learning program students who have no previous post-secondary experience and have completed four courses (2.00 credits) with a 70% minimum cumulative average may transfer into a B.A. (Bachelor of Arts) program at the University of Guelph.

Applicants are advised to complete two courses (1.00 credit) from the College of Arts and two courses (1.00 credit) in the Social Sciences.

Contact the Open Learning program Counsellor (counsellor@OpenEd.uoguelph.ca) or visit the Open Learning and Educational Support website (https://opened.uoguelph.ca/) for more information about the Guaranteed Admission Pathway.

Guaranteed Admission to the B.Comm. Program

Open Learning program students with no previous post-secondary education will be offered guaranteed admission to the Bachelor of Commerce (B.Comm.) degree program under the following conditions:

1. Applicants must satisfy the English proficiency requirements (see the Undergraduate Calendar, Chapter IV Admission, English Proficiency).
2. Successful completion of four degree-level courses (2.00 credits) with a minimum cumulative average of 70% in at most, six course (3.00 credits) attempts. The four courses (2.00 credits) used in the calculation of the cumulative average will include any degree-level courses used to meet the English and mathematics requirements and must satisfy the following:
   a. at least 1.00 credits must be from arts and social sciences
   b. no more than 1.00 credits from mathematics and statistics combined may be used to calculate the cumulative average
3. Applicants must satisfy the following English and mathematics requirements:
   English Requirement
   A grade of 75% or higher in English 12U or the successful completion of one course (0.50 credits) from:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENGL*1030</td>
<td>Effective Writing</td>
<td>0.50</td>
</tr>
<tr>
<td>ENGL*1200</td>
<td>Reading the Contemporary World</td>
<td>0.50</td>
</tr>
<tr>
<td>GEOG*1220</td>
<td>Human Impact on the Environment</td>
<td>0.50</td>
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<tr>
<td>SOC*1100</td>
<td>Sociology</td>
<td>0.50</td>
</tr>
<tr>
<td>WMST*1000</td>
<td>Introduction to Women’s Studies</td>
<td>0.50</td>
</tr>
</tbody>
</table>

   Mathematics Requirement
   A grade of 75% or higher in the 12U mathematics course(s) is required for the applicant’s intended major or the successful completion of MATH*1030 Business Mathematics.

Contact the Open Learning program Counsellor (counsellor@OpenEd.uoguelph.ca) or visit the Open Learning and
Educational Support website (https://opened.uoguelph.ca/) for more information about the Guaranteed Admission Pathway.

Open Learning Program Certificates and Diplomas
- Certificate in Accounting
- Certificate in Business
- Certificate in Communication Process: Bridging Theory and Practice
- Certificate in Environmental Citizenship
- Certificate in Environmental Conservation
- Certificate in Food Science
- Certificate in Hospitality Studies
- Certificate in Indigenous Environmental Governance
- Certificate in Leadership
- Certificate in Public Policy and Administration

Refer to Certificates and Diplomas in this section for descriptions or visit the Certificate/Diploma page on the OpenEd Student Portal (https://courses.opened.uoguelph.ca/search/publicCourseCertificateSearch.do?method=load).

Open Learning Program Courses
Please refer to Distance Education in this section for courses offered through the Open Learning program.

Visit the OpenEd website (https://opened.uoguelph.ca/) for technical and material requirements.

Distance Education
Open Learning and Educational Support (OpenEd) facilitates the delivery of online degree-credit courses to students. Online courses provide students with a flexible alternative in course scheduling. OpenEd assists in course development and preparation and is the focal point of this activity by providing information, student support, and administration. Please refer to the Distance Education heading in this section for the listing of courses offered through the distance format.

Visit the OpenEd website (https://opened.uoguelph.ca/) for more information about distance education.

Continuing Education
Open Learning and Educational Support annually offers over 100 professional development programs, courses, conferences, and certificates in collaboration with academic departments and/or professional organizations. For detailed information on learning opportunities offered by OpenEd, please visit the Open Learning and Educational Support website (https://opened.uoguelph.ca/).

Certificate in Coaching for Leadership
Employee engagement and performance management are essential drivers in high performing organizations. The Coaching for Leadership program focuses on developing your leadership skills using the coach approach.

Courses will examine the necessary components of a coaching culture and assist in developing leadership skills in an online learning environment. Participants will learn about performance management and how to manage conflict to build high trust relationships. The program is focused on leadership development using coaching and communication to engage employees to achieve organizational excellence.

