

Graduation Requirements for the New Brunswick High School Diploma

1. Completion of Grade 9/10 Program

Meet the requirements of the prescribed common curriculum of the grade 9/10 program as outlined in the *Grades 9/10 Companion Document*. These courses are prerequisites for credits taken during grades 11 and 12.

2. English Language Proficiency Assessment (ELPA)

Successful completion on the reading and writing components of the ELPA in grade 9 is required. A reassessment in grades 11 and 12 is available to students who have not achieved a successful rating on the reading and/or writing components.

3. Completion of 17 grade 11 and 12 credits

This includes seven compulsory and ten elective credits; minimum of five credits must be at the grade 12 level. All courses are single credit unless otherwise noted. Some students will complete a grade 11/12 credit during grade 10. The seven compulsory credits available at HTHS are:

English English 11 - 2 credits, full year, and English 12

Math Financial and Workplace Mathematics 110 or
Foundations of Mathematics 110

History Modern History 11

Science Physics 112, Biology 112, Biology 113 (no longer offered as of 2016-17), Human
Physiology 110, Chemistry 112, Introduction to Environmental Science 120

Fine Arts/Life Role Development

Visual Arts 110, Music 112, Theatre Arts 120, Graphic Art and Design 110,
Individual and Family Dynamics 120, Co-op Education 120 (2 or 3 credits),
Career Explorations 110 (2 credits), Outdoor Pursuits 110, Wellness Through
Physical Education 110, Physical Education Leadership 120, Entrepreneurship
110, Reading Tutor 120, French Immersion Reading Tutor 120

4. Electives Ten (10) in total

Reference: New Brunswick Department of Education, Policy 316

Gathering Information about Careers and Education after High School

Not sure where to find information about careers that interest you? Visit the Career Cruising website – see the login information below. Next stop: learning about university and college programs. When researching the various educational institutions' websites, look for words like *admissions, prospective students, recruitment, future applicants and new students* to help navigate and learn about programs, admissions requirements, fee tables and application procedures.

 **CareerCruising.com**

Username: harrison

Password: trimble

Career Cruising is an interactive career discovery website designed to help YOU explore different career options and helps identify the requirements for your desired career path.

Create your personal and confidential folder when you login.
The menu options are:

Matchmaker & My Skills

Answer questions about your likes and dislikes to find careers that match up with your interests.

Learning Styles Inventory

Discover how you learn and retain information and find tips on how to improve your study habits to suit your learning style.

Explore Careers

A-Z listing of **100s** careers!

Explore Education & Training

Extensive listing of and links to Colleges & Universities.
Programs related to subject cluster or job sector.

Pathways for UNIVERSITY

Wondering which high school courses are required for university acceptance? Canadian universities require a minimum of **five (sometimes six)** grade 12 courses. **English 121/122 is always required.** Remember, admission requirements vary among institutions so confirm requirements with the university's website. Having at least one additional university acceptable grade 12 credit beyond the required five or six is strongly recommended.

Faculty: Required Courses	Examples of Majors	ADMISSION DETAILS	
Bachelor of Arts – B.A.			
English 121/122	History, English, Gender Studies, Languages, Philosophy, Political Science, Sociology, Psychology, Criminology, Classics, Anthropology	<p>High school credits universities often accept: Biology 121/122, Business Organization and Management 120, Calculus 120, Canadian Geography 120, Canadian History 122, Canadian Literature 120, Chemistry 121/122, Computer Science 120, Economics 120, Foundations of Math 120, French Immersion Language Arts 120, Introduction to Accounting 120, Journalism 120, Law 120, Physics 121/122, Political Science 120, Post-Intensive French 122, Introduction to Environmental Science 120, Pre-Calculus A 120, Pre-Calculus B 120, Sociology 120, World Issues 120</p> <p>High school credits universities sometimes accept: Cooperative Education 120, Leadership Physical Education 120, Marketing 120, Media Studies 120, Music 120/122, A.P. Psychology 120, Reading Tutor 120, French Immersion Reading Tutor 120, Theatre Arts 120, Visual Arts 120</p> <p>Universities will accept French Immersion credits as equivalents to those listed above.</p> <p>What if a university required course is scheduled second semester of grade 12? The universities will look at the grade 11 version of that course as a predictor for performance in the grade 12 course.</p>	
Bachelor of Commerce – B.Com. / Business Administration – B.B.A.			
English 121/122, Foundations of Mathematics 120 <u>or</u> Pre-Calculus A 120, Pre-Calculus B 120	Accounting, Finance, Marketing, Management, Entrepreneurship, Humans Resource Management, International Business, Economics		
Bachelor of Computer Science – B.C.S.			
English 121/122, Pre-Calculus A 120, Pre-Calculus B 120, Chemistry 121/122, Physics 121/122	Hardware, Information, Theory & Computation, Geographic Information, Software Development, Software Engineering, E-Commerce, Telecommunications, Security, Graphics, Gaming		
Bachelor of Engineering – B.Eng.			
English 121/122, Pre-Calculus A 120, Pre-Calculus B 120, Chemistry 121/122, Physics 121/122, sometimes Calculus 120	Chemical, Civil, Electrical, Computer, Environmental, Industrial, Geodesy & Geomatics, Mechanical, Geological		
Bachelor of Fine Arts – B.F.A.			
English 121/122 Portfolio	Drawing, Painting, Photography, Printmaking, Sculpture, Textiles, Jewelry, Ceramics, Fashion, Art History, Art Education		
Bachelor of Kinesiology – B.Kin.			
English 121/122, Foundations of Mathematics 120 <u>or</u> Pre-Calculus 110, two of: Biology 121/122, Chemistry 121/122, Physics 121/122	Sports Psychology, Exercise Physiology, Human Movement, Health Promotion and Wellness, Recreation & Sport Studies		
Bachelor of Music – B.M.			
English 121/122 Audition	Theory & Composition, Music History & Literature, Music Education, Opera, Jazz, Performance (e.g. instrument)		
Bachelor of Nursing – B.N.			
English 121/122, Foundations of Mathematics 120 <u>or</u> Pre-Calculus 110, Biology 121/122, Chemistry 121/122 *Marks should be above 80%, admission to program is very competitive.	Completion of BN qualified graduated to write the National License Examination required for professional licensing.		
Bachelor of Science – B.Sc.			
English 121/122, Pre-Calculus A 120 & Pre-Calculus B 120, two of: Biology 121/122, Chemistry 121/122, Physics 121/122	Biology, Chemistry, Biochemistry, Environmental Science, Marine Science, Mathematics, Physics, Computer Science, Forestry, Earth Sciences, Health Sciences		

UNIVERSITY TERMS DEFINED

Programs generally require four years of study; students enter a **faculty** (e.g. sciences, arts, music, etc.). During second year students select a **Major**, which means 50% of courses are in one subject area. Sometimes students will have a **Minor** where 25% of courses are in one subject area. In a **Bachelor's** (or Undergraduate) **degree**, students may learn job ready skills and directly enter the workforce (e.g. B.N., B.Eng.) or further their education to earn professional qualifications, e.g. pharmacist, teacher, dentist. **Master's degree** follows a Bachelor's and is also known as a Graduate degree.

