



## School of Science & Engineering Technology

2014-2015

Architectural Technician  
Architectural Technology  
Energy Management-Sustainable Building Technology  
Food and Farming Technician  
Horticulture Technician

**PROGRAM GUIDE**



## INDEX

<b>WELCOME STUDENTS</b> .....	2
A Message from the Dean and Vice President, Academic.....	2
<b>SCHOOL OF SCIENCE AND ENGINEERING TECHNOLOGY</b> .....	3
Contact Information Oshawa/Whitby Campus – Fall 2014.....	3
Field Placement.....	4
<b>PROGRAM INFORMATION</b> .....	4
Architectural Technician .....	5
Program Description: .....	5
Synopsis of the Vocational Learning Outcomes.....	6
Architectural Technology.....	7
Program Description .....	7
Synopsis of the Vocational Learning Outcomes.....	8
Energy Management and Sustainable Building Technology.....	9
Program Description .....	9
Synopsis of the Vocational Learning Outcomes.....	10
Horticulture Technician.....	11
Program Description .....	11
Synopsis of the Vocational Learning Outcomes.....	12
Horticulture – Food and Farming .....	13
Program Description .....	13
Synopsis of the Vocational Learning Outcomes.....	14
Program of Studies.....	15
School of Science and Engineering Administrative Policies.....	17
<b>ADDITIONAL IMPORTANT INFORMATION</b> .....	21
Academic Advising - Student Advisors .....	21
Academic Integrity.....	21
Aegrotat .....	21
Centre for Students with Disabilities .....	22
Continuing Education Course Book .....	22
Course Outlines.....	22
Credit Transfer Information .....	22
Durham College Mission, Vision and Values.....	22
Essential Employability Skills .....	23
General Education.....	23
Important Dates.....	23
Learning Management System Usage (LMS).....	23
Library.....	23
Missed Final Examinations .....	24
Pathways to Degrees .....	24
Prior Learning Assessment and Recognition (PLAR).....	24
Requirements For Promotion.....	24
Scholarships, Bursaries and Awards .....	25
Student Academic Learning Services (SALS) .....	25
Student Communications .....	25
Student Rights and Responsibilities .....	25

*Please note the following important information:*

*Durham College strives to ensure the accuracy of the information in this publication. Please note that the academic curriculum is continually reviewed and revised to ensure program quality and relevancy. As such, the college reserves the right to modify or cancel any course, program, fee, procedure, timetable or campus location at any time. Please consult our website at <http://www.durhamcollege.ca> for the most current information. June 2014*

## **WELCOME STUDENTS**

### **A Message from the Dean and Vice President, Academic**

Thank you for choosing Durham College's School of Science and Engineering Technology to further your education. It is a great pleasure for the faculty and staff to guide and assist you in reaching your goals. The purpose of this Program Guide is to provide you with information relating to **all areas** of the college, including important dates and deadlines, all services offered to students to assist in both academic life and life in general.

Your chosen program has been designed to provide you with the theoretical and hands on experience which will enhance and enrich your resume. Durham College provides a great many services for students so please do not hesitate to take advantage of them. Your professors are all dedicated professionals chosen for their knowledge and excellence in your field of study. They will be more than happy to share this knowledge and guide you along your journey.

The School of Science and Engineering Technology takes pride in our mission to encourage a progressive, motivating and experiential learning environment which produces exceptional graduates who exceed employer and industry standards. We welcome you and wish you every success!



Susan Todd, Dean

Congratulations on choosing Durham College and taking a very important step in preparing for your future. Durham College is known for high quality programs, leading edge technology, an award winning library and a student-centered approach to learning. Supporting our mission that the student experience comes first, Durham College is committed to providing students with quality learning experiences and support in finding fulfillment in education, employment and lifelong learning.

Our programs are continually shaped by market needs and delivered by exceptional teachers with real-world experience. The program you have chosen has been designed to help you develop the necessary skills and knowledge to support your success in your chosen career path. Our dedicated and professional staff and professors are committed to helping you achieve your educational goals and your career aspirations.

Durham College strives to be accountable to students and employers through the preparation of work-ready graduates who will continue to live our "success matters" focus in their professional work environment.

We are pleased you have chosen to study at Durham College and we look forward to supporting your learning journey – work hard, have fun, enjoy your college experience and campus life.

I wish you much success with your studies.



Judy Robinson,  
Vice President, Academic

**SCHOOL OF SCIENCE AND ENGINEERING TECHNOLOGY**  
**Contact Information Oshawa/Whitby Campus – Fall 2014**

Administration/ Support Staff Name	Office #	Phone Voice  Ext. Voice Mail	E-mail Addresses	Position
Todd, Susan (A)	H140F Osh 117A Whitby	2319  2319	susan.todd@durhamcollege.ca	Dean
Calhoun, Maureen (A)	H140D Osh 117A Whitby	2168  2168	maureen.calhoun@durhamcollege.ca	Associate Dean
Head, Jenni-Lynn (S)	H140	3060  3060	jenni-lynn.head@durhamcollege.ca	Administrative Assistant
Dillon, Linda (S)	H140E	2545  2545	linda.dillon@durhamcollege.ca	Administrative Coordinator
Green, Maureen (S)	H140A Osh Rm. 117 Whitby	2383  2383	maureen.green@durhamcollege.ca	Student Advisor/Admin. Support
Knihnisky, Steve (S)	H230B	2378  2378	steve.knihnisky@durhamcollege.ca	IMC Technician
MacKay, Dave (S)	H220	2767  2767	dave.mackay@durhamcollege.ca	Electronics Technologist
Myers, Jeff (S)	H166D	2385  2385	jeff.myers@durhamcollege.ca	Mechanical Technologist
Oberg, Stacey (S)	A210	2210  22101	stacey.oberg@durhamcollege.ca	Science Lab Technologist, Oshawa Campus
Rigby, Terry (S)	22-28 Whitby	4203  4203	terrence.rigby@durhamcollege.ca	Field Laboratory Technologist
Thompson, Craig (S)	A210	2210  22102	craig.thompson@durhamcollege.ca	Science Lab Technologist

## Field Placement

Field training provides valuable experience in the workplace. When on field placement, students must realize that their behaviour reflects upon the entire student body and the image of the college. Students are expected to act in a professional manner. This includes punctuality and regular attendance. It is **strongly recommended** that students do not carry any outstanding courses in third year to ensure that they meet field placement pre-requisite requirements and graduation deadlines.