The program consists of four online courses. All courses in the program have been designed as independent courses and do not have to be completed in sequence. Each course is eight (8) weeks in duration resulting in approximately 30 contact hours. There are no formal admission requirements for the program however the course has been designed for senior leaders, managers, supervisors, human resource professionals, project managers and organizational consultants or anyone who is aspiring to be a leader. Participants can complete the certificate program within approximately one (1) year.

To learn more, please visit the Certificate in Coaching for Leadership website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=129192).

Cheese Maker Certificate
The Cheese Maker Certificate program provides instruction in all aspect of cheese making - scientific and technological principles of cheese making, unit operations, cheese technologies from A – Z, safety, quality control, grading and more. The program also offers an ongoing opportunity for any cheesemaker to attend Master Classes that focus on particular cheese varieties or technologies.

The certificate consists of four required core courses, two master classes and an internship. The Introductory to Cheese Making course is optional for those who have experience in cheese making. The Cheese Making Certificate courses and the internship can be completed over two years or up to six years. The internship can be done in the second year.

If you have any questions about the Cheese Maker Certificate or courses, please email: fsevents@uoguelph.ca (fsevents@uoguelph.ca?subject=Cheese%20Making%20Technology%20course) or visit https://www.uoguelph.ca/foodscience/cheese-maker-certificate (https://www.uoguelph.ca/foodscience/cheese-maker-certificate/).

Advanced Certificate in Couple & Family Therapy Studies
The Advanced Certificate in Couple and Family Therapy Studies (CFTS) program is designed to provide specialized training and/or professional development in the theory, concepts and practices that inform needs, problems, and changing patterns of couple and family relationships. For therapists working within an organization or private practice, the focus of the program is on clinical or direct client service. Systems theory is the primary, although not the only, theoretical orientation within the program.

Courses in the Advanced Certificate in Couple and Family Therapy Studies cover the theory, concepts, and approaches of couple and family therapy practice. These courses introduce the major theories and central concepts that form the foundations of couple, family, and marriage therapy. They focus on the historical development of systemic therapy and introduce several models of therapy, such as: Cognitive-Behavioural, Experiential, Bowenian, Contextual, Structural, Strategic and many other models. A comparative analysis of the various models assists students in placing the various therapy tools into an integrated framework. The courses use a variety of teaching and learning methods to effectively translate theories into practical methods for contemporary therapists. Examples of active learning strategies utilized to promote student engagement include: case studies, small group discussions, small group work projects, activities that utilize movement (e.g., role-plays, fish bowl,
etc.). Students should anticipate that many discussions and interactive activities require reflection and sharing from personal and or professional experience with class members and the instructor.

The certificate program consists of three (3) required core courses and three (3) elective courses that must be successfully completed within five (5) years.

The certificate is provided in partnership with the Canadian Association for Marriage and Family Therapy (CAMFT).

To learn more, please visit the Advanced Certificate in Couple and Family Therapy Studies website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateld=129835).

**Creative Writing Certificate**

If you are an aspiring writer looking to get serious about your craft, then the Creative Writing Certificate program is designed for you. Take advantage of an opportunity to explore a variety of genres, improve your writing, and develop the tools to master a significant writing project.

Our creative writing courses are designed to include extensive interaction that works best in a face-to-face learning environment. Classroom-based courses offer multiple opportunities for peer interaction and one-on-one instructor guidance. By participating in these courses, you will have a unique opportunity to meet and learn from a variety of talented Canadian writers and establish lifelong writing networks with your peers.

There are no admission requirements. Students can take one course or continue to complete the certificate. To complete the Creative Writing Certificate students are required to complete six courses. Two required courses, a choice of three electives, and the capstone project.

To learn more, please visit the Creative Writing Certificate website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateld=583604).

**Data Science Certificate**

The online Data Science Certificate reviews and provides a solid understanding of data science and the role of the data scientist in the real-world environment. Participants will learn how to use data analytics, predictive analytics and big data tools to understand the basic technical concepts and challenges of Big Data. The programs’ final course will include a capstone project that draws on skills gained from the curriculum to address a real-world problem.

Admission to the program requires an Undergraduate degree or College diploma, and successful completion of a basic Statistics course.