ELECTIVE COURSE SUGGESTIONS

Bachelor of Arts: Writing 110, Journalism 120

Bachelor of Commerce / Business Administration: Business Organization and Management 120, Entrepreneurship 110, Information Technology 120

Bachelor of Computer Science: Computer Science 110/120, Digital Production 120

Bachelor of Engineering: Computer Science 110/120, Digital Production 120

Bachelor of Fine Arts: Fashion Design 120, Graphics & Design 110, Theatre Arts 120, Visual Arts 110/120

Bachelor of Kinesiology: Advanced Training Principles 120, Human Physiology 110, Leadership Physical Education 120, Wellness Through Physical Education 110

Bachelor of Music: Music 110/120/122, Theatre Arts 120, Visual Arts 110/120

Bachelor of Nursing: Child Studies 120, Early Childhood Services 120, Human Physiology 110, Human Services 110, Individual & Family Dynamics 120, A.P. Psychology 120

Bachelor of Science: Computer Science 110/120, Introduction to Environmental Science 120

PREPARE YOURSELF FOR RIGOR OF UNIVERSITY ACADEMICS AND EARN UNIVERSITY CREDITS WITH ADVANCED PLACEMENT COURSES!

Offered at HTHS: Advanced Placement English 120, Advanced Placement French 120, Advanced Placement Psychology 120

Offered by Anglophone East School District: Advanced Placement Calculus 120

WANT TO EARN CREDITS AND GAIN WORK EXPERIENCE?

Not certain what you'd like to do after high school? **Cooperative Education 120** allows students to earn credits (2 or 3), while gaining valuable job experience and career exposure, taken in grade 12. Apply second semester of grade 11.

INTERESTED IN COMBINING COLLEGE AND UNIVERSITY PROGRAMS?

University Transfer or **Articulation Agreements** or **2 + 2 Programs** are formalized agreements between universities and colleges that allow students to combine the college and university studies and graduate with a Bachelor's degree.

Pathways for COLLEGE

College education develops skills and qualifications that lead directly to the work force. A **Diploma** is awarded following 1 or 2 year(s) of study.

Employment Sector & Related Programs		Important to Know
Animal Care	Veterinary Assistant, Veterinary Technician, Pet Groomer, Horse Trainer, Wildlife Conservation, Dog Trainer	<p>Always check with college websites to confirm specific program requirements!</p> <p>It's important to research programs that may offer similar training but have different admission requirements.</p> <p>How to Apply</p> <p>Public Colleges</p> <ul style="list-style-type: none"> • Application form • Fee (\$25 - 60) • Transcript <p>Private Colleges</p> <p>Interested students are often encouraged to make an appointment with meet with an admissions representative to determine if the program is right for you.</p> <p>Admission Requirements</p> <p>Many college programs accept a high school diploma (e.g. completion of the required 17 credits) while others require specific courses.</p> <p>Some examples:</p> <ul style="list-style-type: none"> • Practical Nurse: science(s) • Business: math(s) • Technology: Math(s) and science(s) <p>Grade 12 English</p> <p>Either English level 2 <u>or</u> 3 is acceptable for many college programs.</p>
Business & Office Administration	<u>Business</u> : Accounting & Payroll, Insurance & Risk Management, Investment Management, Management, Marketing, Human Resources, International <u>Office</u> : Medical, Executive, Bilingual, Legal	
Environment & Energy Systems	Wind Turbine Technician, Gas Technician, Environmental Engineering Technology, Energy Sustainability, Geographic Services (Cartography, Community & Environmental Planning, Geographic Info Systems, Remote Sensing Technology), Marine (Navigation, Engineering), Natural Resources, Environmental Technology, Fisheries & Aquaculture, Utility Line Technician	
Expressive Arts	Animation, Graphic Design, Digital Photography, Costume Design, Theatre Production, Performing Arts (Music, Dance, Theatre), Recording Arts, Journalism (Broadcast, Radio, Production), Video Game Design	
Health & Wellness	<u>Health</u> : Health Information Management, Medical Laboratory Assistant and Technician, Dental Assistant, Dental Hygiene, Support Worker, Pharmacy Technician, Practical Nurse, Primary Care Ambulance, Occupational Assistant, Physiotherapy Assistant <u>Wellness</u> : Cosmetology & Esthetics, Golf Club Management, Sport & Leisure Management	
Hospitality & Tourism	Cook, Culinary Arts, Culinary Arts Management, Pastry Arts, Event Management, Hotel & Restaurant Operations, International Travel	
Social & Protective Services	<u>Social</u> : Sign Language Interpreter, Youth & Child Care, Early Childhood Education, Education Assistant, Human Services, Funeral Services <u>Protective</u> : Police Foundations, Corrections, Fire Fighter, Sheriff / Public Safety Officer, Conservation Enforcement	
Technology	<u>Civil Engineering</u> : Architectural, Building Systems, Construction Management, Highway & Municipal, Structural, Civil Technical <u>Electrical Engineering Technology</u> : Alternate Energy Systems, Commercial & Industrial Systems, Communication Systems <u>Information Technology</u> : Business Analysis, Game Design, Gaming Experience Development, Network Administration, Network Support, Programmer Analyst, Mobile Application Development, Information Systems, Database Application, Web Programming, Library IT, Health Information Management	
Trades	<u>Construction</u> : Bricklaying, Building Maintenance & Repair, Cabinetmaking, Carpentry, Heritage Carpentry, Electrician, Floor, Installer, Fuels Technician, Landscaper, Plumber, Heating &, Ventilation Technology, Refrigeration & AC Technician <u>Metals Processing</u> : CNC Machining, Machinist, Sheet Metal Fab, Welding, Welding & Metal Fab, Welding Technology, Steamfitting & Pipefitting, Commercial Diving (Welder) <u>Transportation</u> : Pilot, Truck Driver, Aircraft Engineer (Avionics, Mechanical, Structural, Gas Turbine Engine Repair), Flight Attendant <u>Vehicle Repair</u> : Heavy Equipment, Diesel, Motorcycle, Agricultural, Body Repair & Painter, Car Mechanic	

PUBLIC COLLEGES

Offer a wide selection of many programs in many campus locations. Regional institutions include *New Brunswick Community College* (6 campuses), *Nova Scotia Community College* (14 campuses), *Holland College* (8 campuses across PEI), and *New Brunswick College of Craft & Design* (Fredericton). Public colleges receive funding from the government therefore have lower tuition fees.

NEW BRUNSWICK COMMUNITY COLLEGE (NBCC) is the publically supported college system offering one and two year programs at six campuses across the province. The majority of these programs can be started following high school graduation. The programs offered through NBCC reflect anticipated labour needs in the coming years within the province. Admissions requirements for many programs is high school diploma, other programs require specific math and science courses. Please consult nbcc.ca for more information. In addition to NBCC, students can explore programs offered at *Holland College* (hollandcollege.com) located in Prince Edward Island and *Nova Scotia Community College* (nsc.ca).

PRIVATE COLLEGES

Sometimes called *Career* or *Vocational* colleges, feature a huge variety of programs that often focus on one or two employment sectors. Examples of Moncton area colleges include *Oulton*, *Eastern*, *BayTech*, *Jon Raymond*, *Majestany*, *McKenzie*, *Medes*, *Medavie HealthEd*, *Moncton Flight College*. Fees tend to be higher because tuition must cover all operating expenses; these are private businesses and do not receiving funding from the government.

MAKING THE DECISION TO APPLY

- Talk to students currently enrolled in college and/or university (and their parents!) about the program of interest.
- Test drive the program by visiting the campus and seeing the program first hand. Post-secondary institutions – colleges and universities – encourage students to participate in a **Student for a Day** program. High school students can attend classes, meet with professors and current students, talk with admissions advisors and visit campus facilities. Visit the post-secondary institution’s website for sign-up information.
- Ensure that admissions requirements are met!
- Educational institution must be the right “fit” for the student, e.g. location, type of campus, size. Do you see yourself at that PSE institution as a successful, happy student?