### Evaluation criteria and weighting

- ❖ In order to be eligible to graduate, the student must successfully complete a minimum of 80 hours on the job placement in his/her chosen field and 5 hours of required workshops on or before May 13, 2015.
- ❖ The student must have the employer complete and sign the “student evaluation form” and submit the form to the Student Advisor in the Technology Office (H140A) on or before May 13, 2015. **The evaluation must indicate a satisfactory rating.** Please be aware that employers may also be contacted by the Student Advisor or the Program Coordinator.
- ❖ If a student does not successfully complete his/her placement requirements he/she will not be eligible to graduate.
- ❖ The student must also submit a completed tracking form (Task Log) to the Student Advisor in the Technology Office (H140A) on or before May 13, 2015. This tracking form (Task Log) is attached to the employer evaluation form in your placement package and must be **signed** by the employer.

### Terms and conditions of placement

Students must have a minimum 2.0 GPA and have successfully completed all of their first and second year courses before they can begin their placement. Exceptions may be made with the written consent of the Dean.

Placement must be completed before final grades are due in order to graduate.

Placement comes in different formats for different programs. The minimum requirement is that each student obtains at least 80 hours of program related, practical work experience in his/her chosen field plus 5 hours required workshops.

The placement options are:

- 1) One day a week during the fall and/or winter semester for a minimum of 80 hours.
- 2) A summer position after second year related to your field of study.
- 3) An “internship” for 4, 8, 12 or 16 months.
- 4) A prior work experience with proper approval and documentation.
- 5) Working during a block period of time such as the Xmas break, Reading week or in May once all course work is complete.

Students are responsible for their own transportation, safety glasses and safety boots. Placement should be treated as a job and proper work attire should be worn. If sick, it is the student’s responsibility to call his or her workplace supervisor. In addition, any work issues should be discussed with support person first. If there is no resolution, please speak to the Program Coordinator or Maureen Green, the Student Advisor in H140A.

Should the field placement assignment not meet the needs of the student, the student, in conjunction with the placement coordinator will attempt to find another placement company for the student. The student should notify the field placement coordinator within two weeks of the assignment if alternate arrangements need to be made.

In addition, the Coordinators receive leads from employers in regard to the employer’s placement requirements. These leads are then passed on to the students but may be subject to change from year to year.

## Program Information

# **Architectural Technician**

## ***2 Year Diploma***

### **Program Description:**

The two-year Architectural Technician program involves preparing designs, construction drawings and specifications for a variety of building types and will appeal to both your creative and analytical side with instruction in freehand sketching, history of architecture, renovation and restoration, site planning and technical communications.

A focus on sustainable design will give you the skills you need to be current and relevant in today's increasingly eco-friendly architectural field. Under the guidance of an architect, graduates employed in this field will be skilled in analyzing building codes to determine design requirements; drafting contract and bidding documents; assisting architects with drafting construction and design plans; and constructing design models.

You will focus on:

- Architectural drafting and detailing
- Building information modeling
- Building services and environmental systems
- Construction materials, methods and processes
- Land use and site analysis and planning

**Please note: students will be required to purchase green tag safety boots in order to participate in many laboratory settings.**

### **Employment Opportunities**

As a graduate, you can find employment in introductory or junior positions as technicians in a number of settings including:

- Architect's office
- Construction firm
- Engineering firm
- Facilities management
- Municipal, provincial and federal building agency
- Project coordinator
- Real estate

### **Opportunities for degree completion or additional credits**

**Qualified graduates of this program may be eligible to apply their academic credits towards further study. See Credit Transfer Information under Additional Important Information in the Index.**

To further enhance your employment credentials and professional development opportunities, including those offered by the Ontario Architecture Association of Ontario, graduates may apply to and pursue the third year option of the Architectural Technology program.

Please visit the Transfer Guide under Additional Important Information.

## **Synopsis of the Vocational Learning Outcomes**

### ***Architectural Technician (Ontario College Diploma)***

*The graduate has reliably demonstrated the ability to*

1. Communicate with clients, contractors, other building professionals and approval authorities.
2. Assist in the preparation, reading, and interpretation of drawings, and other graphical representations used in building projects.
3. Read and assist in the preparation of specifications and other project documents used in design and construction.
4. Assist in the preparation of estimates of time, costs, and quantity.
5. Assist in solving technical problems related to building projects through the application of principles of building science and mathematics.
6. Collaborate with members of the building team.
7. Assist in the development of architectural designs.
8. Review and assist in the preparation of site planning documents.
9. Comply with the legal and ethical requirements of an architectural technician in the practice of building design and construction.
10. Assist in the assessment of buildings related to repurposing and renovation projects.
11. Ensure personal safety in the workplace.
12. Identify sustainable design and building practices.
13. Use current and emerging technology to support building projects.
14. Assist in the administration of the construction phase of building projects.

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

# Architectural Technology

## 3 Year Diploma

### Program Description

In the three-year Architectural Technology program you will focus on the commercial aspect of construction and renovation and gain an in-depth understanding of building and construction technology.