In order to receive your Data Science Certificate, you must complete the three online courses sequentially. The program can be completed within one year.

To learn more, please visit the Data Science Certificate website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateld=8353906).

**Certificate in Disability Management**

The Certificate in Disability Management program provides students with an opportunity to explore concepts and utilize evidence-based best practices to advance their knowledge and skills in disability case management, attendance management, and employee support. Within each of these focuses, legal obligations and ethical responsibilities are explored.

The program’s design utilizes a highly interactive learning approach, engaging students in case studies and real-life scenarios to provide a deeper analysis of the many approaches, roles, complexities, and challenges in the field and specific functions.

There are no admission requirements. The certificate is achieved by successfully completing four different courses within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials. To learn more, please visit the Certificate in Disability Management website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateld=129861).

**English Language Certificate Program**

The English Language Certificate Program (ELCP) is an intensive academic English program designed to prepare ELP students aged 18 and over for academic study at the undergraduate and graduate level. Classes in grammar, reading, writing, listening, and speaking help students achieve the advanced level English skill needed to be successful in academic studies. Students who successfully complete the Advanced level earn the University of Guelph Certificate of English Proficiency, which meets the English proficiency requirements for entry into undergraduate and graduate studies at the University of Guelph and the University of Guelph-Humber. Applicants are encouraged to have an intermediate English skill level, and an academic goal to study at the University of Guelph.

Students may also earn the Certificate of English proficiency by completing the Integrated Admission Pathway (IAP). The Integrated Admission Pathway (IAP) will allow academically qualified international students, who meet the University’s undergraduate admission requirements but have not yet achieved English language proficiency, to complete degree credit courses through the University’s Open Learning program while studying English language courses to achieve the Certificate of English proficiency granted by Open Learning and Educational Support (OpenEd). The pathway includes a combination of classroom-based and fully online degree course offerings and provides a range of student support.

Students with an IELTS 5.5 or TOEFL iBT 56 or equivalent and who satisfy the undergraduate admission requirements may be offered conditional admission to one of the following pathway streams:

- Bachelor of Arts – regular and co-op programs
- Bachelor of Bio-Resource Management – regular and co-op programs
- Bachelor of Commerce (Undeclared)
- Bachelor of Science (all majors) – regular and co-op programs
- Bachelor of Science in Agriculture – regular and co-op programs
- Bachelor of Science in Environmental Sciences – regular and co-op programs

Successful completion of the degree-credit courses with a 60% cumulative average and successful completion of the English Language courses with a 75% cumulative average will satisfy the conditions of admission to the degree program specified in the original offer letter. Successful students will enter the degree program at the level of second semester after having studied in IAP for three successive semesters.
To learn more, please visit the English Language Programs website (https://opened.uoguelph.ca/English-Language-Programs/) or contact Open Learning and Educational Support by email at info@OpenEd.uoguelph.ca or call 519-767-5000.

Certificate in Facilities Management
The Certificate in Facilities Management provides students with the knowledge, skills, and abilities required to manage and lead the Ontario School Board's infrastructure in a way that meets legal requirements and regulating authorities’ standards, ensures facility sustainability and creates green learning environments for students and communities, as well as engenders employee engagement.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Facilities Management website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=129911).

Certificate in Human Resources Management for School Board Administration
The Certificate in Human Resources Management for School Board Administration program is designed for Ontario school board professionals who wish to develop and/or enhance their knowledge, skills, and abilities in effective human resources management as it relates to the uniqueness of the school board environment. The curriculum reflects the current and relevant information, critical issues, and challenges facing human resources professionals within Ontario school boards.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Human Resources Management for School Board Administration website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=129952).

Certificate in Information and Communication Technology Management
The Certificate in Information and Communication Technology Management program is designed for information technology professionals who wish to develop their knowledge and skills in effective information technology management and enhance their leadership and management competencies. The program offers students a strategic overview of the management of information and technology challenges and opportunities in today’s work environment.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings.

The certificate is provided in partnership with the Community Engaged Scholarship Institute.

To learn more, please visit the Certificate in Information and Communication Technology Management website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=453705).

Certificate in Pupil Transportation Management
The Certificate in Pupil Transportation Management provides a unique opportunity for school board transportation specialists and independent operators to develop and enhance their knowledge, skills, and abilities in effective transportation management. The curriculum reflects the current
information, evidence-based best practices, issues, and challenges facing pupil transportation at Ontario school boards.