HOW TO APPLY TO POST-SECONDARY EDUCATION

1. Application Form (paper or online)
2. Application Fee \$40-60
3. Official Transcript (mailed or faxed directly from HTHS to the PSE institution)
4. Depending on program, sometimes a portfolio, audition, written statement, etc. may be required.

***Note:** Remember university and college acceptance is **conditional** until graduation is confirmed and June final marks are received by the college or university.*

Certificates

FOCUS ON TECHNOLOGY (FIT)

The *Focus on Information Technology* (FIT) program is a nationally recognized certificate that is issued by Information and Communications Technology Council.

Students are required to take

- Information Technology 120,
- Business Organization and Management 120, and
- at least one elective course consisting of Entrepreneurship 110, Technology Support 110, Computer Science 110, and Digital Production 120.

Graduates of the FIT program will have the benefit of a certificate to help distinguish themselves to employers and academic institutions.

The FIT certificate will be awarded with five different levels of certification.

- FIT Basic (courses only),
- FIT with experience (Co-op education, paid work, or volunteer experience of at least 200 hours),
- FIT with certification (IT Essentials, CompTIA A+, Microsoft Office Specialist),
- FIT with experience and certification, and
- FIT Plus (All requirements for FIT plus an additional industry standard including Cisco CCENT, Java, CompTIA Network+, or Microsoft Office Specialist).

FRENCH IMMERSION CERTIFICATES

To graduate as an Immersion student recognized by the province of New Brunswick, students must take a required number of FI designated courses. 50% of the course load in grade 9 and 10 must be FI designated. They must also take a minimum of five (5) courses with an F.I. designation in grades 11 and 12. The courses cannot be transferred from year to year, i.e. taking six in grade 10 and 11 and then four in grade 12.

Students who participate in the French Immersion program and complete three F.I. courses: French Immersion Language Arts (F.I.L.A.) 110, F.I.L.A. 120 and one other F.I. course are eligible to receive a *Harrison Trimble High School French Immersion Certificate* which recognizes their achievement in maintaining their French second language skills.

Students may also receive a *Bilingual Language Certificate* upon graduation. To receive this certificate, students must pass an oral interview with an interviewer appointed by the Province. When a student takes F.I.L.A. 120, the interview will be arranged by the French Department and will be conducted as part of the course.

Course Selection & Career Planning

Use the following forms and charts to track progress and plans for the future.

Future career and job ideas:

Post-secondary ideas and plans for college and/or university:

*Remember that grade 9 and 10 *courses* are prerequisites for grade 11 and 12 *credits*. Unless noted, all grade 9 and 10 courses are one semester in length

Mark Earned (if completed)	Grade 9	Mark Earned (if completed)	Grade 10
%	English 9 – full year	%	English 10 – full year
%	Math 9 – full year	%	Math 10: <i>Geometry, Measurement & Finance 10</i> <i>Numbers, Relations & Functions 10</i>
%	Science 9 / F.I. Full Semester – 90 hours	%	Science 10 / F.I. Full Semester – 90 hours
%	P.I.F. / F.I.L.A. 9 Full Semester – 90 hours	%	P.I.F. / F.I.L.A. 10 Full Semester – 90 hours
%	Social Studies 9 / F.I. Full Semester – 90 hours	%	Social Studies 10 / F.I. Full Semester – 90 hours
%	Broad Based Tech. 9 Half Semester – 45 hours	%	Specialty 10: _____ Full Semester – 90 hours
%	Health & Phys. Ed. 9 Half Semester – 45 hours	%	Specialty 10: _____ Full Semester – 90 hours
%	Music 9 Half Semester – 45 hours	%	Grade 11/12 Elective specify:
%	Visual Arts 9 Half Semester – 45 hours	Specialty 10 Select two from: <ul style="list-style-type: none"> ○ Broad Based Technology 10 / F.I. ○ Health & Physical Education 10 / F.I. ○ Music 10 ○ Visual Arts 10 	
%	Personal Development & Career Planning 10 Full Semester – 90 hours		

Meeting High School Diploma Requirements

Track your marks for each course taken in Grade 11/12 in the following chart to ensure you have the credits required for graduation with the New Brunswick High School Diploma.

Mark Earned (if completed)	Grade 11	Mark Earned (if completed)	Grade 12
%	English 11 <i>Compulsory</i> Full year Select one: 111 or 112 or 113	%	English 12 <i>Compulsory</i> Select one: 121 or 122 or 123
%	Math 11 <i>Compulsory</i> Select one: <i>Financial and Workplace Mathematics 11</i> or <i>Foundations of Mathematics 11</i>	%	Elective specify:
		%	Elective specify:
%	Modern History 11 <i>Compulsory</i> Select one: 112 or 113 or FI 112	%	Elective specify:
%	Science <i>Compulsory</i> specify:	%	Elective specify:
%	Life Role <i>Compulsory</i> . Taken in grade 11 or 12 Specify:	%	Elective specify:
%	Elective specify:	%	Elective specify:
%	Elective specify:	%	Elective specify:
%	Elective specify:	%	Elective specify:
%	Elective specify:	%	Elective specify:
Total Credits Earned	Grade 10	+ Grade 11	+ Grade 12

Complete listing and description of all credit courses

ARTS & MUSIC	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Fashion Design 120 This course focuses on Fashion with emphasis placed on fabric drawing, fashion illustration, clothing design, and clothing creation. Students will also research famous fashion designers and will complete an independent project designing patterns, clothing or fashion based on what they have learned in the course.</p>		<i>Elective Course</i>	Midterm and final are practical and hands on.
<p>Fashion Technology 110 This course focuses on making clothing. Topics include: Basic sewing, using a pattern, creating a pattern, making clothing, the felting process, batik coloring and fashion photography.</p>		<i>Elective Course</i>	The midterm and final of this course involve practical hands on testing.
<p>Graphic Art and Design 110 This course looks at commercial art and develops the skills to understand and create images, signs, symbols, logos, that communicate a message or value. Projects include collage painting, business cards, logo design, CD cover design, illustration, three-dimensional package design.</p>	Visual Arts 10 or permission from art teacher	Strongly recommended for students considering commercial art, fashion design, advertising, marketing, and fine arts programs. <i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	
<p>Music (Guitars) 112/122/120 This course is designed for students who wish to improve upon their guitar playing ability. It is designed for both beginning guitar players as well as more advanced players.</p>	Music 10 or permission from music teacher	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	
<p>Music (Instrumental) 112/122/120 This course is designed for students interested in developing their skills with concert band and rock band instruments.</p>	Music 10 or permission from music teacher	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	
<p>Music (Keyboards) 112/122/120 This course is designed for each student to play at their own level and to set goals to reach a reasonable place of progression by the end of the semester. It is designed as primarily a solo instrument to study but there are opportunities to play duets.</p>	Music 10 or permission from music teacher	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	
<p>Music (Voice) 112/122/120 This course is designed for students to gain experience in singing a variety of texts, setting, groupings, and voicings. Enrollment in this course entails performing, both within and outside the school.</p>	Music 112 or permission from music teacher	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	
<p>Visual Arts 110 Students will build upon drawing and painting skills developed in the Visual Arts 10 course. Value drawing will be explored in new and interesting ways, as will the expressive potential of the portrait. Students will continue to develop painting skills and this will lead to independent painting projects which require creative problem solving. Art historical content will include works from the early Modernists up to and including late Modernists of the 1980's.</p>	Visual Arts 10 or permission from art teacher	Students complete art projects that can be used for portfolio required for post-secondary visual arts and design programs. <i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	Recommended that students who consider a career in an arts related field take this course in Grade 11.

