



Course Descriptions

<i>Robotics and TECH Programs</i>	www.gatewaysbotshops.ca
Lego Club 1 Ages 7 to 12	Robotics 0.1 (Lego Club 1): This class is the fundamental introduction into Robotics courses and presents the concepts and functions necessary for success in levels 1 and 2. Classes familiarize students aged 7-12+ with design sets that allow them to build simple and fun structures that lead into our other classes.
Lego Club 2 Ages 7 to 12+	Robotics 0.2 (Lego Club 2): This class moves past the basics of building simple designs and introduces more complex designs. Students will build buildings, starcrafts, houses, and more! Classes bring in design sets for students aged 7 to 12+ that allow them to build complex and fun structures that lead into our other classes.
Robotics Beginners 1.1 Ages 6 to 8	Robotics Beginners 1.1 (Wedo™ 1.1): LEGO® Education WeDo™ - Students aged 5+ to 8 get a head start on simple robotics with this concept. They get to build models, attach sensors and motors that are plugged into a computer, and configure behaviours using a simple programming tool.
Robotics Beginners 1.2 Ages 6+ to 9	Robotics Beginners 1.2 (Wedo™ 1.2): LEGO® Education WeDo™ - Students aged 6+ to 9 will take the principles from Wedo 1 and move on in building more advanced concepts. Students will be encouraged to use their own creativity to bring their own creations to life.
Robotics Mechanical 2.1 Ages 7 to 12+	Robotics Mechanical 2.1 (WedoMore 2.1): WeDoMORE is a Gateway's Robotics class designed to equip students aged 7 to 12+ with enhanced understanding about compression, motors, torque and gear ratios through lego® technics. This class allows students to modify and design Lego® technics vehicles into moving remote control vehicles.
Robotics Mechanical 2.2 Ages 9 to 14+	Robotics Mechanical 2.2 (WedoMore 2.2): WeDoMORE is a Gateways Robotics class designed to equip students aged 9 to 14+ with increased learning about compression, motors, torque and gear ratios through lego® technics and other building sets. This class advances from level 1 and moves towards building more complex designs.
Robotics Engineering 3.1 Ages 8+ - 14+	Robotics Engineering 3.1 (Mindstorms 3.1): – Students aged 8 to 14+ learn to design, program and control fully-functional models. They use software to plan, test and modify sequences of instructions for a variety of life-like robotic behaviours.
Robotics Engineering 3.2 Ages 9+ – 14+	Robotics Engineering 3.2 (Mindstorms 3.2): LEGO®– Students aged 9+ to 14+ who have finished Mindstorms



	1 will take their learning experience further with this course. In Mindstorms 2, students go to the next level of STEM with more complex engineering projects.
Robotics Engineering 3.3 Ages 12 to 16+	Robotics Engineering 3.3 (Mindstorms 3.3): – Students aged 12 to 16+ who have finished Mindstorms 1 and Mindstorms 2 will explore the applications of robotics in this course. Projects in this class are all designed to bring real world scenarios into the classroom. Students will problem solve their way through these realistic scenarios and produce robots that can solve these tasks.
Robotics Engineering 3.4a (First Lego League) Ages 9 - 14	Robotics Tournament 3.4a (First Lego League): Students aged 9 to 14 will prepare for Lego's First Lego League tournament. Students will work with one of our teachers and prepare by completing a series of challenges that will be used in the tournament.
Robotics Engineering 3.4a (BC Skills Connect) Ages 9 - 14	Robotics Tournament 3.4a (BC Skills Connect): Students aged 9 to 14 will prepare for the BC Skills Connect tournament. Students will be challenged to complete a variety of challenges so they will be prepared for new challenges on tournament day.
Robotics Engineering 3.5 (LeJOS Robotics) Ages 16+	Robotics Tournament 3.5 (LEGOs Robotics): This class will require the use of at least 3-4 (3-4 groups of 3 students) Lego NXT kits. These kits will need to be flashed with a different operating system than the one they already have. This operating system is called LeJOS (Lego Java Operating System) and allows the brick to be programmed in a more precise way with less overhead.
Arduino Engineering 4.1 Ages 14 – Adults	Arduino Engineering 4.1 (Arduino 1) In Arduino 1, students explore robotics from the ground up through the use of basic electrical components and a microprocessor. Students learn about analog vs digital circuits, electricity, wiring, LEDs, sensors, and microprocessor programming.

