DURHAM COLLEGE
SUCCESS MATTERS

PROGRAM GUIDE

Faculty of Science, Engineering & Information Technology (SEIT)
Information Technology Programs
2023-2024

able of Contents

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, and timetable or campus location at any time. Please consult the Durham College website for the most current information.

August 2023

A message from the Executive Dean

Welcome!

I am genuinely excited to welcome you to Durham College and to your program in the Faculty of Science, Engineering and Information Technology! You have made an excellent choice in Durham College. As an institution, we aspire to foster a positive learning environment that is inclusive, equitable, and diverse. We are committed to supporting and helping all students to find success in whatever their educational goals may be.

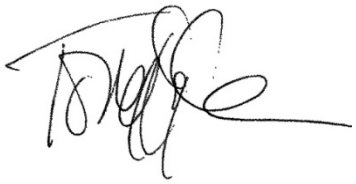
The purpose of this Program Guide is to provide you with information relating to many areas of the college, including important dates, deadlines, and services to support you in your studies and beyond.

Our programs provide hands-on experiential opportunities and a foundation in relevant theories, along with opportunities to gain relevant work experience. This will serve you well upon graduation or should you pursue further studies in your discipline. Your professors bring years of experience to their teaching and a true dedication to your success in and out of the classroom.

College is exciting and challenging, and we recognize there may be a period of adjustment, both academically and socially. There are a wide range of services and departments that specialize in ways that meet the needs of all students and we encourage you to reach out to them to support you to overcome any challenges you may encounter.

Finally, I would like to remind you that your student experience extends well beyond the classroom. Please take time to consider a volunteer or on-campus work opportunity, supporting our college research agenda, or participating in campus life in some other way. The more you put into your time at Durham College, the more you will get out of it!

I wish you the very best with your studies and program. Please let us know wherever we can help!



Tony Doyle,
Executive Dean
Faculty of Science, Engineering and Information Technology (SEIT)

A Message from the Executive Vice President, Academic

On behalf of Durham College (DC), I would like to extend a warm welcome to you for the upcoming academic year. It is an exciting time, whether you are a returning student, getting back into the swing of things, or this is your first year of college.

You have made a great choice with DC. We offer a comprehensive range of exceptional academic programs and student services. Our faculty members are experts in their respective fields, and they are dedicated to providing you with the knowledge and skills needed to excel in your future careers. Our students develop the professional, intercultural and durable skills required to realize meaningful careers and make a difference in the world.

We support students by delivering excellence in teaching and learning, and providing opportunities for experiential learning, applied research and technology-enabled education. Our goal is to inspire students to create success for themselves and their communities through the best in innovative and transformative education.

As we start the new semester, it's important to recognize the evolving nature of how we live, work and learn. By choosing to study at DC this year, you've demonstrated a willingness to adapt and grow, which will help you move forward with your studies and life. I encourage you to take advantage of all that we have to offer. Be sure to get to know your faculty members, program coordinator, student advisor, and all the other employees on campus who are committed to your success. These individuals can provide valuable information and resources to support your studies and career planning. Get involved in campus life, connect with your peers, and make the most of your time here.

We are honoured to be a part of your educational journey and can't wait to see the great things you will achieve during, and after, your time with us. Together, we're leading the way.

Best wishes for a successful academic year!

Dr. Elaine Popp
Executive Vice President, Academic

Program Specific Information

Contact the Office of the Faculty of Science, Engineering and Information Technology

Students can visit Faculty of Science, Engineering & Information Technology (SEIT) website: Faculty of Science, Engineering & Information Technology (SEIT) | Durham College Faculty of SEIT LiveChat is available Monday to Friday, 8:30 a.m. to 4:30 p.m.

Office staff and faculty can be reached by their e-mail address below. General inquiries can also be sent to SEIT SEIT@durhamcollege.ca where they will be directed to the appropriate contact. To dial by extension, call 905.721.2000 or to reach the Faculty office call 905.721.3060.

Office and Administrative Staff	Office	Extension
Tony Doyle, Executive Dean tony.doyle@durhamcollege.ca	H140	4284
Nazneen Kanga, Associate Dean nazneen.kanga@durhamcollege.ca	H140	2046
Kara Woods, Associate Dean kara.woods@durhamcollege.ca	H140	2787
Maryam Irshad, Manager maryam.irshad@durhamcollege.ca	H140	2221
Miranda Bekiaris, Administrative Coordinator miranda.bekiaris@durhamcollege.ca	H140	2621
Melissa Bosomworth, Administrative Coordinator melissa.bosomworth@durhamcollege.ca	H140	2545
Cherie Vlahos, Administrative Assistant cherie.vlahos@durhamcollege.ca	H140	3060
Stephanie Darroch, Administrative Assistant stephanie.darroch@Durhamcollege.ca	H140	3060
Rahul Kumar, Field Placement Officer/Student Advisor rahul.kumar@durhamcollege.ca	H140 – Oshawa 1-8C – Whitby	6120 – Oshawa 4248 - Whitby
Stephanie Thomson, Field Placement Officer/Student Advisor stephanie.thomson@durhamcollege.ca	H140	2383
Heather Dunlop, Field Placement Officer / Student Advisor heather.dunlop@durhamcollege.ca	H122	2151

Program Coordinators	Program	Office	Extension
Chris Klimek chris.klimek@durhamcollege.ca	Computer Systems Technician, Computer Systems Technology, Computer Systems Technician - Transfer to Ontario Tech	D209	2171
Dave Schuett dave.schuett@durhamcollege.ca	Electronics Engineering Technician, Electronics Engineering Technology	C208	3655
Sam Plati sam.plati@durhamcollege.ca	Data Analytics for Business Decision Making	C112E	6149
Stephen Forbes stephen.forbes@durhamcollege.ca	Computer Foundations, Computer Programming, Computer Programming and Analysis	C314	6397
Sukhwant Sagar sukhwant.sagar@durhamcollege.ca	Cybersecurity	C312	2565
TBD TBD@durhamcollege.ca	Cloud Computing	TBD	TBD
TBD TBD@durhamcollege.ca	Artificial Intelligence Analysis, Design and Implementation / Artificial Intelligence – Honours Bachelor	TBD	TBD

Student Advisors

Student Advisors are available all year to support, encourage, plan and advocate for students needing academic assistance.