<p>Visual Arts 120 / Visual Arts 120-Portfolio Students will build upon skills and abilities developed in Visual Arts 110. Students will continue to explore the expressive potential of new materials and processes in drawing and painting. Greater emphasis will be placed on the volume, speed and energy of artistic production, and projects will involve more self-direction in consultation with the instructor. Art historical works will include those primarily from the late Modernists.</p>	<p>Visual Arts 110 or Graphic Art and Design 110 with Art teacher permission</p>	<p>Those entering university or college Visual Art, Design, or Photography programs, as well as architecture should take this course. The acceptance into most post-secondary visual arts and design programs is determined by portfolio submissions. <i>Elective Course</i></p>	<p>The content of these two courses is identical. Visual Arts 120-Portfolio is scheduled first semester; allowing students to prepare well-rounded portfolios for submission to post-secondary visual arts and design programs.</p>
BUSINESS	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Business Organization & Management 120 This course is designed to help students understand and apply concepts and practices associated with business. New Brunswick businesses will be the focus of the course, with particular emphasis on small and medium size businesses. Students will learn about the importance of ethics in business, the business environment, management and human resources as well as international business.</p>	<p>Open to Grade 11 or 12 students</p>	<p>BOM is an academic level grade 12 course, accepted by most universities Valuable for students who plan on studying business at the post-secondary level. <i>Elective Course</i></p>	<p><i>Required for FIT certificate</i> An introductory course in business organization, operation and management. Recommended to be taken in grade 12, preceded by Entrepreneurship 110 taken in grade 11.</p>
<p>Career Exploration 110 2 credit, one semester course This course combines classroom activities with work experiences. Students begin with four weeks of classes, followed by a five week work placement, then one week of classes, return for five weeks in a work placement and finish the course in the classroom.</p>	<p>Open to Grade 11 or 12 students</p>	<p>Students examine personal interests, values and aptitudes concerning the world of work. <i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i></p>	<p>Students complete an application and are interviewed by the Career Exploration teacher before being accepted into the course and matched to work placements in the community.</p>
<p>Co-operative Education 120 1, 2 or 3 credit, one semester course Students have the opportunity to engage in a work placement in a chosen career interest and are placed at a single worksite for 15 weeks. Students complete weekly journals and timesheets, career and training plan and a research assignment. Students prepare a personal portfolio for job interview purposes.</p>	<p>Grade 12 students only</p>	<p>The pre-placement component includes First Aid and Work Safety certified training, resume writing, interview and employability skills, communication, and decision making in the work place. <i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i></p>	<p>Students complete an application and are interviewed by the Coop teacher before being accepted into the course and matched to work a placement. <i>The French Immersion option of this course is offered.</i></p>
<p>Economics 120 Students develop a basic understanding of the economic system. Units include economics basics, comparative economic systems, business organization, demand, supply and the market, international trade, performance of the Canadian economy, money and banking, public finance, and labor unions.</p>	<p>Open to Grade 11 or 12 students</p>	<p>Academic level grade 12 course, accepted by most universities. Valuable for students who plan on studying business the post-secondary level. <i>Elective Course</i></p>	<p>Course helps students understand the flow of money in our society.</p>
<p>Entrepreneurship 110 This course provides students with the opportunity to learn about small business start-ups, recognize and assess new business opportunities, determine the appropriate source of start-up capital and form of business.</p>	<p>Open to Grade 11 or 12 students</p>	<p>Introduces students to the business environment where they will experience creation of their own business plan. <i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i></p>	<p>Recommended to be taken in grade 11 and follow by Business, Organization & Management 120 in grade 12. <i>The French Immersion option of this course is offered.</i></p>

<p>Hospitality and Tourism 110 Units include five sectors of the hospitality and tourism industry, history and geography scenic routes, top attractions and events of N.B., impact on marketing strategies and trends in tourism, looking at why people travel, transportation, accommodations, general occupational health and safety.</p>	Open to Grade 11 or 12 students	Prepares students for work in the travel industry. <i>Elective Course</i>	Project-based course, students are expected to complete projects, activities and presentations. The French Immersion option of this course is offered online.
<p>Introduction to Accounting 120 Accounting is a system that records and communicates information about an organization's economic activities. This knowledge contributes to better assessments of opportunities, products, investments, social and community responsibilities.</p>	Open to Grade 11 or 12 students	Valuable for students who plan on studying business the post-secondary level. <i>Elective Course</i>	Students with accounting knowledge develop skills that are useful in business and everyday life.
<p>Marketing 120 This course introduces the fundamental concepts of marketing, with an emphasis on in-depth analysis of the influence of changes in the economy and global marketplace, trends and issues, and the impact of technology. Students will analyze the buying patterns of various consumers and the effect of marketing strategies, and will engage in marketing research. Students will develop and present a full and in-depth marketing plan.</p>	Open to Grade 11 or 12 students	Valuable to students studying business at the post-secondary level. <i>Elective Course</i>	An introductory course on marketing and advertising.
ENGLISH	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Advanced Placement English 120 An enriched exploration of English literature.</p>	English 122 and teacher recommendation	A valuable course for preparation of post-secondary studies. Recognized and can be accepted as a university credit.	This is intended to be a challenging academic course.
<p>Canadian Literature 120 Various Canadian texts explore characters, ideas, values and experiences that contribute to Canada's unique and global nature.</p>	Students complete or be enrolled in English 122	An appropriate course for preparation of post-secondary studies in the humanities. Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	This is intended to be a challenging academic course. This course is a complement to the English 122/121 courses.
<p>English 111 – 2 credit, full year course Covers content similar to 112, but with a focus on analytical skills, literary theory, and effective writing. The intensive program prepares you to study humanities at the university level.</p>	Recommendation from tenth-grade English teacher.	<i>Fulfills Grade 11 English Compulsory Requirement</i>	
<p>English 112 – 2 credit, full year course This course provides experience in speaking and listening, reading and writing and in representing with a focus on significant literary pieces.</p>	English 10	Designed for students whose aptitudes and interests in language and literature are above average. <i>Fulfills Grade 11 English Compulsory Requirement</i>	
<p>English 113 – 2 credit, full year course Focus on developing students' abilities in speaking, listening, reading, viewing and writing. Priority is given to development of reading and writing comprehension and effective oral and written communication.</p>	English 10	<i>Fulfills Grade 11 English Compulsory Requirement</i>	Practical and personal writing is stressed.
<p>English 121 Covers content similar to 122, but with a focus on analytical skills, literary theory, and effective writing. The intensive program prepares you to study humanities at the university level.</p>	English 111	A valuable course for preparation of post-secondary studies. <i>Fulfills Grade 12 English Compulsory Requirement</i>	English 12 is required for graduation. Course is one semester