You will gain knowledge and skills in:

- Computer-aided drawing
- Building methods and project management
- Computer-aided drafting programs
- Construction and sustainable technologies for materials such as wood frame, steel, masonry and precast concrete
- Project management

Graduates employed in this field will be skilled in analyzing building codes to determine design requirements; drafting contract and bidding documents; assisting architects with drafting construction and design plans; and constructing design models.

The sustainable design skills you will gain will make you current and relevant in today's increasingly eco-friendly architectural field. Graduates are eligible to apply for additional industry-relevant certifications, which may be a requirement of some employers.

**Please note: students will be required to purchase green tag safety boots in order to participate in many laboratory settings.**

### Employment Opportunities

As a graduate, you can find employment in introductory or junior positions as technicians in a number of settings including:

- Architect's office
- Construction firm
- Engineering firm
- Facilities management
- Municipal, provincial and federal building agency
- Project coordinator
- Real estate

### Advanced Standing:

Students with post-secondary credits may be considered for advanced standing on an individual basis.

**Qualified graduates of this program may be eligible to apply their academic credits towards further study. See Credit Transfer Information under Additional Important Information in the Index.**

**For further information, please see the Durham College [Pathways to Degrees](#) under Additional Important Information.**

## **Synopsis of the Vocational Learning Outcomes**

### ***Architectural Technology (Ontario College Diploma)***

*The graduate has reliably demonstrated the ability to*

1. Communicate with clients, contractors, other building professionals and approval authorities.
2. Assist in the preparation, reading, and interpretation of drawings, and other graphical representations used in building projects.
3. Read and assist in the preparation of specifications and other project documents used in design and construction.
4. Assist in the preparation of estimates of time, costs, and quantity.
5. Assist in solving technical problems related to building projects through the application of principles of building science and mathematics.
6. Collaborate with members of the building team.
7. Assist in the development of architectural designs.
8. Review and assist in the preparation of site planning documents.
9. Comply with the legal and ethical requirements of an architectural technician in the practice of building design and construction.
10. Assist in the assessment of buildings related to repurposing and renovation projects.
11. Ensure personal safety in the workplace.
12. Identify sustainable design and building practices.
13. Use current and emerging technology to support building projects.
14. Assist in the administration of the construction phase of building projects.

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

# Energy Management and Sustainable Building Technology

## 3 Year Program

### Program Description

With the cost of energy rapidly increasing there is a commitment to being part of the move to renewable energy sources. Some commercial buildings frequently use more energy in unoccupied times than occupied, a practice that can hardly be considered sustainable.

This program offers the opportunity to learn how to integrate a variety of technologies to quantify energy efficiency and conservation within commercial and institutional buildings through the application of energy management, business principles and clean energy technologies.

The Ontario Power Authority is projecting the creation of thousands of new jobs as part of the shift to green and renewable energy. This program will prepare you to meet this demand by teaching you the skills required to work in the fields of energy-use efficiency, energy sourcing and energy management within industrial, commercial and residential buildings.

Students will be trained at the college's state-of-the-art and energy efficient Skilled Trades Centre in energy management and building systems technology including strategies, practices and techniques for generating, managing, optimizing, capturing, storing and distributing renewable and clean energy technologies.

You will focus on:

- Understanding the basics of building science
- Utilizing instrumentation and other related technologies to monitor and control energy systems in commercial facilities
- Analyzing technical problems related to energy systems
- Making recommendations applying green technologies in order to repurpose buildings
- Linking sustainability to the benefits of the company and linking financial benefits to sustainability and green strategy
- Improving employee morale and health

### Employment Opportunities

Graduates will enter the workforce job-ready with the knowledge and skills to be employed by a variety of industries in the energy sector. This includes working in energy systems manufacturing, energy management, building management, consulting or for a municipal government agency in the following roles:

- Energy evaluator
- Energy consultant/manager
- Financial advisor for energy option alternatives
- General contractor assistant
- Municipal energy officer
- New systems installer assistant
- Sales
- Sustainable and green energy specialist

**Qualified graduates of this program may be eligible to apply their academic credits towards further study. See Credit Transfer Information under Additional Important Information in the Index.**

**For further information, please see the Durham College [Pathways to Degrees](#) under Additional Important Information.**

## **Synopsis of the Vocational Learning Outcomes**

### ***Energy Management Sustainable Building Technology***

*The graduate has reliably demonstrated the ability to:*

- 1, Analyze and solve technical problems related to building energy efficiency and related building projects through the application of the basic principles of building science, mathematics and renewable and clean energy systems and technologies.
2. Assist with analyzing and preparing working drawings and other technical documents using industry specific software and procedures.
3. Use a variety of basic troubleshooting techniques and test equipment to assist in identifying problems with electrical and/or mechanical components of conventional, renewable and clean energy technologies within building systems.
4. Integrate renewable and clean energy technology into the building systems adhering to the legal, regulatory and health and safety codes and guidelines.
5. Contribute to the financial and technical planning, scheduling, implementation and monitoring of sustainable principles and practices during the development of building projects.
6. Identify and apply the principles and ethics associated with issues involving environmental management, energy management, building management and building commissioning.
7. Apply basic principles of networking, instrumentation and other related technologies to monitor and control energy systems in residential or small-scale industrial or commercial facilities.
8. Analyze and assess existing conventional building systems and make recommendations applying green energy management techniques in the repurposing, renovation and retrofitting of the buildings.
9. Communicate with clients, contractors, other building professionals and approval authorities.
10. Collaborate with and coordinate information from structural, mechanical, and electrical building systems professionals.
11. Ensure personal safety and contribute to the safety of others in the workplace.
12. Evaluate current and emerging energy and energy conservation technology related to buildings and building projects.
13. Apply business principles to energy management and sustainable energy options for buildings.
14. Collaborate with other building professionals to integrate and practice rain water harvesting and water conservation concepts in sustainable buildings

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

# **Horticulture Technician**

## ***2 Year Diploma***

### **Program Description**

The art, science and business of horticulture are the focus of this two year program. Exciting opportunities exist if you are interested in learning the skills required to create landscapes, renew historical gardens, enhance communities and be awarded by opportunities to express your creativity while learning the complexities involved in making things grow.