Technology Programs	www.gatewaysinternational.ca
Film Production Ages 13 – 17+	Lights, Camera, Action! In this course you will get a chance to see what it takes to make a movie. From characters to story to props to scenery, you will get a chance to unleash your creativity and create a movie. You will learn production (camera, lighting, sound) as well as post production (editing, compressing, etc) using video editing software and cameras.
Video Game Designer 1 Ages 9 to 17	Students get a chance to create their own video games from scratch. They cover the game development process, game planning, game design, and character and level creation. Students create their own characters and levels using advanced drawing tools and learn and



	make interactive games that they get to take home.
<i>Video Game Designer 2</i> Ages 13 – 17	Video Game Designer 2 takes students to the next level of programming with concepts like path-based movement, dialogue, enemy behaviour, health bars and many more. Students will help each other test and play their games, and may choose to even collaborate on some projects.
<i>Computer Programming</i> Ages 13 – 17+	Ever wonder what goes on inside a computer? Well, here is your chance to find out! This one week programming course introduces you to computer programming. The course covers the basic workings of a computer, the different parts of a computer, how software works, and how to make your own software.
<i>Introduction to Computer Science</i> Ages 16+	The course will require a handful of used parts for demonstration purposes. It is not required that these parts function. These parts will include: Hard Drives, Memory Modules, Motherboards, Video Cards, Network Integration Cards, Processors and optionally an optical drive.
<i>Fundamentals of Home PC/Network Maintenance</i> Ages 16+	The class will be based around teamwork; each group will have a terminal they will return to. Each terminal will purposely have something wrong with it each section and each group will document how they fixed it or attempted to fix it. The idea is that the first 45-60 minutes will be lecture; the last hour will be teamwork workshop practice.
<i>Computer Animation</i> Ages 15 – Adults	This course will excite any young learner who has ever wondered how 3D Video Games, Hollywood Visual FX, Pixar films, and any other creative 'well paid' projects are made. The approach in this curriculum revolves around the fundamental principles of the entertainment industry, capitalizing on independent study and team based projects.
<i>I-Phone Application Developer</i> Ages 15+	With all the iphones, ipads, and ipods out there, it's no wonder you are looking at this program description! You want to create games for these devices! Well we have the tools to help you. Over the course of a few weeks, you'll have the chance to create amazing 2D games for these devices! You'll design your own characters, backgrounds and sounds, or use content from existing libraries.
<i>Date Night</i> Ages 5 – 12	Looking for a place to drop your kids off so that you can go on a date or enjoy a night off? Gateways Learning Centre offers this for parents looking to get away. We offer a safe and clean environment where kids can enjoy robots and robotics toys, tons of Lego, clean and non-violent video games, tons of board games, loads of great reading materials and much more!



ESL and International Students	www.gatewaysinternational.ca
ESL- Writing Ages 5-18	This course will help students learn the forms of written English and the process of creatively expressing their thoughts in clear sentences and well-organized paragraphs.
Reading Program Ages 5-12	Our reading courses are designed to help students improve their reading skills at whatever level they are at. We also intentionally combine speaking into the classes, so students learn the valuable skill of responding orally to the material they have read.
IELTS	IELTS, the International English Language Testing System, is designed to evaluate the English proficiency of people who intend to work or study in English speaking environments. The test assesses students' ability to use the four skills of listening, reading, writing, and speaking. The instructor will work through an excellent study guide with students, helping them prepare for the version of the test they must take.
TOEFL	The TOEFL® iBT is the most widely used English proficiency test in the world. A good score allows students to study abroad on any continent, with thousands of universities to choose from. The test measures how well students can listen, read, speak and write in the context of university life and education. In this intensive course the instructor will help teach the academic skills necessary for students to enter university and be successful at the undergraduate level.
Adult Classes	The teacher will use creative methods to help students form grammatically correct oral and written sentences. This course introduces several intermediate grammatical structures, such as perfect tenses, the passive voice, adjectival and adverbial clauses, gerunds, infinitives, and conditional sentences. These concepts are discussed in a way that makes it interesting for students. We will incorporate the skills of speaking and writing into our grammar lessons. Learning language structures will help students improve their academic writing and allow them to intelligently express their opinions out loud.



