The Ecosystem Management Technology program builds on the expertise developed from the two year Technician program. You will also gain applied experience while working with community and resource agencies that are dedicated to long term ecosystem health.

Application Process
Students interested in the Ecosystem Management Technology program are required to enter via the Ecosystem Management Technician level of the program. During the second year of the technician level, students can apply, through an internal application process, to be considered for entry to the technology level. Students must successfully complete all four semesters of the technician level to be granted entry to the technology program.

Program Highlights
The third year of Fleming's Ecosystem Management Technology program begins with a mandatory four-day field camp in a remote wilderness setting. This experience offers both personal challenge and the opportunity to build effective working relationships with your classmates - essential preparation for the year ahead.

If you are looking for a challenge, are passionate about the environment and want to be a leader, then this program is for you.

Students participate in the unique placement program - Credit for Product - spending one day per week working with a team on a project for an external agency.

Students in the Ecosystem Management Technology program also host an annual EcoHealth conference. The class invites the public, local area residents, community groups and businesses to attend, participate and learn.
If you are interested in continuing your education once you complete the Ecosystem Management Technology program, the university transfer agreements in place with a number of universities are first rate. Alternatively, if you are a university student looking for a program to complement your degree and provide you with a more applied approach to learning, then this program will meet your needs.

Students will attend the Annual National Council for Science and the Environment Conference in Washington D.C. A current passport for this activity is required.

* Students starting in January are required to attend classes over the summer semester.

Why Choose Fleming

» The Ecosystem Management Technologist program is the only one of its kind at an Ontario community college.
» As a discipline, Ecosystem Management is on the leading edge of resource conservation in the 21st century - the future is now.
» The School of Environmental and Natural Resources Sciences at the Frost Campus encourages small class sizes and access to state-of-the-art technology.
» Dedicated, award-winning faculty provide a challenging and dynamic learning environment in the heart of the Kawartha Lakes region.
» Our transfer agreements with universities enable graduates to further their studies and obtain a degree.
» Program graduates are eligible to apply for a Bachelor of Environmental Science degree at Trent or York University and complete it with an additional two years of study at these partner institutions (this would normally take seven years to complete instead of five).
» An agreement with Cape Breton University enables program graduates to obtain their Bachelor of Science (Environment) with approximately one year of study.

Work Experience

In the fall and winter semesters, you will work in a small team for an external agency one day per week during the Credit for Product student placement program. It's a great opportunity to expand your network of employment contacts and gain valuable on-the-job experience. Our partners in this placement program include agencies like the Ontario Federation of Anglers and Hunters, conservation authorities, provincial stewardship councils, the Ontario Ministry of Natural Resources, local schools, community groups, and many more.

Examples of Credit for Product projects include:

» Creating and presenting a detailed report with recommendations on how to develop and maximize recreational and educational usage for a property bequeathed to Havelock township.

» Analyzing data and making recommendations to Brampton's Environmental and Planning Advisory Council.

» Spreading awareness about the Emerald Ash Borer in the County of Peterborough

Indigenous Perspectives Designation

The Indigenous Perspectives Designation (IPD) is an option available to students studying in the Ecosystem Management Technician program. To qualify for the IPD, students must take and successfully complete GNED49 - Introduction to Indigenous Studies
and GNED128 - Indigenous Knowledges, along with a minimum of four approved co-curricular Indigenous events or experiences that will be incorporated into the final portfolio assignment in GNED128. The student's transcript will indicate the IPD designation. Upon graduation, students with an IPD will have a strong foundational basis in Indigenous Studies, and a designation that will be marketable in the employment sector.

Is this You?
Success in this program and career field requires:

» the ability to ask questions, solve problems and create sustainable plans
» an interest in understanding how ecosystems and humanity interact
» good problem-solving skills
» analytical, critical and creative thinking
» excellent oral and written communication skills
» the ability to work as part of a team
» good organizational ability
» project management skills
» cultural awareness/sensitivity
» strong information management and technology skills
» strong field and research skills
» work or volunteer experience in such areas as conservation, greenspace projects, parks, public education about the environment, or habitat restoration is an asset.

Career Opportunities
Taking your education up a notch from Ecosystem Management Technician, to an Ecosystem Management Technologist, you'll qualify for higher-level positions upon graduation in similar settings and job positions, as well as being qualified to work in:

» restoration/conservation of ecosystems
» habitat assessment
» Geographic Information Systems
» ecological research
» rural and urban planning
» environmental protection, and others

Admission Process for Entry
You can apply for entry to semester one of the Ecosystem Management Technology program and/ or semester one of the Ecosystem Management Technician program. The curriculum is the same for the first two years of these programs.