There are no admission requirements. The certificate is achieved by successfully completing four different courses from within the program offerings. The certificate is provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Certificate in Pupil Transportation Management website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=465245).

Certificate in Supply Chain Management for Public Procurement

The Certificate in Supply Chain Management for Public Procurement is designed to provide knowledge and skills required in supply chain management and applied in the broader public sector (e.g., school boards, hospitals, etc.). Students will develop a deeper understanding of the principles of supply chain management for public procurement and the critical issues currently facing the field (e.g. legislative and regulatory change, costing, risk), while advancing their skills in strategic sourcing decision-making, methods of procurement, managing the competitive bidding process, contracting, and managing vendor relationships from negotiation to dissolution.

There are no admission requirements. The program is currently comprised of five different courses, four of which must be successfully completed to earn the certificate.

The certificate is provided in partnership with the Ontario Association of School Business Officials. To learn more, please visit the Certificate in Supply Chain Management for Public Procurement website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=474252).

Certificate in Turf Managers’ Short Course

The Turf Managers’ Short Course is an intensive four-week residential program designed to provide turf industry personnel with knowledge in all aspects of turf management and culture. Students will learn to interpret and integrate turfgrass agronomic information to design and implement turfgrass management strategies.

This program is delivered in partnership with the Guelph Turfgrass Institute. To learn more, please visit the Turf Managers’ Short Course Certificate website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=14958241).

Diploma in Human Resources Management

The Human Resources Management diploma program has been developed to provide you with the fundamental knowledge, skills and values to become a successful HR professional. The courses—all approved by the Human Resources Professionals Association (HRPA)—have been designed to assist you with understanding the day-to-day realities of working within the HR field. The courses include a mix of lectures, case studies, small group work, simulations and role playing.

Our program instructors bring a wealth of knowledge and relevant work experience to the classroom. These experts will guide and coach you to develop the core competencies required to be proficient in the field of HR.

If you are interested in a career in HR or are already working as an HR professional and looking to upgrade your skills, then the HR Management diploma program may be just right for you.

In order to receive your Diploma in Human Resources Management you must complete ten (10) courses within the program which include nine (9) Human Resources Professional Association (HRPA) approved courses and one (1) online course elective. There are no formal admission requirements for individuals interested in registering for courses.

To learn more, please visit the Diploma in Human Resources Management website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=590230).

Diploma in School Board Administration

The Diploma in School Board Administration (DSBA) is designed for Ontario school board professionals who wish to develop and enhance their skills and knowledge of the board’s business operations and functions. Facilitated by an expert team of instructors, the program explores a broad range of management topics and addresses strategic multidisciplinary issues in order to help participants effectively manage business opportunities and challenges in the school board environment. The intended audience includes individuals seeking to enhance their career potential within the school board environment.

While successful completion of post-secondary education is required for admission to the program, academic consideration may be extended to students with experience in a board environment. The diploma is achieved by successfully completing six online required courses and four elective courses, currently classroom-based. The diploma provided in partnership with the Ontario Association of School Business Officials.

To learn more, please visit the Diploma in School Board Administration website (https://courses.opened.uoguelph.ca/public/category/courseCategoryCertificateProfile.do?method=load&certificateId=605466).

DNA Barcoding Courses

Explore DNA Barcoding, PCR, next generation sequencing and environmental DNA (eDNA), to monitor biodiversity and obtain precise species identification, authentication and traceability through online courses developed by the Centre for Biodiversity Genomics. Gain an introduction to and history of DNA barcoding and its application as a standard for species identification. Metabarcoding reviews the state of the current technology and the suite of bioinformatics tools available for sequence analysis and data interpretation. Regulatory and forensic applications of DNA barcoding can trace and authenticate to the species level substitutes or counterfeits in traded commodities and pests.

Standard operating workflows will give you the tools to develop routine protocols and integrative operational procedures.

Admission to the program requires an Undergraduate degree or College diploma, and successful completion of a basic Statistics course.

These courses are provided in partnership with the Centre for Biodiversity Genomics at the University of Guelph.