GATEWAYS

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Science Programs	www.gatewaysinternational.ca
Math 1 to 10	Gateways' qualified, expert math instructors will develop lesson plans specifically tailored to meet the individual learning needs of each student, and their patient, caring approach will help students develop the habits, attitudes, and skills needed to complete even the most difficult math problems with confidence.
Math 11	Gateways' Integrated Math program provides essential high school math education in areas such as Algebra I and II, geometry and trigonometry to students in school districts that use an integrated math curriculum. Gateways utilizes a spiralling curriculum, weaving together advanced math topics and developing skills in the key areas of concepts and processes.
Math 12	Gateways' Integrated Math program provides essential high school math education in areas such as Algebra I and II, geometry and trigonometry to students in school districts that use an integrated math curriculum. Gateways utilizes a spiralling curriculum, weaving together advanced math topics and developing skills in the key areas of concepts and processes.
Biology 11	Learn the fundamental concepts integral to your success in Biology 11. This class will explore taxonomy, evolution, ecology, microbiology, seedless plants, seed producing plants, lower invertebrates, higher invertebrates, chordates and more! In this class you will have the chance to improve trouble spots and accelerate your learning potential.
Biology 12	Get a head start on achieving a high score on the diploma with the concepts covered in this dynamic class. Go through the key elements in the BC Biology 12 curriculum such as cell biology, biochemistry, cell compounds, biomolecules, DNA replications & protein synthesis, cell membrane transport, cell metabolism, digestive systems, cardiovascular systems, respiratory systems, nervous systems, excretory systems, reproductive systems, and much more! Practice provincials and improve problem areas with your experienced instructor.
Chemistry 11	Chemistry Eleven is the study of matter, its composition, and its changes. Chemistry Eleven builds on the foundation of chemical concepts developed in science Seven through science Ten. The instructor will prepare students for college chemistry by developing a strong mathematical base. The relationship between chemistry concepts and mathematics will be emphasized. The teacher uses classroom skills with computer and technology aids, enabling students to gain a stronger grasp of more complex equations.



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Physics 11	In this class students will increase their knowledge of the skills, methods and nature of concepts covered in Physics 11. Specifically, they will learn about wave motion and geometrical optics, kinematics, forces, Newton's laws, momentum, energy, special relativity, and nuclear fission and fusion.
Physics 12	In this class students will increase their knowledge of the skills, methods and nature of concepts covered in Physics 12. Specifically, they will learn about experiments and graphical methods, vectors, kinematics, dynamics, work, energy, power, momentum, equilibrium, circular motion, gravitation, electrostatics, electric circuits, and electromagnetism.
SAT Prep	With increasingly competitive university entrance requirements it is imperative that students achieve to the best of their ability on the SAT. Our classes will include interactive lectures, mock tests and actively encourage class participation in areas of critical reading, writing and mathematics. Home-work will be assigned and understanding of key concepts will improve!

Writing and General Studies	www.gatewaysinternational.ca
Publish a Book	This creative writing program is designed to support imaginative writing across literary genres. Students choose a focus of Poetry, Fiction, non-fiction, or play-writing and participate in other writing labs and workshops to introduce contemporary and non-traditional writing techniques.
Wild Blogging Adults	Do you have an opinion you want to be heard? Blogging is a fantastic way of developing your literary voice and engaging with pertinent current issues you are interested in. Whether you have political, social or cultural insights, blogging will get you on the path of verbal expression. In the online community your audience is limitless and your potential to be a flourishing writer is vast. Join our class of likeminded



	individuals and learn the tricks to have you blogging like wild in no time!
Poetry Slam Ages 13 – 17	So you think ya got some mad skills in da rhyming department? Put your talents to the test with this weeklong camp guaranteed to bring out the rapper in you. Discover how words and beats come together to create hiphop music. Discuss important issues around hiphop culture such as gangs, violence and drugs. By the end of the week, you'll have your own hit single ready to share with da world!
Mad Readers Ages 5-8	This class will give children the opportunity to read a wide range of interesting literature, including but not limited to mystery, and engage with interactive media programs to improve their vocabulary, reading comprehension, detective skills, reading confidence and much more!
Theatre Sports Ages 13-17	Love theatre? In this class you will learn all about dramatic productions. From basic voice projection, realistic acting, script reading, to technical aspects and more advanced techniques, you will have greater stage confidence and be an experienced thespian by the end of this enthusiastic and fun-filled class.
Creative Writing 11	Think you've got what it takes to be the next J.K. Rowling? Embrace your creative side with this innovative class. In this course your instructor will inspire you to become more confident in your creative literary abilities, hone specific technical writing techniques and sharpen the skills in your writing tool-box. Poetry, drama or fiction, this class is for you!
Creative Writing 12	Building on the foundational skills you learned in Creative Writing Eleven, this class will challenge you as a writer and put your creative abilities to the test. Analyse successful models, incorporate various writing prompts and learn what it takes to create substantial characters, believable plots, and realistic events.
English II Literature Age Specific	English literature is about much more than reading uninteresting novels, confusing poetry, making character sketches and composing run of the mill essays. In this class literature will come alive with engaging class discussions, real world applications and in-depth analysis. Learn what it takes to impress your teachers with unique insights, efficient comprehension and high-quality writing.
English 12 Literature	Whether you are already a book-worm or think the statement "the pen is mightier than the sword" is wrong, you will find this class both stimulating and rewarding. Improve your close reading, writing and interpretation skills needed for post-secondary success