Our student advisors can assist students with the following:

- Assist with individual academic plans
- Identify future career goals
- Discuss pathways to university or post-graduate programs
- Program transfer to other college programs or interest in additional courses (e.g. Continuing Education)
- Assist with decisions regarding full-time or part-time studies
- Work with the Access and Support Centre (ASC) to devise and map out a course load that better supports individual needs
- Map out courses and upcoming semesters for off-stream students
- Find equivalent credits
- Help with timetable changes
- Discuss short- and long-term academic goals
- Assist and discuss re-entry into a program
- Support, advise and provide access to the many student services Durham College offers (e.g. Student Academic Learning Services (SALS), Career Development and Campus Health Centre

Stephanie Thomson
stephanie.thomson@durhamcollege.ca
(905) 721-2000 ext. 2383
Location: Oshawa: H140

- Artificial Intelligence – Honours Bachelor (HBAI)
- Artificial Intelligence Analysis, Design and Implementation (AIDI)
- Biotechnology – Advanced (BITY and Fast-track (BTYF)
- Biotechnology (BTYF)
- Chemical Engineering Technology (CHEM)
- Chemical Lab Technician (CLBT)
- Cloud Computing (CLCP)
- Environmental Technology (ENVT) and Fast-track (ENVF)
- Environment Health and Safety Management (EHSM)
- Pharmaceutical Science (PHRS)
- Mechanical Engineering Technician – Non-Destructive Evaluation (NDE) and Fast-track (NDEF)

Rahul Kumar
Rahul.kumar@durhamcollege.ca
(905) 721-2000 ext. 6120 Oshawa / 4248 Whitby
Locations: Oshawa: H140 / Whitby: 1-8

Whitby campus programs:

- Architectural Technology (ARHY)
- Civil Engineering Technician (CETC)
- Civil Engineering Technology (CETY)
- Construction Management – Honours Bachelor (HBCM)

Oshawa campus programs:

- Biomedical Engineering Technology (BMTY)
- Data Analytics for Business Decision Making (DATA)
- Electronics Engineering Technician (ELTC)
- Electronics Engineering Technology (ELTY)
- Electromechanical Engineering Technology (EMTY)
- Health Care Technology Management – Honours Bachelor (HCTM)
- Mechanical Engineering Technician (METC)
- Mechanical Engineering Technology (METY)

Heather Dunlop
heather.dunlop@durhamcollege.ca
(905) 721-2000 ext. 2151

Location: Oshawa: H140

- Computer Foundations (CFND)
- Computer Programming (CPPG)
- Computer Programming and Analysis (CPGA)
- Computer Systems Technician (CSTC)
- Computer Systems Technology (CSTY)
- Computer Systems Technician – Transfer to Ontario Tech (CSTU)
- Cybersecurity (CYSC)

Program of Study (POS)

The Program of Study (POS) for first-year students 2023-2024 is posted on the Faculty of Science, Engineering and Information Technology's page on MyDC:

1. Academic Faculties
2. Faculty of Science, Engineering and Information Technology
3. Program Guides
4. Programs of Study

Program Descriptions and Program Learning Outcomes

Artificial Intelligence – Honours Bachelor

4-year Diploma

Program Description

Developed in response to the impact of artificial intelligence (AI) on business processes globally, the Honours Bachelor of Artificial Intelligence program will teach you skills, tools, and techniques to design AI solutions. A comprehensive mix of courses, that not only focus on technical theory but also on topics including legal, social, and corporate responsibility, as well as a field placement and capstone project, will teach you project management, as well as critical and analytical thinking skills.

Employment Opportunities

Graduates of this program will be equipped with the skills and knowledge to find employment as any of the following:

- Technology companies
- Start-ups
- Financial institutions
- Healthcare providers
- Research organizations

Program Learning Outcomes

1. Evaluate data requirements and technical approaches for building an AI solution by using systems analysis to align to business and client concerns.
2. Analyze and evaluate the nature and quality of input data to prepare data for selected machine learning algorithms.
3. Build machine learning models by evaluating input data and identifying features that meet the needs of the project.
4. Evaluate technical performance metrics, feasibility, legal, privacy, security, and explainability requirements for each candidate design to select the socially responsible, best performing, and technically appropriate AI solution for solving a business problem.
5. Design and develop simulated environments according to project specifications for testing the effectiveness of machine learning models.
6. Evaluate and provide justification for machine learning model outputs by referencing algorithmic explainability and prediction interpretability to ensure transparency and accountability.
7. Utilize data visualization techniques and user interaction designs to create communication material for AI solutions, products, and user experiences for a variety of stakeholders.
8. Adhere to ethical frameworks and legal guidelines to ensure the integrity, confidentiality, and compliance in the delivery of AI solutions and recommendations.
9. Collaborate as part of an interdisciplinary team to coordinate project deliverables by

applying professional communication, teambuilding and leadership skills, and project management methodologies, tools, and techniques.

10. Develop software systems using modern programming languages, techniques, and tools for deploying on different platforms.
11. Develop strategies to pursue continuing education and professional development opportunities to enhance research skills and knowledge and skills in the field.

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

Artificial Intelligence Analysis, Design and Implementation

Two semesters (optional third semester work term)

Program Description

As Artificial Intelligence (AI) continues to rapidly transform the way organizations and their people work, a shortage of skilled professionals remains the single most significant challenge facing AI adoption by industry. With a focus on enterprise AI, including both off-the-shelf solutions and proprietary AI, this program – the first and only graduate certificate of its kind in Canada – will prepare you to meet this demand for AI-literate practitioners.

As a graduate, you will know how to leverage AI to extract data and use data-driven intelligence to guide decision-making, solving complex enterprise problems with state-of-the-art solutions, all while creating efficiency and quality gains for small and medium-sized enterprises up to the largest of corporations. Additional emphasis will be put on data governance, including data management to ensure its integrity.

Students will also benefit from multiple opportunities for experiential learning, including access to the college's AI Hub, completion of two diverse capstone projects and an optional work term. Graduates will be prepared to enter this high-growth field, which currently sees the Greater Toronto Area as home to the highest per-capita concentration of AI companies in the world.

Employment Opportunities

Graduates of this program will be equipped with the skills and knowledge to find employment as any of the following:

- Technology companies
- Start-up and early-stage entrepreneurial companies
- Financial services providers
- Telecommunications companies
- Manufacturing organizations

Program Learning Outcomes

Graduates of the Artificial Intelligence Analysis, Design and Implementation program will enter the workforce with a specialized skill set that includes the ability to:

1. Analyze, design, and implement Artificial Intelligence (AI) systems through the application of systematic approaches and methodologies to meet organizational needs.
2. Develop AI models and agents that use enterprise data to identify patterns, provide insights, recommend actions or perform tasks autonomously on behalf of stakeholders.
3. Prepare and communicate analysis, reports and recommendations, in a variety of formats, for various audiences, stakeholders and purposes.
4. Conduct research, data analysis, model development and solution deployment in an ethical manner that protects privacy, confidentiality, addresses data bias and transparency and ensures data integrity.

5. Apply project management tools and lifecycle management strategies to implement AI systems on time and within budget.
6. Implement AI solutions in compliance with corporate policies, ethical standards, and industry regulations

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

The AI Hub

Students will also benefit from and contribute to the Durham College Hub for Applied Research in Artificial Intelligence for Business Solutions (the AI Hub), which offers industry partners access to technical expertise, state-of-the-art facilities and platforms, and student talent, to help uncover business insights while providing intelligent and autonomous solutions that increase their companies' productivity and growth.

Cloud Computing

Two semesters (optional third semester work term)

Program Description

This program emphasizes leadership in the design, implementation and deployment of services in the cloud by utilizing cloud computing, privacy and legal principles and methodology to meet system requirements and align with business goals and objectives.

Graduates can address back-end and front-end configuration, as well as develop administration and troubleshooting techniques to manage a cloud environment. Graduates are prepared to address the demand for strategies in cloud computing and infrastructure deployment.