<p>English 122 This course focuses on critical and personal response to various forms of writing and representing, including fiction, non-fiction, poetry, digital media, and drama. Students will complete an independent novel study, a formal paper, and a research presentation.</p>	English 112	<p>English 121 or 122 is an academic level grade 12 course and is an admissions requirement at ALL Canadian universities. <i>Fulfills Grade 12 English Compulsory Requirement</i></p>	English 12 is required for graduation. Course is one semester
<p>English 123 Focus on development of students' skills in speaking, listening, reading, viewing and writing with a concentration on reading comprehension, oral communication and written expression.</p>	English 113	<p>Acceptable level of English for college level studies for most programs. <i>Fulfills Grade 12 English Compulsory Requirement</i></p>	<p>English 12 is required for graduation. Course is one semester Practical and personal writing is stressed.</p>
<p>Journalism 120 An elective course within the discipline of English Language Arts. It is intended to be an academic course, challenging in terms of its requirements but flexible enough to accommodate students with a wide range of interests and abilities. Students will explore four themes: craft of writing, medium is the message, propaganda, sensationalism and the news and accountability.</p>	Grade 10	<i>Elective Course</i>	Students will focus primarily on digital journalism.
<p>Reading Tutor 120 This course is offered to provide students at the Grade 12 level an opportunity to experience the role of a literacy tutor. As a part of this course, students will conduct research into best practices for literacy instruction and work in pairs or teams to design an individual literacy program for a student experiencing difficulties in the regular classroom. Individually, students will use this knowledge to tutor a specific student from grades two to nine. Because of this, tutors will work in another local school three days a week. There is an application process.</p>	level 2 and 3 students accepted	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	<p>Application process includes completing a formal application form, teacher recommendation and excellent attendance, and successful interview. The French Immersion option of this course is offered.</p>
<p>Theatre Arts 120 Students develop performance skills. Units include projects like monologues, theatre history, improvisation, scene work, technical theatre work, movement module, voice module and pantomime. There is emphasis on group, partner and solo work in all units.</p>	Open to Grade 11 or 12 students	<p><i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i> <i>Elective Course</i></p>	This course requires active participation from students; major evaluations are in children's theatre project, theatre critique, history of drama unit and monologue workshops.
<p>Writing 110 An introduction to writing creative non-fiction, short-stories, poetry, drama, children's literature, and long fiction. Workshop and module based, meaning it is mainly student-driven.</p>	English 10		<p>Should be considered by students with good writing skills and an interest in creative or imaginative work. The French Immersion option of this course is offered online.</p>

FRENCH & LANGUAGES	Prerequisite	Post-Secondary Considerations	Special Notes
Advanced Placement French Language Arts 120 An enriched opportunity to develop increased fluency in French.	FILA 120	A valuable course for preparation of post-secondary studies in French. Recognized and can be accepted as a university credit	This is intended to be a challenging academic course.
French Immersion Language Arts 110 Focus on the development of students' skills in speaking, listening, reading, and writing with a concentration on oral communication and written expression. Units include speeches, novel studies, and cultural awareness activities.	FILA 10	Course can be used towards the <i>Provincial Certificate of French Immersion. Elective Course</i>	This course prepares students for the French Oral Proficiency Evaluation.
French Immersion Language Arts 120 Students learn to appreciate French culture through oral, reading and writing activities such as poems, stories, movies, etc.	FILA 110 recommended	Course can be used towards the <i>Provincial Certificate of French Immersion. Academic level grade 12 course, accepted by most universities. Elective Course</i>	Students acquire fluent language skills appropriate for post-secondary studies and various workplaces. This course prepares students for the French Oral Proficiency Evaluation.
Mandarin Students learn about the daily life and lifestyle of the Chinese people, Chinese tradition, education, food, history and cross cultural communication. Students will be able to speak Mandarin at a basic conversational level and be able to read, write and recognize more than 150 basic Chinese characters.	Open to Grade 11 or 12 students	<i>Elective Course</i>	
Post Intensive French (PIF) 112 The emphasis is on having fun while speaking French. This course is based on the use of the French language for real life communication in the classroom and the development of literacy skills in the target language.	Post Intensive French (PIF) 10	<i>Elective Course</i>	This course is not intended for immersion students.
Post Intensive French (PIF) 122 Speaking and listening in French is emphasized as well as hands-on dynamic experiences. Units include a novel study, common phrases and useful grammar.	PIF 110 recommended	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	Students acquire conversational French skills desired by many employers.
HEALTH & PHYSICAL EDUCATION	Prerequisite	Post-Secondary Considerations	Special Notes
Advanced Training Principles 120 This course develops physical fitness of students as they learn practical (power lifting techniques, body building, plyometric exercises, cross-, endurance-, alternative- and speed-training) and theoretical (sport nutrition, supplementation issues, physiology, biomechanics, sport specific training programs) aspects of physical training.	Wellness Through Physical Education 110 Recommended	Recommended for students interested in post-secondary education in Kinesiology; students interested in becoming certified personal trainers and athletes wanting to compete at a university level. <i>Elective Course</i>	Fitness for this class equals speed, power, strength, endurance, flexibility and agility. Students must be prepared to train. If you do not desire to sweat, work hard and be physically challenged, do not take this course.
Health and Physical Education 120 Leadership This course develops leadership skills through involvement in physical activities. Themes include management, teaching, coaching, officiating, first aid and organization planning and leadership theory.	Grade 11 and 12 students Health & Physical Education Grade 10 recommended	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	Students complete an application and are interviewed by the Physical Education teacher. Students must complete 30 hours of out-of-class volunteer time.

Outdoor Pursuits 110 This course offers students an understanding of outdoor activities, such as canoeing, swimming, orienteering, hiking, and outdoor survival. The classroom setting varies, i.e. football field, aquatic center, local lake and nature park. Activities go as planned – rain, snow or shine.	Health & Physical Education Grade 9	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	Completing all skills, projects, and teaching components is non-negotiable. This course is not for the faint of heart, as students must be flexible in their approach to activity.
Wellness Through Physical Ed. 110 Students have opportunities to be active while enhancing their decision-making skills towards wellness. Theory units include nutrition, exercise and fat control, understanding of body's response to exercise, heart maintenance, stress, flexibility and planning fitness programs.	Open to Grade 11 or 12 students	<i>Elective Course</i>	Apprenticeship hours in the Harrison Trimble Fitness and Wellness Centre are required. Students must participate in a variety of fitness activities.
HOME ECONOMICS & FAMILY STUDIES	Prerequisite	Post-Secondary Considerations	Special Notes
Child Studies 120 This course enables students to recognize children as our most significant resource and provide for their optimum growth. This includes learning about pregnancy, child development and child behavior.	Open to Grade 11 or 12 students	This course would be beneficial in any field involving work with children one-on-one, such as teachers, day care workers, parents, nurses. <i>Elective Course</i>	Participation with a child outside of school hours is compulsory.
Culinary Technology 110 This course focuses on knowledge and application of the food service industry, employment, safety & sanitation, nutrition, standardization, cooking methods, equipment, workspace, techniques and food preparation.	Open to Grade 11 or 12 students	This course helps students be aware of employment opportunities and post-secondary education in the food service industry. <i>Elective Course</i>	In the last twenty years, the number of food service employees and the amount of restaurant food consumed have doubled; there is need for training in this field.
Culinary Technology 120 This focuses is on safety and sanitation, food supply, influences on North American cuisine, food for meals (legumes, fruits and vegetables, shell fish, meat cuts), menu management, and additional food preparation skills. Theory includes the planning of quality meals, ordering, pricing, preparation and service.	Culinary Technology 110	Students explore careers and entrepreneurship opportunities in the food service industry. <i>Elective Course</i>	Actual hands-on experiences will add to the students' knowledge and employability.
Early Childhood Services 110 This course explores historical perspective of children's needs, current issues regarding child care, regulations governing facilities in N.B., theories on child growth and development, observation & communication skills, planning and instructional skills.	Open to Grade 11 or 12 students	Prepares students for employment in the child care sector. <i>Elective Course</i>	Instructional time includes group and individual research and study, followed by tests and exams. Laboratory time is used to develop and practice plans to work with young children. Participation with a child outside of school hours is compulsory.
Individual and Family Dynamics 120 This course exposes students to the skills and information necessary to make informed decisions about personal development, lifestyle choices, and healthy relationships. Units of study: Families in a Changing World, Personal Growth & Development, Interpersonal Relationships, Individual & Family Wellness.	Open to Grade 11 or 12 students	<i>Fulfills Fine Arts/Life Role Development Compulsory Requirement</i>	The course is discussion-based and designed for students interested in social issues.
Nutrition For Healthy Living 120 The course explores the influences of food on personal health and wellness. Topics include: digestion, absorption, metabolism and function of the six nutrient groups. Through investigation and analysis of five nutrient groups, recommended daily intake of calories, and other nutritional 'hot topics' students will become educated on the importance of maintaining a balance between healthy food choices and physical activity.	Open to Grade 11 or 12 students	This is an excellent choice for students concerned with personal wellness and who wish to pursue a career in science, with an emphasis in nutrition or other health related fields. <i>Elective Course</i>	Students are expected to examine their eating habits and lifestyle choices. Students should have a background or interest in biology and chemistry.