The growing interest in landscaping, gardening and urban agriculture is prompting more people to spend money on these enjoyable activities and opening new opportunities for graduates. Experience the different aspects involved in horticulture as you work toward becoming a professional horticulturalist working in the landscape and horticulture industries.

You will focus on:

- Arboriculture
- Aspects of growing plants outdoors, indoors and in a greenhouse environment
- Disease and pest management
- Landscape construction
- Landscape design fundamentals
- Nursery management
- Parks and turf management fundamentals
- Plant propagation
- Retail store operation
- Small equipment operation and safety
- Soil and plant nutrition

The Horticultural Technician program will be offered at the Whitby campus, home of the college's new Centre for Food. This incredible new learning centre will undergo further expansion to include orchards, agricultural fields, greenhouses and more.

As part of a partnership between Durham College and the Parkwood National Historic Site (Parkwood), students enrolled in this program will have an opportunity to train and study at Parkwood's historic gardens and greenhouses in addition to their regular classes at the college's Whitby campus.

Please note: students will be required to purchase green tag safety boots in order to participate in many laboratory settings.

### **Employment Opportunities**

Employment opportunities are available in a wide variety of horticulture-related positions:

- Entrepreneurship
- Horticulture equipment company
- Landscape construction and maintenance
- Landscape design assistance
- Municipal park or garden
- Nursery stock farm
- Nursery and garden centre

- Property management
- Sales and assisting in the setup of accessories including backyard greenhouses, garden sheds, lawn irrigation equipment and patio and garden furniture
- Sales of plant nutrition and other plant products
- Tree management or maintenance company

### **Advanced Standing:**

Students with post-secondary credits may be considered for advanced standing on an individual basis.

**Qualified graduates of this program may be eligible to apply their academic credits towards further study. See Credit Transfer Information under Additional Important Information in the Index.**

**For further information, please see the Durham College Pathways to Degrees under Additional Important Information.**

## **Synopsis of the Vocational Learning Outcomes**

### ***Horticultural Technician (Ontario College Advanced Diploma)***

*The graduate has reliably demonstrated the ability to*

1. apply the principles of plant and soil sciences to complete work in horticulture.
2. apply practical horticulture skills to the production of plant materials, including herbaceous plants, woody plants, and turf.
3. apply the principles of design to horticulture.
4. apply basic installation and construction principles and practical skills to horticulture.
5. implement maintenance procedures for plants, property, and equipment.
6. utilize knowledge of plant identification, usage, and maintenance criteria.
7. recognize the potential environmental effects of projects and the need to avoid environmental damage and promote healthier ecosystems.
8. apply the principles and practical skills of Integrated Pest Management (IPM) to indoor and outdoor plants.
9. contribute to the effective planning, implementation, and conclusion of projects.
10. use safe working practices.
11. use business practices appropriate to the horticulture industry.
12. act in a professional manner, maintain professional relationships, and communicate effectively with clients, co-workers, supervisors, and others.
13. develop strategies for ongoing personal and professional development to enhance work performance and career opportunities and to keep pace with industry changes.

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

## **Horticulture – Food and Farming**

### ***2 Year Diploma***

#### **Program Description**

The creative and innovative concepts and practices of food and farming are suited to an urban lifestyle and enhanced by being able to serve a large, nearby consumer population. The Horticulture - Food and Farming program offers students the hands-on opportunity to become familiar with the concepts of local food production.

Students will work in teams and individually, both in a lab and lecture environment and study on- and off-campus at various locations to experience all types of food and farming environments.

#### **Students will focus on:**

- Plant propagation
- Soil and plant nutrition
- Fruit and vegetable production under field, greenhouse, garden and container conditions
- Product development
- Food processing, sanitation and safety including niche processing of local foods
- Food and agriculture regulations
- Food quality skills from field to fork
- Disease and pest management
- Business practices including product branding, entrepreneurship and marketing

**Please note: students will be required to purchase green tag safety boots in order to participate in many laboratory settings.**

#### **Employment Opportunities**

- Agriculture, garden and food product sales
- Agri-tourism
- Community and roof-top garden maintenance
- Environmental and community projects at municipal offices
- Farmer's markets
- Field production
- Food inspection
- Greenhouse production assistant or manager
- Hydroponics
- Marketing and/or sales for small specialty or national brand food companies
- Niche preservation and processing of local foods
- Self-employment
- Urban agriculture product sales including backyard greenhouses and irrigation systems

#### **Advanced Standing:**

Students with post-secondary credits may be considered for advanced standing on an individual basis.