Upon completion of this program, graduates will be prepared to write industry standard cloud technology certifications from three of the largest public cloud service providers: Amazon (AWS), Microsoft (Azure) and Google (GCP) cloud.

Program Learning Outcomes

1. Create secure micro-service solutions to support the virtual infrastructure and application development needs of the client.
2. Adopt hybrid cloud environments that respond to changing business requirements.
3. Architect and deploy fault tolerant solutions within cloud computing platforms to maximize the availability and reliability of services.
4. Automate security and resources for applications by using cloud computing tools to mitigate risk for organizations and protect assets.
5. Design and test code-based solutions to cloud computing problems that ensure security in depth.
6. Assess the viability of developing, deploying, maintaining and securing cloud computing solutions using a variety of resiliency testing tools.
7. Create and defend cloud-computing strategies used to solve identified business needs on behalf of a client.
8. Install, monitor, and maintain a database management system on the cloud in response to specified requirements.
9. Assess business processes that impact cloud computing systems to ensure current, relevant, secure and responsive practices are implemented.

Employment Opportunities

Graduates can work at any organization utilizing a cloud platform, including those utilizing Amazon (AWS), Microsoft (Azure) and Google (GCP) cloud.

Computer Foundations

Two semesters

Program Description

In today's workplace, computer skills are a virtual necessity. Whether you're working with numbers, designs or words, your ability to successfully navigate digital technology can help you get your foot in the door when applying for that perfect job. This program develops fundamental skills in computer technologies including computer programming, web development, computer networking, hardware and operating systems that will open the door to pursuing additional certifications and/or diplomas.

The technical skills gained will benefit graduates both personally and professionally whether they choose to use the program as a starting point to a more advanced IT diploma or as a solid foundation in digital technology.

Students who enter the program with a previous educational credential can supplement their learning by adding a technical skillset providing them with a competitive advantage when entering the workforce.

Accreditations and Associations

First-year students enrolled in this program will receive a membership to all eight of Durham Region's Chambers of Commerce and Boards of Trade for the duration of their studies, plus an additional year following graduation. DC is proud to be one of the only colleges in Ontario offering students this unique connection to business leaders.

The eight Chambers of Commerce and Boards of Trade include:

- Ajax-Pickering Board of Trade
- Brock Board of Trade
- Clarington Board of Trade
- Greater Oshawa Chamber of Commerce
- Newcastle and District Chamber of Commerce
- Scugog Chamber of Commerce
- Uxbridge Chamber of Commerce
- Whitby Chamber of Commerce

Membership benefits:

- Opportunities to connect with over 2,500 local businesses and jumpstart your career by networking with potential future employers;
- Access to professional development events across Durham Region to gain unique business insights and learn from industry leaders; and
- Learning opportunities to develop the in-demand skills required to launch a successful career.

Employment Opportunities

Graduates of this program will be equipped with the skills and knowledge to work in:

- Banks
- Colleges and universities
- Computer and network support companies
- Government
- Retail corporations
- Software companies
- Publishing companies
- Telecommunications companies

Program Learning Outcomes

Graduates of the Computer Foundation program will enter the workforce with a specialized skill set that includes the ability to:

1. Analyze and resolve information technology programs through the application of systematic approaches.
2. Install, configure, troubleshoot, and maintain computer systems and networks to meet user requirements.
3. Design, model, and implement a simple database.
4. Design and develop simple software applications to address user needs.
5. Complete all work in compliance with relevant policies, practices, processes and procedures.
6. Participate as an effective member of a team.
7. Interpret, produce, and present work related documents and information effectively and accurately.

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

Computer Programming

Four semesters

Program Description

The field of software development is constantly growing across the globe and provides opportunities for high-paying jobs in an industry that is always evolving to meet the needs of the modern world. Requiring strong team-work skills and a problem-solving mentality, this challenging and rewarding career path can be anything but mundane. As a tech-savvy graduate, you'll be trained to combine your collaborative, analytical and programming skills, making you a highly desirable hire to support and develop software systems.

Organizations in all fields depend on computer specialists to assist them with their information processing needs. This program will give you a solid foundation in the competitive job skills required for today's information technology (IT) field.

Areas of study include:

- Business computing concepts
- Computer applications
- Computer hardware
- Application programming
- Database development
- Data communications
- Network management
- Operating systems
- Systems analysis and design

Note: To ensure you make an informed decision about your information technology (IT) career path, a common first semester is offered for the Computer Systems Technician, Computer Systems Technology, Computer Programming and Computer Programming and Analysis programs. This approach will give you an opportunity to explore the systems/programming applications and networking/hardware applications of the IT sector. At the end of the first semester, you will then select your program of choice.

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Employment Opportunities

- Colleges and universities
- Banks and credit unions
- Digital business solutions firms
- Government
- Newspapers/media corporations
- Research companies
- School boards
- Small and-medium-size organizations
- Software development firms

Program Learning Outcomes

1. Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
2. Contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.
3. Implement and maintain secure computing environments.
4. Implement robust computing system solutions through validation testing that aligns with industry best practices.
5. Communicate and collaborate with team members and stakeholders to ensure effective working relationships.
6. Select and apply strategies for personal and professional development to enhance work performance.
7. Apply project management principles and tools when working on projects within a computing environment.
8. Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.
9. Support the analysis and definition of software system specifications based on functional and non-functional requirements.
10. Contribute to the development, documentation, implementation, maintenance and testing of software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks.
11. Apply one or more programming paradigms such as, object-oriented, structured or

functional programming, and design principles, as well as documented requirements, to the software development process.
12. Model, design, implement, and maintain basic data storage solutions.
13. Contribute to the integration of network communications into software solutions by adhering to protocol standards.

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

Computer Programming and Analysis

Six semesters

Program Description

Today's businesses and essential services depend on complex information and data management systems. Designing, developing and keeping those systems up to date with the business processes they support is the domain of programmer analysts. In a digitized world, the ingenuity and technical know-how of programmer analysts are in demand. From transportation networks to critical hospital databases to social network-driven applications, analysts design and develop the systems that are key to the success of all businesses and services in today's digital world.

This program offers comprehensive study in information technology, systems development methodologies and application programming built on a solid foundation of business expertise. The curriculum includes in-depth instruction and the practical application of structured, mainframe and object-oriented programming languages.

Additionally, you will receive extensive training in:

- Advanced application development
- Database administration
- Internet development
- Software development life cycles

You will work independently and in teams to achieve course deliverables. As a graduate, you will begin your career in programming, microcomputer support or computer operations and, with experience, advance to an analyst role with responsibility for the design and planning of software systems or a leadership position in programming, operations, or other areas.

Note: To ensure you make an informed decision about your information technology (IT) career path, a common first semester is offered for the Computer Systems Technician, Computer Systems Technology, Computer Programming and Computer Programming and Analysis programs. This approach will give you an opportunity to explore the systems/programming applications and networking/hardware applications of the IT sector. At the end of the first semester, you will then select your program of choice.