High School Mathematics Pathways



An understanding of math is essential in today's competitive, technological world. Starting in 2008, the K-12 mathematics curriculum in New Brunswick has been changing to help students be better prepared for whatever they choose to do after high school. The new curriculum is focused on providing students with the skills and knowledge to confidently solve problems and contribute to society.

The high school mathematics program has changed significantly. There are new courses for Grades 9 to 12 and the Grades 11 and 12 courses are organized into three "pathways". These pathways and the courses included in each are explained in more detail on the next page.

◆ Financial and Workplace Mathematics



◆ Foundations of Mathematics



◆ Pre-Calculus



Each pathway is designed to provide students with the mathematical competencies and critical-thinking skills that will be needed after high school. Students should select courses in the pathway that best fits their interests and plans for after high school, similar to selecting science and other elective courses. Each pathway provides students with a different focus of math concepts and skills. Students may choose to take additional courses beyond what they need to graduate to better prepare them for what they want to do after high school.

REQUIRED COURSES

What math courses do I need to graduate?

- ◆ Mathematics 9
- ◆ Geometry, Measurement, and Finance 10
- ◆ Number, Relations, and Functions 10
- ◆ Plus: one of the following Grade 11 courses
 - ◇ Financial and Workplace 11
 - OR
 - ◇ Foundations of Mathematics 11 (pre- or co-requisite for the Pre-Calculus pathway)



GRADE 9: MATHEMATICS 9

Length: Full year

Prerequisite: Grade 8 mathematics

Topics: exponents and bases, linear relations and equations, polynomials, circle properties, surface area, scale diagrams, data collection and displays, histograms, probability

GRADE 10: Geometry, Measurement, and Finance 10

Length: 1 semester

Prerequisite: Grade 9 mathematics

Topics: Pythagorean Theorem, polygons, angles, trigonometric ratios, metric and Imperial systems of measurement, surface area and volume, unit pricing, currency exchange, income (gross & net pay), credit cards, loans, interest

GRADE 10: Number, Relations, and Functions 10

Length: 1 semester

Prerequisite: Grade 9 mathematics

Topics: prime factors, common factors, square and cube roots, irrational numbers, integral and rational exponents, polynomial expressions, trinomial factoring, linear relations and functions, slope, distance formula, midpoint formula

AND

How are pathways different than levels?

Levelled courses are developed for different academic abilities. "Pathways" of courses are designed to better meet your interests and needs for after high school.

What if I don't know what I want to do after I graduate? Can I switch pathways?

Yes. If you have started to take courses in one pathway, you can take courses in another one, as long as you complete the prerequisites. You will receive credit for all math courses you take.

Should I take more math courses, even if I don't need them to graduate?

You may need specific courses for entrance to post-secondary programs. You will also increase your math skills and keep them current which will help you no matter what you decide to do after high school.

For more information, contact the Guidance Counsellor at your school or go to: www.careercruising.com (login information available from Guidance Dept.)

High School Math Pathways: Which one is best for you?



FINANCIAL AND WORKPLACE MATHEMATICS

This pathway is designed for students who plan to take post-secondary programs that require applied mathematics or who plan to enter the workforce directly after high school.



FOUNDATIONS OF MATHEMATICS

This pathway is designed for students who plan to take post-secondary academic programs that do not require calculus.



PRE-CALCULUS

This pathway is designed for students who plan to take post-secondary programs that require calculus.



GRADE 11 COURSES

Financial and Workplace Mathematics 110

Length: 1 semester

Pre-requisite: *Geometry, Measurement, and Finance 10*

Topics: right triangles, trigonometry, scale models & drawings, numerical reasoning, renting & buying, investment portfolios, personal budgets, application of formulas, slope, proportional reasoning.

Opens doors to programs such as:
College diplomas: Early Childhood Education, Firefighting, Drafting, Welding, Plumbing, Carpentry;
Bachelor degrees: Arts and Fine Arts

Foundations of Mathematics 110

Length: 1 semester

Pre-requisites: *Number, Relations, and Functions 10* and *Geometry, Measurement, and Finance 10*

Topics: numerical & logical reasoning, angles & triangles, sine & cosine law, systems of linear inequalities, quadratic functions, renting & buying, investment portfolios

Opens doors to programs such as:
College diplomas: Medical Technology, Business Administration, Practical Nursing;
Bachelor degrees: Arts and Fine Arts

Pre-Calculus 110

Length: 1 semester

Pre- or Co-requisite: *Foundations of Mathematics 110*

Topics: absolute value functions, radical expressions & equations, rational expressions & equations, angles & trigonometric ratios (0° - 360°), polynomial factoring, systems of equations, quadratic functions & equations, linear & quadratic inequalities.

Opens doors to programs such as:
College diplomas: Engineering and Environmental technology;
Bachelor degrees: Nursing

GRADE 12 COURSES

Financial and Workplace Mathematics 120

Length: 1 semester

Pre-requisite: *Financial and Workplace Mathematics 110* OR *Foundations of Mathematics 110*

Topics: measuring, sine & cosine laws, properties of polygons, transformations of 2-D & 3-D shapes, small business finance, linear relationships, data interpretation, probability.

Not currently required for any specific program, but would support:
College diplomas: Art and Design, Forest Technology, Business

Foundations of Mathematics 120

Length: 1 semester

Pre-requisite: *Foundations of Mathematics 110*

Topics: normal distribution, standard deviation, confidence intervals, set theory, conditional statements, probability, binomial theorem, polynomial, exponential, logarithmic & sinusoidal functions.

Opens doors to programs such as:
College diplomas: Engineering Technology, Computer Technician, Pharmacy Technology; Bachelor degrees: Nursing, Kinesiology, Business Administration, Economics, Psychology

Pre-Calculus A 120

Length: 1 semester

Pre-requisite: *Pre-Calculus 110*

Topics: graphs of functions & related equations, exponential & logarithmic functions & equations, angles in standard position, degrees & radians, unit circle, trigonometric functions & equations, trigonometric identities.

****Most programs that require Pre-Calculus A 120, also require Pre-Calculus B 120**

Pre-Calculus B 120

Length: 1 semester

Pre- or Co-requisite: *Pre-Calculus A 120*

Topics: arithmetic & geometric sequences & series, polynomial factoring & functions, radical, reciprocal & rational functions, function toolkit, permutations, combinations & binomial theorem, limits & continuity of functions.