	<p>in this encouraging and creative setting. This class will integrate the learning objectives of grade 12 English curriculum, improving competence, confidence and ultimately marks in your grade 12 English class.</p>
<p>Why George Orwell Matters Ages 15-18</p>	<p>George Orwell has much more to offer than just <i>1984</i> and <i>Animal Farm</i>! Learn about his reputation as a socially awkward and morally dubious eccentric, his conflicting political opinions, slumming adventures, and ultimately his passion for the underdog. This course will cover <i>Animal Farm</i>, <i>1984</i>, and several of Orwell's published articles on various political and social issues. The objective of this class is to increase knowledge of the life, times and writings of George Orwell, improve critical reading and develop effective writing skills</p>
<p>Fantasy Literature of C.S. Lewis and G. MacDonald Ages 15-18</p>	<p>Enter the fantastical realms of Lewis and MacDonald. Discover engaging literature which inspires moral courage, spiritual imagination, and ethical audacity. In this class we will discuss Lewis's <i>Chronicles of Narnia</i> and MacDonald's <i>The Princess and the Goblin</i>. Various writing assignments and reading comprehension exercises will develop students' literary skills and appreciation for quality literature.</p>
<p>Fairy Folk Lore Ages 15-18</p>	<p>Did you know that Conan Doyle adamantly believed in fairies? If you liked <i>Spiderwick Chronicles</i>, you should take this class! Discover the fantastical (and not always cheerful) legends of pixies, elves, dwarfs, leprechauns, fairy folk and fairyland through discussing their history, popular fairy tales, cultural function and more. Students will learn analytical reading skills, improve their writing, and enlarge the world of their imagination.</p>
<p>English College-Prep A Ages 15-18</p>	<p>The majority of first year college students are unprepared for the writing skills that will be required of them throughout their university career. The goal of this course is to improve students' comprehension, analysis and compositional skills through a variety of activities which prepare the student for a typical first year English college course. In this class students will become familiarized with the major authors, popular literary forms, grammar, vocabulary, basic research methods, and effective essay writing strategies.</p>
<p>Arthurian Legend Ages 15-18</p>	<p>Enter the enchanting legend: learn about King Arthur and his Knights of the Round Table, Camelot and the Quest for the Holy Grail, Merlin, Arthur, Lancelot, magic, and much more. Arthurian legend has intrigued audiences of all ages and backgrounds for hundreds of years; learn about these fascinating tales of mystery and heroism as we explore several major Arthurian themes. Students will develop close reading skills, increase vocabulary, and strengthen their writing skills.</p>



Canadian Literature Ages 15-18	From accounts of the early settlers to selections of modern poetry, learn about the rich literary heritage we have here in Canada. In this class you will become familiar with the works of several prominent Canadian authors you are likely to encounter in later studies. Additionally, you will learn poetic devices and some of the key concepts of literary analysis which will improve your comprehension and compositional skills.
History 11	In this course you will explore the key expectations of your History Eleven curriculum including theories of economy, geography, Canadian and American history and politics and much more. Your enthusiastic instructor will bring facts and figures off of the page and into memorable examples in your mind through illustrations, examples, engaging activities and more. Get a clearer understanding of history, understand its relevance and learn the necessary skills and information to tweak your interest, impress your teachers, improve your grades, and increase your own self-confidence!
History 12	With increasingly competitive university entrance requirements, diplomas can be overwhelming and stressful. In this class your instructor will go through the key concepts presented in History 12 and give you useful and helpful learning, writing and test-taking strategies integral to your success on the diploma.
Young Debaters Ages 13-17	Students will improve academic speaking and listening skills by learning debating vocabulary and sentence structures and by having lively group discussions on topics of interest. For example, students may debate 'cell phones in school' or something more serious, such as teen violence or global warming. By the end of the class students will have better skills in critical thinking note-taking, and improved self-confidence.

Nursing and ESL Classes	www.crne.ca
CELBAN	This course is a full-time program designed for internationally educated nurses that will prepare them to take the CELBAN examination. It is a focused program that covers all four areas tested by the exam: speaking, listening, reading and writing.
CRNE Prep	International Nurses will take this program to better understand the complexities of Canadian nursing jobs. This course is designed to prepare them for the subtle and not so subtle differences between Hospitals in Canada and the Hospitals that foreign nurses are familiar with. This course has been designed by our top



	<p>consultant and our top nursing staff. Once you have taken this course and have passed the CRNE prep exam, you will be ready to go straight into one of our exciting job opportunities.</p>
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