To progress to semester 5 of the Ecosystem Management Technology program you must have successfully completed (and passed) all courses in semesters 1, 2, 3 and 4.

Advanced Standing
College or university graduates may be eligible for advanced standing entry to this program. See the Ecosystem Management Technology - Advanced Standing
program for details.

**Additional Costs**
In addition, plan to spend about $475 for books, supplies and field camps.

**Physical Requirements**
As an Ecosystem Management student you will be required to:

» Participate in field activities, sometimes in remote areas, including walking up several kilometers over rough terrain, carrying heavy gear, and working in all weather conditions such as rain, deep snow and extreme temperatures.

» Participate in activities that require reading, interpreting and creating maps using Geographic Positioning Systems and Geographic Information System software, topographic paper maps and aerial photographs.

» Identify landscape features, rocks, minerals, soil layers, flora and fauna, including microscopic plankton and invertebrates for the purposes of habitat assessment. Identification of these elements of the ecosystem will be based almost exclusively on live and/or preserved specimens, objects or samples, maps and photographs etc.

» Apply verbal and non-verbal communication techniques in a team context to resolve conflicts and achieve project goals.

**Minimum Admission Requirements**
Students applying to Ecosystem Management Technology must meet the following requirements:

» OSSD including Gr 12 C English and Gr 12 C Math

OSSD with majority of courses at College (C) or Open (O) unless otherwise stated.
Grade 12 C courses will be accepted where Gr 11 C course requirements are listed.
Where College level courses are listed, U and M courses will be accepted.

**Mature Students**
If you are 19 years of age or older before classes start, and you do not possess an OSSD, you can write the Canadian Adult Achievement Test to assess your eligibility for admission. Additional testing or academic upgrading may be necessary to meet specific course requirements for this program.
Vocational Learning Outcomes

» Use Geographic Information Systems and remote sensing technologies as a decision-making tool in ecosystem-based management planning and decision-making.

» Apply project management skills (work flowcharts, project planning, etc.) to complete projects for internal and external clients.

» Apply the principles of sustainability (social, environmental, cultural and economic) to decision-making at a variety of levels (local, regional, global).

» Analyze the role of government policies (both market-driven and legislated) that encourage accountability and influence human behaviour towards biodiversity conservation and ecosystem sustainability in wilderness, rural and colonized landscapes.

» Respect individuals and their multiple perspectives in the successful completion of team-based projects and activities.

» Apply effective leadership skills ...

» Apply effective communication skills (written, spoken and through digital media and social networks) to engage the public in activities that generate awareness of current issues in ecosystem management and environmental sustainability.

» Develop event-planning, fundraising, media and advocacy skills required to work effectively both with and for non-government agencies and the non-profit sector.

» Work effectively with a wide variety of sampling tools, protocols and technologies to accurately collect, organize, analyze, interpret and communicate ecological and spatially geo-referenced data to external clients and the general public.

» Respect a variety of worldviews and perspectives on ecology, sustainability, and the role that humans play within ecosystems at the local, regional, and global level.

» Prepare comprehensive external reports, maps, and field records, documenting information accurately and in a timely manner, in compliance with industry and government regulations, established policies and procedures.

» Operate and maintain tools and equipment appropriately, in compliance with industry safety and operating standards, ensuring optimum health and safety of self, team members and the environment.

Courses and Descriptions
## SEMESTER 5

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<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Hours</th>
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<tr>
<td>Credit for Product I: Student Placement</td>
<td>FLPL 4</td>
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<tr>
<td>Field Camp</td>
<td>APST 21</td>
<td>40</td>
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<tr>
<td>First Nations and Sustainable Development</td>
<td>ECOS 8</td>
<td>45</td>
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<td>Habitat Assessment</td>
<td>FIWI 14</td>
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<tr>
<td>Resource and Environmental Economics</td>
<td>LAWS 70</td>
<td>45</td>
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<tr>
<td>Satellite Data Processing</td>
<td>COMP 84</td>
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<tr>
<td>Urban Ecosystems</td>
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## SEMESTER 6

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<tr>
<td>Credit for Product II: Field Placement</td>
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<td>Ecosystem Health</td>
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<td>Principles of Wildlife Management</td>
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<td>Sustainability at Work</td>
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<tr>
<td>Urban and Regional Planning</td>
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