Opens doors to programs such as:
Bachelor degrees: Science, Computer Science, Engineering, Mathematics

Calculus 120

Length: 1 semester

Pre-requisites: *Pre-Calculus A 120* and *Pre-Calculus B 120*

Topics: rates of change, derivatives of functions, derivative rules, inverse trig functions, optimization problems, definite integrals, antiderivatives, application of integrals.

Supports: Bachelor degrees: Science, Computer Science, Engineering, Mathematics



Please confirm the entrance requirements for specific programs offered by post-secondary institutions.

SCIENCE	Prerequisite	Post-Secondary Considerations	Special Notes
Biology 112 This course emphasizes the nature of life. Topics include unity and diversity of living systems, cellular structure, energy systems and animal physiology.	Grade 10 science	<i>Fulfills Science Compulsory Requirement</i>	Instructional methods include lecture, demonstration, projects, and labs. The French Immersion option of this course is offered.
Biology 122 Major topics are systems regulating change in human and other organisms, reproduction and development, chromosomes, genes, DNA, change in populations, communities and species.	Biology 112	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	Instructional methods include lecture, demonstration, projects, and labs. The French Immersion option of this course is offered.
Chemistry 111/112 This course emphasizes learning chemistry through the scientific method. Topics include laboratory safety and techniques, matter, chemical nomenclature, chemical reactions, stoichiometry, atomic structure, bonding, and trends in the periodic table.	Grade 10 science Foundations of Math 110	<i>Fulfills Science Compulsory Requirement</i>	Laboratory experiments allow students to observe and draw conclusions leading directly to important chemical principals. Labs are essential to your learning.
Chemistry 121/122 Major topics include organic chemistry, thermo, equilibrium, kinetics, acids and bases. Students continue to gain skills used for laboratory investigations.	Chemistry 112 Foundations of Math 110	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	Labs are essential to your learning.
Human Physiology 110 This course is designed to appeal to a wide range of learners including students for whom this will serve to fulfill their science graduation requirement and students who will take additional science courses. A study of Human Physiology will be relevant to every student, providing them with the tools they will need to make informed choices about their own health and that of others. This course focuses on the biology and healthy functioning of all of the major human body systems and how wellness can be compromised by struggles with mental and social health, lifestyle choices and disease.	Grade 10 science	Human Physiology 110 will be relevant to those students who will be going on to careers in the social sciences, health care and medicine. <i>Fulfills Science Compulsory Requirement</i>	Attendance is important as evaluation is based on many in-class labs, activities, and projects.
Introduction to Environmental Science 120 This course introduces the scientific concepts needed to understand the natural world and current environmental issues. Topics include terrestrial and aquatic ecosystems, biodiversity, biochemical cycles, land & water resources, population dynamics, energy resources & consumption, pollution and climate change.	Grade 10 science	Academic level grade 12 course, accepted by most universities. <i>Fulfills Science Compulsory Requirement</i>	Evaluation is based on activities, projects, and labs. Depending on the season, field work may be required.
Physics 112 Main units include kinematics, dynamics, work and energy and waves. Labs are generally done in teams. A physics problem solving assignment usually accompanies each chapter. Problems are from external sources and require considerable thought.	Grade 10 science Foundations of Math 110	Physics is required for many post-secondary programs in health science and engineering technology fields. <i>Fulfills Science Compulsory Requirement</i>	Problem solving is the backbone of physics and demonstrates that one can apply the pieces of knowledge they have acquired.
Physics 122 Main units include three units: dynamics extension, projectiles / circular motion and universal gravitation and fields Labs are generally done in teams.	Physics 112 Foundations of Math 110	Academic level grade 12 course, accepted by most universities. Valuable for students who plan on studying science at the post-secondary level. <i>Elective Course</i>	Problem solving opportunities explored in Physics 112 are further investigated.

SKILLED TRADES	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Computer Aided Design 110</p> <p>This is an introductory course in computer-assisted drafting using AutoCAD LT. Students will work at a computer station to design and develop drawings to industry standards. The focus of this course is to commence with Mechanical Drafting and then complete the course with a unit in Architectural drafting. The last week of classes students will prepare a final presentation of their architectural project using Google Sketch-up.</p>	Foundations Math recommended	<p>The program prepares students to enter engineering or architecture at University, Engineering Technology at NBCC and various Trades program at NBCC or BayTech.</p> <p><i>Elective Course</i></p>	This is a practical course where students work on drawings
<p>Construction Trades Program (4 credits)</p> <p>This program is designed for students who are serious about a career in the construction industry from engineering to the skilled trades. The program includes carpentry, electrical, plumbing, masonry, HVAC and drywall.</p>	Introduction to Applied Technology 110.	<p>The program prepares students to enter engineering or architecture at University, Engineering Technology at NBCC and various Trades program at NBCC or BayTech.</p> <p><i>Elective Course</i></p>	<p>This program takes place over two semester (afternoons) in grade 11. See Mr. Brockbank about applying to this program. Students will earn the following credits: Framing & Sheathing 110, Electrical Wiring 110, Residential Finish 120 and Construction Technology 110.</p> <p>Coop placement in grade 12 is recommended.</p>
<p>Computer Aided Graphics (Drafting) 120</p> <p>This is a continuation of Computer Aided Design 110. The emphasis will be on Architectural Drafting. We will begin with an exploration of the construction industry, all the systems in a house and finally design and draw an energy efficient home to existing codes and standards. A 3-D model of the house will also be rendered using Google Sketch-up. Students will become competent and proficient in the planning and development of drawings. In addition, students will have the opportunity to read blueprints and learn sketching techniques.</p>	Computer Aided Design 110	<p>The program prepares students to enter engineering or architecture at University, Engineering Technology at NBCC and various Trades program at NBCC or BayTech.</p> <p><i>Elective Course</i></p>	
<p>Framing and Sheathing 110</p> <p>This is a project based introduction to the carpentry trade. Students learn about safe use of tools, print reading, wood and wood products and basic framing and sheathing methods.</p>	Introduction to Applied Technology 110	<i>Elective Course</i>	This course is 40% theory and 60% practical work.
<p>Introduction to Applied Technology 110</p> <p>This is a project based course designed to introduce the various shop classes at HTHS. Students learn about safety, measurement and measurement math, hand and power tools and information needed in more specialized vocational courses.</p>	Open to Grade 10, 11 or 12 students	<p>This course is strongly recommended as the grade 10 elective if student is interested in the skilled trades.</p> <p><i>Elective Course</i></p>	This course is approximately 40% theory and 60% practical.
<p>Mill and Cabinet Work 120</p> <p>This is a project based introduction to the cabinetry and mill work trade. Students learn about the safe use of tools, print reading, wood and wood products, joinery techniques used to build furniture and cabinets.</p>	Introduction to Applied Technology 110	<i>Elective Course</i>	This course is 40% theory and 60% practical work.