Accreditations and Associations

First-year students enrolled in this program will receive a membership to all eight of Durham Region's Chambers of Commerce and Boards of Trade for the duration of their studies, plus an additional year following graduation. DC is proud to be one of the only colleges in Ontario offering students this unique connection to business leaders.

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- Scugog Chamber of Commerce
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- Whitby Chamber of Commerce

Membership benefits:

- Opportunities to connect with over 2,500 local businesses and jumpstart your career by networking with potential future employers;
- Access to professional development events across Durham Region to gain unique business insights and learn from industry leaders; and
- Learning opportunities to develop the in-demand skills required to launch a successful career.

Employment Opportunities

Today's businesses and essential services depend on complex information and data management systems. Designing, developing and keeping those systems up-to-date with the business processes they support is the domain of programmer analysts. In a digitized world, the ingenuity and technical know-how of programmer analysts are in demand. From transportation networks to critical hospital databases to social network-driven applications, analysts design and develop the systems that are key to the success of all businesses and services in today's digital world.

Graduates will be equipped with the skills and knowledge to work in:

- Colleges and universities
- Computer and network infrastructure firms
- Credit unions and banks
- Digital business solutions firms
- Government
- Newspapers/media corporations
- Research companies
- School boards
- Small and medium-sized enterprises
- Software development firms

Synopsis of the Program Learning Outcomes

1. Identify, analyze, design, develop, implement, verify and document the requirements for a computing environment.
2. Diagnose, troubleshoot, document and monitor technical problems using appropriate methodologies and tools.
3. Analyze, design, implement and maintain secure computing environments.
4. Analyze, develop and maintain robust computing system solutions through validation testing and industry best practices.
5. Communicate and collaborate with team members and stakeholders to ensure effective working relationships.

6. Select and apply strategies for personal and professional development to enhance work performance.
7. Apply project management principles and tools when responding to requirements and monitoring projects within a computing environment.
8. Adhere to ethical, social media, legal, regulatory and economic requirements and/or principles in the development and management of the computing solutions and systems.
9. Investigate emerging trends to respond to technical challenges.
10. Gather, analyze and define software system specifications based on functional and non-functional requirements.
11. Design, develop, document, implement, maintain and test software systems by using industry standard software development methodologies based on defined specifications and existing technologies/frameworks.
12. Select and apply object-oriented and other design concepts and principles, as well as business requirements, to the software development process.
13. Gather requirements and model, design, implement, optimize, and maintain data storage solutions.
14. Integrate network communications into software solutions by adhering to protocol standards.

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

Computer Systems Technician

Four semesters

Program Description

The Computer Systems Technician program is the perfect vehicle to launch a rewarding career in computer assembly, installation, configuration and troubleshooting. You will learn from industry- connected professors in new, state-of-the-art labs. This program is built on partnerships with some of the most influential names in networking today, including Cisco, IBM, AWS and Microsoft. Graduates will be able to help support computer users throughout an entire organization by deploying desktop and laptop systems, assisting users with day-to-day tasks, supporting help desk environments, troubleshooting networking issues and rolling out emerging technologies that will give their organizations a competitive advantage.

This program will provide you with the technical skills and expertise required to work in the high- demand world of personal computers, networking and application support to meet the information technology (IT) needs of modern organizations.

The program curriculum addresses the technical aspects of commonly used components and troubleshooting techniques for:

- Computer hardware
- Networking technologies
- Operating systems
- System administration

You will also learn how to develop your communication and administrative skills and be trained in critical-thinking skills designed to help you respond to many technical challenges. As a graduate, you will be able to:

- Challenge for industry-recognized certifications
- Install and configure system software and network devices
- Troubleshoot computer system and network issues.

Note: To ensure you make an informed decision about your information technology (IT) career path, a common first semester is offered for the Computer Systems Technician, Computer Systems Technology, Computer Programming and Computer Programming and Analysis programs. This approach will give you an opportunity to explore the systems/programming applications and networking/hardware applications of the IT sector. At the end of the first semester, you will then select your program of choice.

Certifications

Students may choose to pursue the following industry certifications, which could require additional exams and/or related work experience to qualify:

- CompTIA - A+; Network+
- Linux LPIC-1
- CISCO CCNA
- AWS Certified Cloud Practitioner

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- Learning opportunities to develop the in-demand skills required to launch a successful career.

Employment Opportunities

Graduates will be equipped with the skills and knowledge to work in:

- Banks
- Colleges and universities
- Computer and network support companies
- Government
- Retail corporations
- Software companies
- Small to Medium Business
- Telecommunications companies

Program Learning Outcomes

1. Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
2. Contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.
3. Implement and maintain secure computing environments.
4. Implement robust computing system solutions through validation testing that aligns

with industry best practices.

5. Communicate and collaborate with team members and stakeholders to ensure effective working relationships.
6. Select and apply strategies for personal and professional development to enhance work performance.
7. Apply project management principles and tools when working on projects within a computing environment.
8. Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.
9. Assist with the implementation of computer systems and cloud solutions.
10. Install, configure, troubleshoot, maintain, upgrade and decommission computing system infrastructures.
11. Automate routine tasks using scripting tools and programming languages.
12. Install and monitor a database management system in response to specified requirements.
13. Provide technical support for computing system infrastructures that aligns with industry best practice.

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

Computer Systems Technician – Transfer to Ontario Tech University Bachelor of Information Technology (Hons)

Four semesters

Program Description

This program was created by Durham College and Ontario Tech University for individuals who plan to take Ontario Tech's Bachelor of Information Technology (Hons) degree program, majoring in Networking and IT Security. The bridging courses required for admission to the degree program are embedded in the curriculum and if you achieve a minimum cumulative grade point average of 3.5 in each semester of your Durham College courses and no grade below C in your Ontario Tech courses, you can apply directly to the third year of the degree program. In order to participate in this program, you are required to maintain a cumulative grade point average of 3.5 and complete an application to Ontario Tech in the first semester. The Ontario Tech embedded courses are flexible and subject to change by Ontario Tech. Academic planning assistance will be offered to you by a student advisor representative.

As a student participating in this program, you will be registered at Durham College and at Ontario Tech. Ontario Tech offers classes in the evenings and the annual calendars including reading week are generally different. Students are expected to attend all classes that are scheduled. In addition, the two institutions use different learning management systems.

For more information, please visit the Computer Systems Technician - Transfer to Ontario Tech Bachelor of Information Technology (Hons) Frequently Asked Questions.

Please note: You will apply to the Computer Systems Technician program at www.ontariocolleges.ca using the CSTU application code. Upon meeting the selection criteria, you may be eligible to complete your Bachelor of Information Technology (Hons) degree at Ontario Tech.

- This program enables students to complete the Computer Systems Technician diploma at Durham College (DC) and the Ontario Tech Bachelor of Information Technology (Hons) degree at the Ontario Tech University (Ontario Tech) in four years for qualifying students, and at less cost than a four-year degree program.
- This program provides students with the option of proceeding in second year with the college-only curriculum to complete the standard two-year Computer Systems Technician diploma, or proceeding to complete the two-year University Transfer, which will include five university credits. Students who choose to complete the standard college diploma will be required to take one additional General Education elective.
- This unique pathway is available on a shared campus with exposure to college and university faculty, information and opportunities. Students can transfer to the Computer Programming, Computer Programming and Analysis, or Computer Systems Technology programs at DC after the first semester; leave after first year with a Computer Foundations certificate; or leave after second year with a Computer Systems Technician Students who choose to return to complete the Computer Systems Technology program would receive advanced standing.