**Qualified graduates of this program may be eligible to apply their academic credits towards further study. See Credit Transfer Information under Additional Important Information in the Index.**

**For further information, please see the Durham College Pathways to Degrees under Additional Important Information.**

## **Synopsis of the Vocational Learning Outcomes**

### ***Horticulture - Food and Farming (Ontario College Diploma)***

*The graduate has reliably demonstrated the ability to*

1. Apply the appropriate theory and principles to the production of crops grown under mainstream and organic management systems including varietal differences for end use or storage.
2. Compare and contrast soils and nutritional and watering requirements for plants and crops in field, garden and container production systems.
3. Utilize and evaluate niche processing technologies including HACCP, in the conversion of locally grown crop products into upscale specialty foods.
4. Discern and apply relevant food safety standards including risk management and food safety plans and traceability to various aspects of food handling and processing.
5. Evaluate potential entrepreneurial opportunities in value added agriculture and agri-tourism by utilizing the fundamentals of business management, business plans, finance, marketing and accounting.
6. Adhere to local, provincial and federal regulations and policies relating to artisan, urban and value-added agriculture.
7. Integrate natural biological cycles and controls in managing plant pathogens, weeds, insect pests and parasites.
8. Apply biological, chemical and food processing technology principles to solving technical problems associated with artisan agriculture and specialty food production.
9. Analyze energy management and greenhouse structures in the greenhouse sector.
10. Discern and apply best practices in the production of plants grown under greenhouse and indoor environments.
11. Develop and communicate principles and key messages of artisan agriculture to consumers, industry representatives and the media.
12. Develop an integrated farm management plan that accounts for ecological farm practices, environmental protection, biodiversity and wildlife preservation.

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

**Websites for the School of Science and Engineering Technology programs  
Program of Studies**

***Architectural Technician/Technologist***

<http://www.durhamcollege.ca/programs/architectural-technician>  
<http://www.durhamcollege.ca/programs/architectural-technology>

***Biomedical Engineering Technology/Biomedical Engineering Technology Fast-Track***

<http://www.durhamcollege.ca/programs/biomedical-engineering-technology>  
<http://www.durhamcollege.ca/programs/biotechnology-advanced-compressed-fast-track>

***Biotechnology Advanced/Biotechnology Advanced Fast-Track***

<http://www.durhamcollege.ca/programs/biotechnology-advanced>  
<http://www.durhamcollege.ca/programs/biotechnology-advanced-compressed-fast-track>

***Chemical Engineering Technology/Chemical Engineering Technology Fast-Track***

<http://www.durhamcollege.ca/programs/chemical-engineering-technology>  
<http://www.durhamcollege.ca/programs/chemical-engineering-technology-compressed-fast-track>

***Chemical Laboratory Technician***

<http://www.durhamcollege.ca/programs/chemical-laboratory-technician>

***Electro-Mechanical Engineering Technology***

<http://www.durhamcollege.ca/programs/electro-mechanical-engineering-technology>

***Electronics Engineering Technician/Electronics Engineering Technology/Electronics Engineering Technology Fast-Track***

<http://www.durhamcollege.ca/programs/electronics-engineering-technician-two-year>  
<http://www.durhamcollege.ca/programs/electronics-engineering-technology-three-year>  
<http://www.durhamcollege.ca/programs/electronics-engineering-technology-compressed-fast-track>

***Energy Management Sustainable Building Technology***

<http://www.durhamcollege.ca/programs/energy-management-and-sustainable-building-technology>

***Environmental Technology/Environmental Technology Fast-Track***

<http://www.durhamcollege.ca/programs/environmental-technology>  
<http://www.durhamcollege.ca/programs/environmental-technology-compressed-fast-track>

***Horticulture-Food and Farming***

<http://www.durhamcollege.ca/programs/food-and-farming>

***Horticulture Technician***

<http://www.durhamcollege.ca/programs/horticulture-technician>

***Mechanical Engineering Technician***

<http://www.durhamcollege.ca/programs/mechanical-engineering-technician>

***Mechanical Engineering Technician Non-Destructive Evaluation/Mechanical Engineering Technician Non-Destructive Evaluation Fast-Track***

<http://www.durhamcollege.ca/programs/mechanical-engineering-technician-non-destructive-evaluation>

<http://www.durhamcollege.ca/programs/mechanical-engineering-technician-non-destructive-evaluation-compressed-fast-track>

***Mechanical Engineering Technology***

<http://www.durhamcollege.ca/programs/mechanical-engineering-technology>

***Pharmaceutical and Food Science Technology/Pharmaceutical and Food Science Technology Fast-Track***

<http://www.durhamcollege.ca/programs/pharmaceutical-and-food-science-technology>

<http://www.durhamcollege.ca/programs/pharmaceutical-and-food-science-technology-compressed-fast-track>

***Water Quality Technician***

<http://www.durhamcollege.ca/programs/water-quality-technician>

## Durham College Academic Policies & Procedures

To view the Durham College Academic Policies & Procedures, please go to: [www.durhamcollege.ca/academicpolicies](http://www.durhamcollege.ca/academicpolicies)

### School of Science and Engineering Administrative Policies

#### Communication/MyCampus

Regular communication between college staff and students is very important to ensure that students stay informed about special events, changes in programming and various deadlines. The School of Science and Engineering Technology office will use MyCampus email to alert you to important details about your program. You are requested to visit MyCampus often to view campus-wide announcements and to check your MyCampus email account.

Professors will confirm their preferred method of communication. Emails sent to professors and/or staff must be professional in appearance and content. Inappropriate emails will be retained and a copy forwarded to the dean or associate dean for appropriate action.

#### Timetables and timetable changes

Timetables are available online through our intranet – “MyCampus”. You can view and/or print your timetable from any computer with internet access. If you require assistance, please contact the Help Desk: (905) 721-3333. MyCampus provides students with the ability to modify timetables at specified times as listed in the Academic Calendar (posted on MyCampus). **Please note: students have the responsibility to ensure that all of their required courses are on their schedules.** Assistance is available via your Student Advisor. Should you find a discrepancy on your timetable, **seek assistance immediately.**

#### Disclaimer

Because of our commitment to continuous improvement of our curriculum, there may be some changes in courses offered. If this occurs, we will notify those affected.

#### Course/program changes

Adding and/or deleting courses or changing a program must be done within the first week of course or program commencement.