To learn more, please visit the DNA Barcoding website (https://courses.opened.uoguelph.ca/public/category/programStream.do?method=load&selectedProgramAreaId=16994&selectedProgramStreamId=1273225).
Online Equine Studies Certificate Programs

Equine Science Certificate
The Equine Science Certificate is designed to help you improve the management and welfare of horses in your care. The courses introduce you to research and evidence-based practice and are presented in a practical format, making it easy for you to directly apply what you have learned to the health and performance of your horse. This program is ideal for the horse owner. The Equine Science Certificate requires you to complete six courses successfully. All of the courses are completed online.

This program is provided in partnership with Equine Guelph, the Centre for Equine Education and Research, at the University of Guelph.

To learn more, please visit the Equine Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000020).

Certificate in Equine Business Management
The Certificate in Equine Business Management is designed for anyone interested in working in the administrative and management aspects of the equine industry. Learn how to develop marketing and business plans, create budgets and set up financial records, manage operations and establish yourself as a professional. Take the first step in gaining the skillset required for sustainable equine business success. The Certificate in Equine Business Management requires you to complete six courses.

This program is provided in partnership with Equine Guelph, the Centre for Equine Education and Research at the University of Guelph.

To learn more, please visit the Equine Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000020).

Equine Welfare Certificate
This program challenges you to consider welfare from the perspective of the horse. You will use an evidence-based approach to support your views for or against specific issues relating to equine management and gain an in-depth understanding of the Five Freedoms, a core concept in animal welfare. You will examine the science behind what is required to support sound management and welfare practices for horses in Canada and around the globe. The Equine Welfare Certificate will help you discover solutions to the behavior and health problems horses face because of our management practices.

This program is delivered in partnership with the Campbell Centre for the Study of Animal Welfare and Equine Guelph Centre for Equine Education and Research, at the University of Guelph.

The Equine Welfare Certificate requires you to complete six courses.

To learn more, please visit the Equine Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000020).

Diploma in Equine Studies
The Diploma in Equine Studies developed with Equine Guelph, brings the expertise of a world-class veterinary college to horse owners. You will explore topics like equine safety and management practices, environmental stewardship, equine behavior, nutrition, anatomy, health, and welfare in this comprehensive program. With so many electives to choose from, you can customize your learning to best fit your interests and career goals, with an opportunity to integrate business courses with fundamental equine science studies. Whether you are new to the equine industry or have been involved for many years, the Diploma in Equine Studies will give you the extensive equine education that you are looking for. The Diploma in Equine Studies requires you to complete ten courses.

This program is delivered in partnership with Equine Guelph, Centre for Equine Education and Research at the University of Guelph.

To learn more, please visit the Equine Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000020).

Online Horticulture Studies Diploma Programs
The Horticulture Studies Diploma Programs include two diploma options:

Horticulture Diploma
The Horticulture Diploma is designed to produce highly knowledgeable, skilled and versatile graduates looking to work in parks and recreation, institutional grounds, nurseries, greenhouses, garden centers, or as a naturalist or professional gardener.

To achieve the Horticulture Diploma, students must successfully complete ten courses: five required courses and five elective courses.

The five required courses are:
- Soil and Plant Growth
- Plant Identification
- Integrated Pest Management
- Business Principles in Horticulture
- Horticulture Capstone

Elective courses can be selected by the student from the listing shown in Table 1. Students can mix and match electives to suit their goals and objectives or they can complete the two (2) elective courses associated with an area of focus. If students successfully complete the two courses associated with an area of focus, the area of focus will be listed on their Diploma (e.g. Horticulture Diploma, Area of Focus in Greenhouse Production).

Table 1

<table>
<thead>
<tr>
<th>Area of Focus</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Turf Management</td>
<td>1. Turf Management</td>
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<tr>
<td></td>
<td>2. Weed Management</td>
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<tr>
<td>2. Greenhouse Production</td>
<td>1. Greenhouse Crop Production</td>
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<tr>
<td></td>
<td>2. Greenhouse Management</td>
</tr>
<tr>
<td>3. Natural Landscape Management</td>
<td>1. Naturalizing and Restoring Landscapes</td>
</tr>
<tr>
<td></td>
<td>2. Arboriculture</td>
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<tr>
<td>4. Nursery Production</td>
<td>1. Nursery Production</td>
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<tr>
<td></td>
<td>2. Plant Propagation</td>
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<td>5. Urban Agriculture</td>
<td>1. Issues in Urban Agriculture</td>
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<td></td>
<td>2. Vegetable Production</td>
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<tr>
<td>6. Landscape Design</td>
<td>1. Landscape Design I</td>
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<tr>
<td></td>
<td>2. Ecological Design</td>
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<tr>
<td>7. Cannabis Production</td>
<td>1. Cannabis Production</td>
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<tr>
<td></td>
<td>2. Cannabis Regulations and Quality Assurance</td>
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</tbody>
</table>