Certifications

Students may choose to pursue the following industry certifications, which could require additional exams and/or related work experience to qualify:

- CompTIA – A+
- CompTIA Network+
- Linux LPIC-1
- Cisco CCNA
- Microsoft Certifications

Accreditations and Associations

First-year students enrolled in this program will receive a membership to all eight of Durham Region's Chambers of Commerce and Boards of Trade for the duration of their studies, plus an additional year following graduation. DC is proud to be one of the only colleges in Ontario offering students this unique connection to business leaders.

- The eight Chambers of Commerce and Boards of Trade include:
- Ajax-Pickering Board of Trade
- Brock Board of Trade
- Clarington Board of Trade
- Greater Oshawa Chamber of Commerce
- Newcastle and District Chamber of Commerce
- Scugog Chamber of Commerce
- Uxbridge Chamber of Commerce
- Whitby Chamber of Commerce

Membership benefits:

- Opportunities to connect with over 2,500 local businesses and jumpstart your career by networking with potential future employers;
- Access to professional development events across Durham Region to gain unique business insights and learn from industry leaders; and
- Learning opportunities to develop the in-demand skills required to launch a successful career.

Employment Opportunities

Graduates of this program will be equipped with the skills and knowledge to work in:

- Banks
- Colleges and universities
- Computer and network support companies
- Small to Medium Size Business
- Government
- Publishing companies
- Retail corporations

- Self-employment
- Software, telecommunications or publishing companies

Program Learning Outcomes

1. Identify, analyze, develop, implement, verify and document the requirements for a computing environment.
2. Contribute to the diagnostics, troubleshooting, documenting and monitoring of technical problems using appropriate methodologies and tools.
3. Implement and maintain secure computing environments.
4. Implement robust computing system solutions through validation testing that aligns with industry best practices.
5. Communicate and collaborate with team members and stakeholders to ensure effective working relationships.
6. Select and apply strategies for personal and professional development to enhance work performance.
7. Apply project management principles and tools when working on projects within a computing environment.
8. Adhere to ethical, legal, and regulatory requirements and/or principles in the development and management of computing solutions and systems.
9. Assist with the implementation of computer systems and cloud solutions.
10. Install, configure, troubleshoot, maintain, upgrade and decommission computing system infrastructures.
11. Automate routine tasks using scripting tools and programming languages.
12. Install and monitor a database management system in response to specified requirements.
13. Provide technical support for computing system infrastructures that aligns with industry best practice.

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

Computer Systems Technology

Six semesters

Program Description

If you see yourself in a career that involves the design, testing, installation and maintenance of computer hardware and software systems, the Computer Systems Technology program is for you. This program is built on partnerships with some of the most influential names in networking today, including Cisco, AWS, IBM and Microsoft. With additional education in systems analysis, database administration and system and network security, this program creates multi-skilled graduates who can respond flexibly to the complex hardware, software and application needs and problems in today's information technology environment. You will learn in new state-of-the-art labs and work with professors who are connected to industry.

Graduates of the three-year Computer Systems Technology program are ready to meet the information technology (IT) needs of the business, industry, service and government sectors. You will be trained to plan, implement and analyze IT solutions based on various operating systems, networking technologies and computer programming languages.

The curriculum addresses:

- Advanced topics in network management
- Communication protocols
- CISCO switches and networks
- Microsoft Servers and applications
- AWS Cloud Technologies
- Security
- Unified Communications

Note: To ensure you make an informed decision about your information technology (IT) career path, a common first semester is offered for the Computer Systems Technician, Computer Systems Technology, Computer Programming and Computer Programming and Analysis programs. This approach will give you an opportunity to explore the systems/programming applications and networking/hardware applications of the IT sector. At the end of the first semester, you will then select your program of choice.

Certifications

Student may choose to pursue the following industry certifications, which could require additional exams and/or related work experience to qualify:

- CompTIA- Network+
- CompTIA - A+
- Linux - LPIC-1-2
- Cisco CCNA
- AWS - Cloud Practitioner, AWS Solutions Architect, AWS SysOps Administrator

Accreditations and Associations

First-year students enrolled in this program will receive a membership to all eight of Durham Region's Chambers of Commerce and Boards of Trade for the duration of their studies, plus an additional year following graduation. DC is proud to be one of the only colleges in Ontario offering students this unique connection to business leaders.

- The eight Chambers of Commerce and Boards of Trade include:
- Ajax-Pickering Board of Trade
- Brock Board of Trade
- Clarington Board of Trade
- Greater Oshawa Chamber of Commerce
- Newcastle and District Chamber of Commerce
- Scugog Chamber of Commerce
- Uxbridge Chamber of Commerce
- Whitby Chamber of Commerce

Membership benefits:

- Opportunities to connect with over 2,500 local businesses and jumpstart your career by networking with potential future employers;
- Access to professional development events across Durham Region to gain unique business insights and learn from industry leaders; and
- Learning opportunities to develop the in-demand skills required to launch a successful career.

Employment Opportunities

Graduates of this program will be equipped with the skills and knowledge to work in:

- Banks
- Colleges and universities
- Computer and network support companies
- Small to Medium Size Business
- Government
- Publishing companies
- Retail corporations
- Self-employment
- Software, telecommunications or publishing companies

Program Learning Outcomes

1. Identify, analyze, design, develop, implement, verify and document the requirements for a computing environment.
2. Diagnose, troubleshoot, document and monitor technical problems using appropriate methodologies and tools.
3. Analyze, design, implement and maintain secure computing environments.
4. Analyze, develop and maintain robust computing system solutions through validation testing and industry best practices.

5. Communicate and collaborate with team members and stakeholders to ensure effective working relationship.
6. Select and apply strategies for personal and professional development to enhance work performance.
7. Apply project management principles and tools when responding to requirements and monitoring projects within a computing environment.
8. Adhere to ethical, social media, legal, regulatory and economic requirements and/or principles in the development and management of the computing solutions and systems.
9. Investigate emerging trends to respond to technical challenges.
10. Analyze, plan, design, implement and administer computer systems and cloud solutions.
11. Research, design, deploy, configure, troubleshoot, maintain, upgrade, and decommission computing system infrastructures.
12. Select and apply scripting tools and programming languages to automate routine tasks.
13. Install, monitor, optimize and administer a database management system in response to specified requirements.
14. Design, implement, and administer technical support processes for computing system infrastructures that aligns with industry best practice.