#### Application for a course credit

Applications must be submitted to the Registrar’s Office no later than two weeks from the course commencement.

#### Emergency Calls

The School of Science and Engineering Technology staff will accept messages for students in the event of a family emergency. Please make sure that anyone in your life who needs to locate you during class time for reasons other than an emergency has a copy of your timetable (e.g. classmates, family, day care provider, and employer). The staff is unable to release your schedule information to anyone due to the Freedom of Information Act.

#### Freedom of Information

Freedom of Information/Protection of Privacy - Pursuant to the Freedom of Information & Protection of Privacy Act, the School of Science and Engineering Technology office may not release any personal information regarding a student. This includes academic standing, personal data, timetable information etc. without a signed Release of Information form initiated by the student.

### Course Completion/Attendance

Minimum course completion and attendance requirements will be specified in the course outlines. Students must be present and complete a lab before a report can be accepted unless alternative work is assigned. Students must attend their assigned lab period unless excused by the professor (due to exceptional circumstances). Class attendance and participation will enhance your opportunities for success. Please refer to the course outline for specific expectations for each course.

### Assignments

Students should keep back-up copies of all assignments in case the original is lost. Electronic submission of assignments is at the option of the professor. Assignments submitted electronically must be in the software format as stated specifically by your professor. Attachments that will not open are the responsibility of the student and subject to the late penalty.

### Handing in/Returning of Reports/Assignments

Deadlines will be clearly specified in each course outline and all submissions must meet specified guidelines as detailed by the section professor. Academic penalties for late assignments will be specified in course descriptions. This may be up to non-acceptance of assignment and a mark of zero. A secure method of handing in and returning reports will be specified by each professor.

Faculty will return tests/assignments to students within a **three** week time frame. Confidentiality will be maintained and tests, grades, or assignments will not be posted or left in areas for students to pick up.

### Academic Dishonesty

Efforts will be made to deny opportunities for dishonesty. These may involve changing rooms, having more than one invigilator, providing exam booklets, disallowing personal items etc. Any student caught cheating will be dealt with under the Durham College Academic policy.

<http://www.durhamcollege.ca/wp-content/uploads/ACAD-101-Academic-Integrity.pdf>

### Examinations

In this section, a final examination is defined as an invigilated comprehensive evaluation given just after regularly scheduled classes. (Week 15) Final examinations will be held for courses as specified in the course outline. A final examination will be comprehensive, and examination questions should reflect the approximate time weighting specified in the course outline.

### Prerequisite courses

Course prerequisites exist to promote student success. Exceptions to the established prerequisite course structure are not permitted. Students who do not have all credits completed from previous semesters may not be eligible for a full-time course load due to required prerequisites. Students with “non-standard” scheduling needs are urged to review their academic plan with the Student Advisor each semester.

### Repeating courses

Durham College’s grading and promotion policy states that courses may be repeated only once without approval from the Dean or designate. The School of Science and Engineering Technology approves repeating of courses for all Science and Engineering students who are repeating a course a second time or more. Students are encouraged to meet regularly with the Student Advisor if they are struggling with academic success.

### Withdrawing from a course

All withdrawals must be done within the first two weeks of the start of any module with no record notes on the student’s transcript. Students withdrawing from a course during week three, four or five of the start of the module will have the course recorded as a ‘W’ (withdrawn) on their transcript. Students may not withdraw from a course during the last two weeks of the module in which they are enrolled. After this date, all courses will be graded and recorded on the student’s transcript. Please refer to the “Important Dates” section for a listing of withdrawal deadlines.

### Graduation Requirements

Students must have a minimum GPA of 2.0 to be eligible for graduation. In addition, a student must have successfully completed all required courses. A student who has a GPA of less than 2.0 should contact the School of Science and Engineering Technology office to arrange for academic counselling. Please refer to the academic policies posted on the Durham College website, [www.durhamcollege.ca/policies](http://www.durhamcollege.ca/policies), for more information. At least 25% of the completed program courses and/or weighted credit hours must be completed at Durham College to be eligible for a Durham College diploma. Students must complete an application for graduation on MyCampus or via paper form in Registration.

### Application for graduation

Applications for graduation for those wishing to graduate at the June Convocation are available online via MyCampus in January and due by a specified deadline (usually mid-February). A diploma will not be prepared until the application is received. Applications for graduation for the October Convocation are usually due by mid-September. Check MyCampus for deadline dates and updates.

### Computer Labs

Computer labs are reserved for coursework. Games are not permitted. Adult material must not be displayed at any time. Please refer to the Information Technology Acceptable Use policy posted on the Durham College website [www.durhamcollege.ca/policies](http://www.durhamcollege.ca/policies). Note: afterhours access to labs is unique by course and must be approved by the professor. Students must sign in and out with Security.

### Laptop & Desktop Computers: (Instant Messaging, (MSN, etc.) Chat, Gaming, Cell phones)

Research studies and feedback have shown that these activities can cause a distraction to other students. They are not acceptable classroom behaviours. Students involved in chatting or gaming during a teaching session will be asked to leave the classroom.

### Safety in Science Labs

Before students begin working in the laboratories they must undergo **documented** safety training and evaluation. This is available on line through Durham Connect (D2L) and must be completed before admittance to any laboratory. Students who endanger themselves or others in the lab will receive a warning and a written report (Academic Alert Form). After the second occurrence the student will be required to meet with the dean. After the third occurrence the student will be asked to withdraw from the course. Please refer to the Lab Safety Regulations for detailed expectations.

### Missed Laboratories

If a student misses a lab due to illness, documentation must be provided. If documentation cannot be provided, the student will receive a mark of zero for the missed lab. If a student misses labs due to compassionate reasons, a note from the program manager/coordinator will be required. Students will not write up a laboratory report for labs they did not attend.