Landscape Design Diploma
The Landscape Design Diploma will elevate your level of understanding and skills related to commercial and residential landscape design.
Students who graduate from the diploma will have thorough knowledge of landscape design techniques and will be able to present their ideas to prospective clients in a professional manner. The Landscape Design Diploma is suited to anyone looking to pursue a career in landscape design or upgrade their credentials as a landscape designer.

To achieve the Landscape Design Diploma, students must successfully complete ten courses: eight required courses, a choice of two courses and one elective course.

The eight required courses are:

- Landscape Design I
- Landscape Design II
- Ecological Design
- Plant Identification
- Graphic and Presentation Styles
- Landscape Construction
- Business Principles in Horticulture
- Landscape Design Capstone

Students must choose one of the following two courses:

- Computer Assisted Drafting I
- Soil and Plant Growth

One electives course must be selected by the student from the approved listing shown on the Diploma website.

To learn more about the Horticulture Diplomas, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Online Horticulture Studies Certificate Programs

There are five certificate programs. Students may choose to complete individual courses or complete a set of courses that count towards the certificates. Students who complete either the Horticulture or Landscape Design Certificate may continue to complete additional courses towards a diploma.

To learn more about the Horticulture Diplomas, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Horticulture Certificate

The Horticulture Certificate will show you how to create beautiful and hardy landscapes through innovative residential garden design tactics and strategies. You will explore topics related to plant care principles, soil conditions, plant science, and horticulture. The program is designed to prepare you with the knowledge and skills related to pests, diseases and weed management so you can effectively address plant health issues and optimize the well-being of any garden. Designed specifically for gardeners, this program will enhance your knowledge and skills with respect to the residential garden environment.

To achieve the Horticulture Certificate, students must successfully complete five courses: three required courses and two elective courses.

The three required courses are:

- Soils and Plant Growth
- Plant Identification
- Integrated Pest Management

Elective courses can be selected by the student from the listing shown in Table 1. Students can mix and match electives to suit their goals and objectives or they can complete the two (2) elective courses associated with an area of focus. If students successfully complete the two courses associated with an area of focus, the area of focus will be listed on their Diploma (e.g. Horticulture Diploma, Greenhouse Production Area of Focus).

To learn more about the Horticulture Certificates, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Landscape Design Certificate

The Landscape Design Certificate will show you how to improve the design of current landscapes and offer meaningful solutions to landscape design challenges. Learn how to produce landscape drawings, recommend construction materials that satisfy client intentions, and deliver aesthetically pleasing design and function into residential and commercial settings.

To achieve the Landscape Design Certificate, students must successfully complete five courses: four required courses and a choice of two courses.

To learn more about the Horticulture Certificates, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Maintaining Golf Courses Certificate

The Maintaining Golf Courses Certificate is designed to provide students with valuable skills and knowledge related to golf course design and construction techniques, tree care, and the environmental care of golf courses. Develop practical and applied skills to design, construct and manage golf courses and turf, keeping the sustainable care of turf and plant communities at the forefront.

To achieve the Certificate, students must successfully complete six required courses

To learn more about the Horticulture Certificates, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Sustainable Urban Agriculture Certificate

The Sustainable Urban Agriculture Certificate is designed for urban dwellers, city planners and community gardeners interested in growing food in a sustainable manner to support families, neighbourhoods and communities.

To achieve the Certificate, students must successfully complete five courses: four required courses and one elective.

To learn more about the Horticulture Certificates, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).

Sustainable Urban Horticulture Certificate

The Sustainable Urban Horticulture Certificate focuses on the environmental, social and economic implications of horticulture in our cities. The program is designed for landscape designers and builders, municipal planners and environmental advocates interested in micro-
economic sustainability and maximizing aesthetic and property values through innovative garden design.

To achieve the Certificate, students must successfully complete five courses: four required courses and one elective.

To learn more about the Horticulture Certificates, please visit the Horticulture Studies website (https://courses.opened.uoguelph.ca/contentManagement.do?method=load&code=CM000019).