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

Cybersecurity (graduate certificate)

Two semesters (optional third semester work term)

Program Description

Security violations, data breaches, privacy failures and other technology failures are in the news every day and pose a growing threat to business and personal information. This eight-month, full- time graduate certificate program provides students with the security background needed in network technologies, computing hardware, operating systems and protocols to harden and further secure such systems from attack. Students develop, evaluate and support information technology (IT) security solutions by creating cost-effective and secure computing environments that will safeguard networked computer systems, including both on-premise and cloud-based systems. This program helps students become skilled in formulating and organizing security policies and procedures to protect corporate information assets including legal, regulatory and governance issues, and teaches how to detect various hacking and penetration attacks. Students also learn from leaders and industry-connected professors in industry-standard labs.

The curriculum will consider information systems security as it applies to business and provide a hands-on approach to understanding a broad range of security concepts and industry best practices.

Gaining the knowledge required to manage the strategic and operational aspects of information security you will focus on the following areas:

- Identifying business assets in need of protection.
- Implementing appropriate safeguards to protect businesses.
- Measuring the effectiveness of the protection and safeguard methods used.
- Implementing vulnerability and remediation of threat vectors.

You will learn detailed, practical aspects of security such as risk analysis, vulnerability testing, writing security policies, implementing access controls and performing security audits. Emphasis will be placed on interpersonal, organizational, technical, communication and troubleshooting skills applied to enhance the effective implementation of information systems.

Certifications

Students may choose to pursue the following industry certifications, which may require additional exams and/or related work experience to qualify:

- CISSP Certified Information Systems Security Professional (by ISC^2)
- CEH Certified Ethical Hacker (by EC-Council)
- CISA Certified Information Systems Auditor (by ISACA)
- GIAC Global Information Assurance Certification (by SANS)

Employment Opportunities

Graduates will be equipped with the skills and knowledge to work in:

- Finance and Banking sector
- Healthcare sector
- Defence and National security
- IT Security firms
- Law Enforcement sector
- Data and Cloud Security companies
- Government entities
- Independent consulting

Program Learning Outcomes

1. Apply knowledge of computer operating systems, networking, and various application to the simulation of business processes.
2. Develop best practices to protect business resources through the application of knowledge of vulnerabilities and exploits.
3. Develop security strategies for the deployment of security procedures and protective devices.
4. Integrate information technology strategies that support business functions by employing knowledge of best practices of business processes and systems.
5. Develop security plans and strategies to include acceptable use of business information and systems by internal employees, contractors, consultants, business partners and customers.
6. Develop security plans and strategies to ensure the integrity of information in compliance with best practices, relevant policies, standards, and regulations.
7. Apply project management principles in the deployment of security policies and strategies.
8. Perform security audits to ensure compliance with security plans, policies, standards, regulations and best practices.
9. Develop and deliver a corporate training program to communicate both orally and in writing the security requirements for compliance with security policies.
10. Prepare security documentation for approval by senior management and present results of security audits.

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

The Centre for Cybersecurity Innovation and AI Hub

Students will also benefit from and contribute to the Durham College Hub for Applied Research in Centre for Cybersecurity Innovation and Artificial Intelligence for Business Solutions (the AI Hub), which offers industry partners access to technical expertise, state-of-the-art facilities and platforms, and student talent, to help uncover business insights while providing intelligent and autonomous solutions that increase their companies' productivity and growth.

Data Analytics for Business Decision Making (graduate certificate)

Two semesters

Program Description

As more organizations rely on data to drive corporate planning and decision-making, increasingly sophisticated business intelligence and data tools are being used to meet the need for extensive data collection and manipulation. This allows the industry to quickly respond to organizational and market opportunities. The Data Analytics for Business Decision Making graduate certificate will prepare you for a career in this high-demand area by teaching you the knowledge and skills that you need to support real-world business decision-making and planning through data insights, data management, and data science. Students will blend theoretical knowledge with hands-on practical skills for data collection, analysis and manipulation. In addition, students will be able to present their analyses and findings to management and key business stakeholders.

Employment Opportunities

Graduates will be equipped with the skills and knowledge to work in:

- Marketing; Retail
- Financial
- Insurance
- Healthcare
- Tourism
- Government
- Media and Public affairs

Program Learning Outcomes

1. Analyze, organize, and manipulate data to support problem-solving, business decision-making, and opportunity identification.
2. Develop statistical and predictive models that use operational and marketing data to identify patterns and provide insights to business stakeholders.
3. Assess and apply business intelligence and Big Data tools appropriate to business decisions, business problems, data movement, and system workloads.
4. Prepare and communicate complex materials verbally, in writing, and digitally for a variety of audiences, purposes, and levels of detail.
5. Analyze and interpret data as it relate to various aspects of a business organization's readiness to change.
6. Conduct data analysis and research in a respectful and ethical manner that protects privacy and maintains dignity to all involved.
7. Deliver data-oriented projects using data science, business analysis, and project management principles, tools, and techniques to ensure clients' business needs are achieved.

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

Electronics Engineering Technician

2-year Diploma

Program Description

No other discipline opens as many career doors to the exciting world of high technology as electronics. In addition, no other branch of science engineering technology has contributed more to the development of the modern world than electronics.

Electronics engineering technicians maintain, operate, test, install and service electronic equipment in the fields of:

- Telecommunications
- Data Communications and the Internet of Things (IoT)
- Computer hardware and software
- Industrial Automation
- Test and Measurement
- Power Generation and Distribution
- Medical Equipment
- Consumer Products

The Electronics Engineering Technician program is two years in duration, covering theory with hands-on practical experience, project-based learning of analog and digital electronic circuits and systems.

Energy conservation, environmental awareness and the global environmental movement will have an impact on students as they train to become part of the green workforce. The Faculty promotes job-ready skills through leading edge instruction and hands-on practical labs that are available to every student in and outside of regular class hours.

Career Options

Graduate employment may be found in a wide variety of industries including:

- Automotive and parts manufacturing
- Industrial automation
- Information technology
- Medical equipment
- Military
- Robotics
- Public transit
- Telecommunications
- Transportation

Past Durham College graduates have found employment with the following job titles:

- Alarm system technician
- Broadcast engineering technician
- Communications technician
- Computer-aided designer

- Electrical control technologist
- Electrical technician
- Electronics engineering technician/technologist
- Electronic test assembler
- Fiber optics communications technician
- Junior radio frequency technician
- Junior robotics technician
- Naval electronics technician
- Robotics technician
- Service technician
- Signals and communication apprentice
- Technical sales

Opportunities for Degree Completion or Additional Credentials

Qualified graduates may be eligible to apply their academic credits toward further study through Durham College's partnerships with many Canadian and international colleges and universities.

Please visit the Transfer Guide for more information and Diploma to Degree chart.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. Analyze, interpret, modify and prepare electrical and electronics drawings, layouts and reports, with guidance as required.
2. Analyze and solve routine technical problems related to electronics engineering by applying fundamental concepts of mathematics and science.
3. Apply appropriate troubleshooting techniques to electronic circuits or systems and perform test procedures.
4. Assemble, modify, test and troubleshoot electronic circuits, equipment and systems in accordance with job requirements, functional specifications and relevant standards, with guidance as required.
5. Maintain and repair electronic equipment and systems in accordance with relevant operational guidelines.
6. Provide justification for the purchase of electronic equipment, components and systems in accordance with code, standards and job requirements, and functional specifications.
7. Analyze and troubleshoot logic and digital circuits, as well as embedded microprocessor- based and microcontroller-based systems, including assembly and high-level language programs.
8. Analyze and troubleshoot circuits consisting of passive components by applying appropriate measurement techniques.
9. Analyze and troubleshoot circuits consisting of low power, high power, active and electromechanical components, and analog integrated circuits.
10. Analyze and troubleshoot control systems.
11. Troubleshoot, maintain and repair analog and digital communication systems.
12. Apply relevant shop practices in compliance with safety policies and current regulations for electronics engineering workplaces.