### Lab Cleanliness

Everyone is expected to leave the labs clean and neat. Course outlines may specify an academic reward/penalty to encourage this. Students will not be signed out of the laboratory until their work area is clean and tidy.

### Placement

Students must have a 2.0 GPA and no failures or outstanding courses in order to qualify for placement in third year. Students must successfully complete 80 hours of on the job placement in their chosen field and five (5) hours of required workshops. Proper documentation must be provided to Maureen Green in the Technology Office (H140) before May 15th in the graduating year.

### Examinations

- a) Graduating students requesting exemption from final exams because of employment must provide their dean or designate with a letter from their potential employer explaining the situation. The opportunity must be for a full time permanent position in a program related field. The student's grades must be reviewed in order to ensure that the student is in good standing, maintaining a minimum 2.0 GPA and eligible to graduate with Aegrotat already on file.
- b) Students writing exams in the Student Academic Learning Centre, see Table of Contents for specific information page.

### Grade Point Average GPA

Students must have a 1.5 or greater GPA at the end of year one to proceed to year two. Students with a GPA less than 1.5 will be advised to repeat year one, but may get credit for any courses with a 60% or better. Students with 0.0 to .99 GPA will be automatically suspended; students with a 1.0 to 1.49 GPA will automatically be on probation. Students on suspension and probation do not receive an invoice to proceed and must meet with their Student Advisor. Second year students with a GPA less than 1.75 will be advised to repeat year two. Note: these are the minimum requirements. All students want to maintain a 2.0 GPA to ensure academic success. All students must have a 2.0 GPA and no failures to graduate from the program. Students in a 3 year program will be required to complete a Field Placement component (minimum 80 hours on the job and 5 hours required workshops) to be eligible to graduate. Please refer to your Student Handbook or your Student Advisor for more information on GPA.

### Grade appeals

Students who do not agree with their marks have 15 days from receipt of that mark to launch a grade appeal. The first step in the appeal is to speak to the professor who issued the grade. For more details on the grade appeal process please consult the procedures regarding grade appeals posted on MyCampus.

## ADDITIONAL IMPORTANT INFORMATION

### Academic Advising - Student Advisors

Each school provides a student advisor(s) to help you reach your full academic potential. These representatives can assist you with: accessing other college services; developing academic plans to promote success in the event of failed subjects or a low GPA; finding equivalent credits; identifying career goals and making sound academic decisions; making decisions regarding full- and part-time studies; reviewing graduation requirements; selecting electives and options; setting up academic plans; or transferring to another program. To view contact information for your Student Advisor, please visit: <http://www.durhamcollege.ca/student-experience/helping-you-succeed/academic-support-resources/academic-advising>

### Academic Integrity

Academic integrity refers to the pursuit of scholarly activity in an open, honest and responsible manner. Acts that undermine academic integrity, such as plagiarism, cheating and misrepresentation of work, contradict Durham College's core values.

To ensure the highest academic standards, students are accountable for the work they produce, and student work must be the product of his or her efforts. Durham College has purchased a license with Turnitin.com, an online service to detect unoriginal work and citation errors. The Academic Integrity Policy and Procedure documents (<http://www.durhamcollege.ca/academicpolicies>) provide a comprehensive explanation of Durham College's expectations regarding academic integrity.

### Aegrotat

Aegrotat refers to a 'compassionate pass' in a course in which, due to **emergency circumstances** related to health and wellness, a student was unable to complete all of the evaluation requirements. Emergency circumstances that may warrant the designation of an Aegrotat include, but are not limited to: injury, illness and/or bereavement. Documentation supporting the request for an Aegrotat designation may be required.

The awarding of an Aegrotat credit is noted in a student's transcript as AEG and is therefore not included in the calculation of a student's grade point average. A student shall receive Aegrotat standing only once in a five year period.

Further information about Aegrotat standing can be found in the Aegrotat Policy and Procedure documents, please visit the following link: <http://www.durhamcollege.ca/academicpolicies>

## **Centre for Students with Disabilities**

The Centre for Students with Disabilities (CSD) at Durham College provides services to students with disabilities to ensure that equal access is available to all aspects of the academic environment. These services are designed in accordance with the Ontario Human Rights Code and the Accessibility for Ontarians with Disabilities Act. Our services are confidential. Please visit the following link to view valuable information regarding the CSD:

<http://durhamcollege.ca/student-experience/helping-you-succeed/centre-for-students-with-disabilities>

## **Continuing Education Course Book**

If you are unable to access a day-time course (timetable conflicts, wish to repeat a course, etc.) or want to get a head start on your next semester, discuss your options with your Student Advisor. To view comprehensive information regarding Continuing Education offerings, please visit the following link:

<http://www.durhamcollege.ca/academic-schools/school-of-continuing-education>

## **Course Outlines**

For each course, a Course Outline that describes course learning outcomes, course content, learning activities, evaluation methods, timelines and support resources is available online. Please note that students are expected to download copies of their course outlines from MyCampus prior to the first class in each course. Instructions for downloading are located on MyCampus at:

<http://www.durhamcollege.ca/mycampus>

Please visit the following link to view the Course Outlines Policy and Procedure documents:

<http://www.durhamcollege.ca/academicpolicies>

## **Credit Transfer Information**

Durham College is dedicated to helping you build upon your previous education. If you have studied previously at Durham College or another recognized post-secondary institution, you may be eligible to receive credit for the courses you have successfully completed. Please view the following link for credit transfer information: [www.durhamcollege.ca/credittransfer](http://www.durhamcollege.ca/credittransfer)

## **Durham College Mission, Vision and Values**

Our mission, vision, values were created to help ensure the success of our students, staff and faculty. Please view our guiding principles at the following link:

<http://www.durhamcollege.ca/about-us/corporate-links/governance/mission-vision-and-values>

## Essential Employability Skills

Essential Employability Skills (EES) are skills that, regardless of a student's program or discipline, are critical for success in the workplace, in day-to-day living, and for lifelong learning. Please view the following link for further information:

<http://www.tcu.gov.on.ca/pepg/audiences/colleges/progstan/essential.html>

## General Education

The Ministry of Colleges and Universities requires all Ontario college students enrolled in a 2-year Ontario College Diploma or a 3-year Ontario College Advanced Diploma program to successfully complete three or more General Education (GNED) courses prior to graduation. For more information about GNED course selection, a full listing of GNED electives (with course descriptions), and how to receive GNED credits for prior post-secondary studies, please visit the General Education website at:

<http://www.durhamcollege.ca/academic-schools/school-of-interdisciplinary-studies-employment-services/general-education>

## Important Dates

Durham College strives to keep you informed of all important dates throughout the academic year. Please review the 2014-2015 important dates that includes fee payments, web registration, add/drop, exam dates etc. You can find this information online, in the Durham College handbook and on MyCampus. Please review MyCampus for important updates and reminders on important dates.

## Learning Management System Usage (LMS)

Professors are expected to use LMS or DC Connect to support student learning. As per the Learning Management System Usage procedure, faculty will post and reveal all marks to their students on an ongoing basis. To view the LMS Usage Policy and Procedure, please visit the following link:

<http://www.durhamcollege.ca/about-us/corporate-links/governance/policies>

## Library

The Library is here to help you succeed! Stop by for help to research a topic, complete an assignment, or when you just need a quiet place to study. You may visit the library virtually at <http://www.durhamcollege.ca/library> or to view information regarding locations, hours, and more, please visit the following link: <http://www.durhamcollege.ca/student-experience/learning-spaces/library/about-the-library>

## Missed Final Examinations

A final examination is a discretely designed assessment administered in Week 15 of a 14 week semester. Students who, as a result of **non-emergency circumstances**, miss one or more final examinations during a single examination period may be eligible to apply to defer/reschedule the writing of these assessments.

To be eligible, students must have no less than a cumulative 1.5 GPA, apply for consideration using the appropriate forms and pay a fee. This privilege can only be used by a student once in a five-year period. External accreditation requirements, the availability of appropriate examination facilities and other constraints necessitate that not all courses will be eligible.

For more details, students should speak with their Student Advisor or review the Missed Final Examination Policy and Procedure documents at the following link:

<http://www.durhamcollege.ca/academicpolicies>

## Pathways to Degrees

Continue your post-secondary journey and leverage your Durham College education to earn additional credentials. To learn how you can further your education, visit [www.durhamcollege.ca/pathways](http://www.durhamcollege.ca/pathways) or check out the Durham College Transfer Guide at [www.durhamcollege.ca/transferguide](http://www.durhamcollege.ca/transferguide). Additional information regarding transferring between institutions in Ontario can be found at [www.ontransfer.ca](http://www.ontransfer.ca).

## Prior Learning Assessment and Recognition (PLAR)

Prior Learning Assessment and Recognition (PLAR) is the process you can use to gain college credit(s) for learning and skills acquired through previous experiences. This may include workplace training, life experiences, self-directed study, community work, travel, hobbies and military service. By using the PLAR process, you may be able to complete a college certificate or diploma program in less time. Please view the following link for PLAR information:

<http://www.durhamcollege.ca/wp-content/uploads/plar.pdf>

## Requirements For Promotion

### Evaluation and Promotion:

Academic courses are evaluated using a variety of methods such as tests, essays, labs, written or verbal assignments, in-process activities, group work and/or final examinations. The evaluation criteria for each course are noted in its course outline. Students are advised to familiarize themselves with these criteria early in the semester. Please refer to the Grading and Promotion Policy and Procedures documents (<http://www.durhamcollege.ca/academicpolicies>) for a complete overview of grading and promotion practices.

## Academic Probation:

Students who are not progressing satisfactorily according to criteria published in their respective program guides may be placed on academic probation, at the discretion of the school Dean or designate. Such students may be allowed to continue their studies on a Letter of Permission (an academic student contract) which will specify conditions which must be met to continue in their programs. Students who do not meet the conditions of their academic probation may be required to withdraw from full-time studies.

## **Scholarships, Bursaries and Awards**

The Financial Aid and Awards office provides students with options to help fund their educational costs. To view valuable information, please visit the Financial Aid and Awards [Web Site](#).

## **Student Academic Learning Services (SALS)**

The Student Academic Learning Services Centre helps Durham College students to achieve their academic goals. Academic supports include: peer tutoring, learning skills services, writing skills services, English language services, and subject specific supports for math, science, and business. Please visit the following link to view valuable information regarding SALS including how to register for 24/7 online access to SALS academic resources:

<http://durhamcollege.ca/student-experience/helping-you-succeed/student-academic-learning-services-sals>

## **Student Communications**

Durham College is committed to communicating important information to you. Please view the following link to reference a comprehensive chart indicating specific vehicles. For example, social media, DC website, DC Mail, MyCampus, DC Connect, and more:

[http://www.durhamcollege.ca/wp-content/uploads/DCCares\\_StudentMatrix\\_v5.pdf](http://www.durhamcollege.ca/wp-content/uploads/DCCares_StudentMatrix_v5.pdf)

## **Student Rights and Responsibilities**

A policy and procedure is in place which articulates the rights and responsibilities of students at Durham College, and provides a framework for addressing non-academic misconduct by students. To view the Student Rights and Responsibilities Policy and procedure, please visit the following link:

<http://www.durhamcollege.ca/academicpolicies>