13. Assist in implementing and conducting quality control and quality assurance programs and procedures.
14. Complete work in compliance with relevant legislation, established standards, policies, procedures and regulations, and ethical principles.

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

Electronics Engineering Technology

3-year Diploma

Program Description

No other discipline opens as many career doors to the exciting world of high technology as Electronics. In addition, no other branch of science engineering technology has contributed more to the development of the modern world than Electronics. In this program students will learn to develop Apps (applications) for the Internet of Things (IoT) using various operating systems, which will run on different wearables and mobile devices, learn rapid prototyping and 3D Printing.

Electronics engineering technologists design, test, install and service electronic equipment in the fields of:

- Networking, data communications and the Internet of Things (IoT)
- Computer hardware and software
- Power generation and distribution
- Industrial automation and robotics
- Medical equipment
- Power generation and sustainable energy systems
- Process instrumentation and control
- Telecommunications
- Test and measurement
- Consumer products
- Navigation and radar systems
- Weapons systems (military)

As a technologist, graduates have the ability to expand their skills into a wider career path including the design of circuits and projects. Technologists study more advanced courses in math, engineering theory and scientific principles giving them the advanced knowledge to work in:

- Analysis
- Complex troubleshooting
- Data interpretation
- Decision making
- Design and planning
- Preparation of specifications
- Problem solving
- Project management
- Scheduling

Since many technologists move into more advanced levels of engineering as part of their career progression, this program covers theory through the hands-on, practical, project-based learning of:

- Analog and Digital electronic circuits and systems
- Data communications, networking configuration, installation, security and troubleshooting
- Instrumentation and control

- Internet infrastructure and protocols
- Microprocessor-based controls
- Process instrumentation and controls
- Robotics and programmable-logic-controller (PLC)-based controls
- Telecommunication systems
- IoT and emerging technologies

Energy conservation, environmental awareness and the global environmental movement will have an impact on every student they train to become part of the green workforce. The Faculty promotes job-ready skills through leading edge instruction and hands-on practical labs that are available to the student in and outside of regular class hours.

To ensure program flexibility, the Electronics Engineering Technician and Electronics Engineering Technology programs have a common first and second year.

Career Options

Graduate employment may be found in a wide variety of industries including:

- Automotive and parts manufacturing
- Industrial automation
- Information technology
- Medical equipment
- Military
- Power generation and distribution
- Robotics
- Public transit
- Telecommunications
- Transportation

Field Placement

Your learning experience will be complemented by a field placement consisting of a minimum of 80 hours related to your program of study, which will allow you to gain hands-on industry experience.

Opportunities for Degree Completion or Additional Credentials

Qualified graduates may be eligible to apply their academic credits toward further study through Durham College's partnerships with many Canadian and international colleges and universities.

Ontario Tech University Bachelor of Applied Science (BASc) (Honours) – Nuclear Power Bridge

Graduates of this program with a minimum 70 percent or better average can apply to the ON Tech University Nuclear Power Bridge program, which leads to a BASc in Nuclear Power degree. You can apply to this program through the Ontario Universities Application Centre website (www.ouac.on.ca) using the program code DNB.

Please visit the Transfer Guide for more information and Diploma to Degree chart.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. Analyze, interpret, modify, design and produce electrical and electronics drawings, layouts and reports.
2. Analyze and solve technical problems related to electronics engineering by applying principles of advanced mathematics and science.
3. Apply appropriate troubleshooting techniques to electronic circuits or systems and generate and perform test procedures.
4. Design, build, test and troubleshoot electronic circuits, equipment, systems and subsystems in accordance with job requirements, functional specifications and relevant standards.
5. Modify, maintain, repair and recommend electronic equipment and systems in accordance with relevant operational guidelines.
6. Determine, select, recommend and justify the purchase of electronic equipment, components and systems in accordance with code, standards and job requirements and functional specifications.
7. Design, modify, analyze and troubleshoot logic and digital circuits, and embedded microprocessor-based and microcontroller-based systems, including assembly and high- level language programs.
8. Design, analyze and troubleshoot circuits consisting of passive components by applying appropriate measurement techniques.
9. Design, analyze and troubleshoot circuits consisting of low power, high power, active and electromechanical components, and analog integrated circuits.
10. Design, analyze and troubleshoot control systems.
11. Design, analyze, troubleshoot and repair analog and digital communication systems.
12. Apply relevant shop practices in compliance with safety policies and current regulations for electronics engineering workplaces.
13. Collaborate in selecting, coordinating and conducting quality control and quality assurance programs and procedures.
14. Complete work in compliance with relevant legislation, established standards, policies, procedures and regulations, and ethical principles.
15. Contribute to the planning, implementation, management and evaluation of team projects by applying project management principles.

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

Program-specific Academic Policies

We are extremely pleased that you have chosen Durham College. Your experience is important to us, and these policies have been developed with your success in mind. This program guide has important Faculty and program information.

Important – Make sure you view your Program of Studies and Learning Outcomes on MyDC under the Faculty tab. In addition, always refer to your course outlines for policies for each individual course.

Administrative Policies

1. Communication - 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. This is especially important for Ontario Tech University embedded programs and co-op opportunities. The SEIT Office will use DC Mail email to alert you to important details about your program. You are required to visit MyDC often to view campus-wide announcements and information on the SEIT MyDC page. Make sure you check your DC Mail email account on a regular basis.

2. Timetables - timetables are available online through MyDC. You can view and/or print your timetable from any computer with Internet access. If you require computer assistance, please contact the IT Help Desk at 905.721.3333. Instructions are also available on MyDC under the "how to/forms" tab. MyDC provides students with the ability to modify timetables starting at specified times as listed in the Academic Calendar (posted on MyDC). **Please note: It is a student's responsibility to ensure that all required courses are on your schedule**. Assistance is available via your Student Advisor or Faculty office. Should you find a discrepancy on your timetable, please seek assistance immediately.

3. Mid-term and Final Marks – Mid-term marks will be posted on MyDC around Week 8 of every semester and final marks will be posted at the end of every semester. Dates are always posted on MyDC or you can search for important

   dates on the Durham College website.

4. Graduation Requirements - Students must have a minimum grade point average (GPA) of 2.0 (60 per cent)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 and/or needs academic advice about missing courses should contact the SEIT Office to arrange for academic advising. Ontario Tech University embedded programs require a 2.0 to graduate, however to remain eligible to transfer to Ontario Tech University students must have a minimum 3.5 GPA (75 per cent) in the Durham College program and achieve the minimum of C (60 per cent) or higher in every Ontario Tech course.

Please refer to the academic policies posted on the Durham College website, www.durhamcollege.ca/academicpolicies, for more information. For transfer students, at least 25 per cent of the completed program courses and/or weighted credit hours must be completed at Durham College to be eligible for a Durham College diploma. All students must complete an application for graduation on MyDC while in their final semester in order to identify that they are in a position to graduate.

5. Computer Labs - Computer labs are reserved for coursework. Games are not permitted. Adult materials must not be displayed at any time. Please refer to the Acceptable Use of Information Technology Policy posted on the Durham College website www.durhamcollege.ca/academicpolicies.

6. If in a laptop program, students are responsible for making sure they have a workable and maintained laptop. This includes having a camera as well as a microphone/headset.

7. Freedom of Information/Protection of Privacy - Pursuant to the Freedom of Information and Protection of Privacy Act, the SEIT Office will not release any personal information regarding a student to anyone but the student without written consent. This includes academic standing, personal data, timetable information, etc.

8. Emergency Calls – SEIT staff will accept messages for students in the event of an 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).

9. 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.

Academic Policies

All academic policies are posted on our website at www.durhamcollege.ca/academicpolicies. A link to this site is also provided via MyDC under the 'Learning Resources' tab and then 'Helpful Links'. Students should review and be aware of the policies and procedures in place.

Policies and Expectations for the Learning Environment

1. Class attendance and participation will enhance your opportunity for success (see below for further information about the importance of attendance).
2. Students must make arrangements with faculty for handing in assignments outside of class time. Assignments will not be accepted by Office staff.
3. Refer to each of the course outlines for specific expectations for each individual course. Outlines are available on MyDC .
4. Students are responsible for regularly checking MyDC, DC Email and DC Connect for messages from faculty and college administration. Communication will come in forms of

emails, targeted messages and posted documents. Faculty will confirm their preferred method of communication.
5. Students should keep back-up copies of all assignments in case the originals are lost.
6. E-mails sent to Faculty and/or staff must be professional in appearance and content. Inappropriate emails may be retained and a copy forwarded to the Executive Dean or Associate Dean for appropriate action.

Course/program changes

Adding and/or deleting courses or changing a program must be done within the dates published by Strategic Enrolment Services. Please refer to the Important Academic Dates posted on MyDC

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.

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. 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 course with no record notes on the student's transcript. Students withdrawing from a course during weeks three, four or five of the start of the course will have it 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.

Application for Graduation

Applications for graduation for those wishing to graduate at the June Convocation are available online via MyDC 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 MyDC for deadline dates and updates.

Laptop and Desktop Computers: Chat, Gaming, Cellphones

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.

Missed Evaluation

To reflect established practice in the workplace and demonstrate responsibility, students unable to be in attendance to complete or submit an assessment, are required to contact their professor within 24 hours of the scheduled evaluation time, preferably in advance. Failure to communicate your absence to the instructor by email will result in a mark of zero. Students may

be required to provide reasonable supporting documentation with respect to the circumstances related to the missed evaluation.

Field Placement (program-specific)

All students must complete the Field Placement component of the program in an approved facility and must meet all requirements associated with Field Placement in order to successfully complete the program.

Students must obtain and maintain a cumulative program GPA of 2.0 or greater in the program and successfully complete all prerequisites to be eligible for field placement.

Students are responsible for their own transportation for their field placement requirements. Students are responsible for all costs associated with such transportation.

To be eligible for the field placement component of any program, students must (at their expense) obtain and submit the required program documents to their respective field placement officer (via a Manually Managed DC Connect or through Verified by Synergy Gateway).

Students are expected to dress appropriately for the placement setting and to behave in a professional manner at all times. This includes punctuality, regular attendance, and having respect for colleagues. Students should ensure that personal property is safely secured while at placement and should not use any electronic devices for personal use (this includes cellphones).

All Durham College policies and procedures, including those related to expectations of student conduct, are applicable to students at placement locations. Students should not take any photos/videos while at placement unless specifically directed to do so by the placement supervisor. Students should refer to their course outline for details about Field Placement requirements. It is the student's responsibility to read and understand all requirements.

ADDITIONAL IMPORTANT INFORMATION

Durham College (DC) Mission, Vision and Values

Used to guide the overall direction of the college, the Strategic Plan outlines DC's mission, vision and values and is based on our four pillars – our students, our people, our work and our community. It is by working together, focusing on these guiding principles, that we are able to deliver quality teaching and learning opportunities that support the success of our students and academic employees. Together we're leading the way.

Academic Integrity

Academic integrity in teaching, learning and research is fundamental to our mission and an expectation of the DC community. Acts that undermine academic integrity contradict our core values, erode educational inquiry and diminish the quality of our scholarship and reputation.

To ensure the highest academic standards, students are accountable for the work they produce, and student work must be the product of their efforts. The Academic Integrity Policy and Procedure provides a comprehensive explanation of DC's expectations regarding academic integrity.

Student Supports

DC offers students a variety of services to help you achieve academic success. From accessibility accommodations, financial aid, health services and wellness coaching, to student life, recreation and career development, the college's knowledgeable staff provide holistic supports to help students reach their greatest potential.

Please visit the Student Services page for more information on each of the student service areas.

Access and Support Centre (ASC)

The Access and Support Centre (ASC) provides services to students who are temporarily at-risk or identified with an exceptionality, to ensure equal access to all aspects of the academic environment. The ASC provides accommodations to meet students' individual needs through assistive technology, counselling and coaching.

The ASC team works in collaboration with faculty and other service areas to provide full opportunities for academic success for all students.

For more information on services available, please visit the ASC website.

Coaching

Wellness coaches meet with students individually to assist with developing a success plan, explore ways to reduce stress and support overall mental health and wellness while at college. Wellness coaches provide a safe, confidential space to explore what is blocking students from being their best possible self. During times when students are feeling overwhelmed or need someone to talk to, the wellness coaches will be there. For more information on coaching, please visit the Coaching webpage.

Important Dates

DC strives to keep you informed of important dates throughout the academic year. Please review the 2023-2024 important dates that include fee payment deadlines, web registration, add/drop and grade release dates etc. You can find this information on the college's website and on MyDC. Please review MyDC regularly for updates and reminders on important dates.

Academic Grading and Progression

Please refer to the Academic Grading Framework Policy and Procedure documents for a complete overview of grading practices which communicates student performance and Academic Progression Policy and Procedure to clearly understand the requirements necessary for a student to progress through an academic program.

Student Academic Learning Services (SALS)

SALS helps DC students to achieve their academic goals through free services and resources, including subject-specific support (math, accounting, biology, chemistry, physics and statistics), academic reading and writing, learning strategies, and assistance with English language proficiency. Students also have access to peer tutoring, online resources located through the MyDC landing page (under "Learning Resources"), and SALS online academic resources, videos, and quizzes in DC Connect.

Please email SALS at sals@durhamcollege.ca, or visit the SALS website, for information on accessing resources and services, scheduling an appointment, registering for workshops, or sign- up to request or a be a peer tutor.