SOCIAL STUDIES	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Advanced Placement Psychology 120 This course covers the same material as first year university psychology. As such it is an introduction to all of the topics and sub-fields within the broad spectrum of psychological studies.</p>	English 112	This course is unusually fast-paced and challenging. Students have the option of writing the national AP test, which, if passed, may allow the student to receive the university credit for first-year psychology without taking it at university.	The Psychology 120 credit may be earned if AP component of course is not completed.
<p>Canadian Geography 120 Topics include changing cultural and physical landscapes of Canada and how they impact on each other. Units include physical geography, environmental issues, social & cultural identity, economic and political aspects of Canadian life and Canadian-International relations.</p>	Social Studies 10	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	
<p>Canadian History 122 Focus on Post-Confederation with an emphasis on the 20th century. Themes include English-French relations, First Nations, Regionalism, and Canadian identity. Students who excelled in level 2 History, who enjoy learning about our Canadian past, and who show an aptitude for civics will find success in this course.</p>	Modern History 112	Academic level grade 12 course, accepted by most universities. Students must be prepared to use research and writing skills taught in History 112 and in English courses. <i>Elective Course</i>	Students must be willing and able to work individually or in groups, as well as possessing the essential skills of note taking, citing references and creating appropriate bibliographies.
<p>Law 120 This course is designed to give students knowledge of Canadian law. Students will examine the origins of the Canadian legal system, Canadian Charter of Rights, the Criminal Code, police investigation and arrest, trials, defences and sentencing, criminal law, torts/civil law, and contracts.</p>	English 10	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	Case studies, guest speakers, mock trials, debates, help students develop informed opinions on current legal topics. <i>The French Immersion option of this course is offered online.</i>
<p>Modern History 112 Covers modern western civilization from the French Revolution to the Cold War. Focus on French & Industrial Revolutions, ideas of the 19th century, WW I, rise of totalitarian states, WW 2, the Cold War, United Nations & globalization.</p>	Social Studies 10	<i>Fulfills Grade 11 Modern History Compulsory Requirement</i>	Each student must write a formal research paper using the required essay format. <i>The French Immersion option of this course is offered.</i>
<p>Modern History 113 Topics include basic world geography, Industrialization, life in the 1920s and 30s, WW 1, WW 2, and the Cold War.</p>	Social Studies 10	<i>Fulfills Grade 11 Modern History Compulsory Requirement</i>	
<p>Political Science 120 Topics include Canadian municipal, provincial and federal political systems, international political systems, political reform, United Nations, and diplomacy. Special projects include analyzing a political document, such as Budget or Throne Speech.</p>	Modern History 112	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	This course requires a great deal of study, research and day-to-day knowledge of domestic politics.
<p>Sociology 120 Students study interactions of individuals and groups and forces that affect them by exploring historical origins of sociology, structures in society, evidence of inequalities both domestically and globally, and by evaluating various social institutions.</p>	Social Studies 10	Academic level grade 12 course, accepted by most universities. <i>Elective Course</i>	Students will be expected to demonstrate their understanding of sociological concepts through writing, researching and presenting.

<p>World Issues 120 This course will guide students through a study of selected contemporary world issues and their cultural, resource, political, economic and environmental factors. The interdependence of these and other factors challenges students to examine their knowledge and biases, to reflect upon alternative positions, to analyze each issue, and to evaluate possible solutions.</p>	<p>Modern History 112</p>	<p>Academic level grade 12 course, accepted by most universities. <i>Elective Course</i></p>	<p>Students should demonstrate an aptitude for history and the arts, and should have a general understanding of the world around them including current events and global geography.</p>
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TECHNOLOGY	Prerequisite	Post-Secondary Considerations	Special Notes
<p>Computer Science 110 An introduction to programming for all high school students. Students will learn the Visual Basic language and will be making small computer applications.</p>	<p>Open to Grade 11 or 12 students</p>	<p>A foundation for further studies for computer science, engineering, business, and physics. Many science and businesses program require students to complete 1 computer science credit.</p>	<p><i>FIT certificate elective.</i> Math, analytic and problem solving abilities an asset but an excellent introduction for all students with a curiosity about programming.</p>
<p>Computer Science 120 A more comprehensive look at object oriented programming, e.g. Java. Students will have the opportunity to also do app development..</p>	<p>Computer Science 110 is strongly recommended</p>	<p>A foundation for further studies for computer science, engineering, business, and physics. Students wishing to apply to a college/university CS degree program require Pre-Calculus 12A and 12B.</p>	<p>Builds on concepts learned in Computer Science 110 CS120 covers many of the concepts which are found in first year CS courses in university and college.</p>
<p>Digital Production 120 Web design and development, social and mobile media, audio production/editing, video production/editing, web communications, and e-business.</p>	<p>Open to grade 11 or 12 students.</p>	<p>Foundation for further studies in e-business, animation, graphic design, audio production, video production and web design.</p>	<p><i>FIT certificate elective.</i> Students will have the opportunity to work hands on with cameras, green screens, podcasting, and recording audio/video and create stunning web and graphic design works.</p>
<p>Information Technology 120 Introduction to MS Office (Word, Excel, PowerPoint, & Access). This is a practical course for future studies and employment.</p>	<p>Open to grade 11 or 12 students</p>	<p>Applicable to all fields of study. The top two skills employers seek are critical thinking and Information Technology applications. Elective course Transferable for credit at NBCC.</p>	<p><i>Required for FIT certificate.</i> Eligible for MS Office certification.</p>
<p>Media Studies 120 This course offers an introduction to the evolution and impact of mass media on the individual and society. The course will emphasize the content, process and technical elements of media production. Major units include culture, television, advertising, film, sound & music.</p>	<p>Open to Grade 11 or 12 students</p>	<p><i>Elective Course</i> An ideal course for students going into psychology or business studies with a focus on advertising and marketing.</p>	<p>Recommended for self-motivated students who well in groups and interested in becoming media literate.</p>
<p>Technology Support 110 Fundamentals and basics of computer components, computer maintenance, repair, upgrading, and assembly.</p>	<p>Open to grade 11 or 12 students</p>	<p>These skills will provide a foundation for further studies in computer support, network support, and other Information Technology (IT) studies.</p>	<p><i>FIT Certificate elective.</i> Learn to build a computer.</p>

Course List Organized by Subject Clusters

Listed according to the order in which courses appear in the Course Handbook:

ARTS & MUSIC page 11

Fashion Design 120
Fashion Technology 110
Graphic Art and Design 110
Music 112
Music 120
Music 122
Visual Arts 110
Visual Arts 120

BUSINESS page 12

Business Organization and Management 120
Career Exploration 110 (2 credits)
Co-Op Ed 120 (2 or 3 credits)
Economics 120
Entrepreneurship 110
Hospitality and Tourism 110
Introduction to Accounting 120
Marketing 120

ENGLISH page 13

Advanced Placement English 120
Canadian Literature 120
English 111 / 112 (2 credits)
English 113 (2 credits)
English 121 / 122
English 123
Journalism 120
Reading Tutor 120
Theatre Arts 120
Writing 110

FRENCH & LANGUAGES page 15

Advanced Placement French Language Arts 120
French Immersion Language Arts 110
French Immersion Language Arts 120
Mandarin 120
Post Intensive French 112
Post Intensive French 122

HEALTH & PHYSICAL EDUCATION page 15

Advanced Training Principles 120
Health and Physical Education – Leadership 120
Outdoor Pursuits 110
Wellness through Physical Education 110

HOME ECONOMICS & FAMILY STUDIES page 16

Child Studies 120
Culinary Technology 110
Culinary Technology 120
Early Childhood Services 110
Individual and Family Dynamics 120
Nutrition for Healthy Living 120

MATH page 17

Calculus 120
Financial & Workplace Math 110
Financial & Workplace Math 120
Foundations of Math 110
Foundations of Math 120
Pre-Calculus 110
Pre-Calculus 12A
Pre-Calculus 12B

SCIENCE page 19

Biology 112
Biology 122
Chemistry 111 / 112
Chemistry 121 / 122
Human Physiology 110
Introduction to Environmental Science 120
Physics 112
Physics 122

SKILLED TRADES page 20

Computer Aided Design 110
Construction Trades Program (4 credits)
Computer Aided Graphics (Drafting) 120
Framing and Sheathing 110
Introduction to Applied Technology 110
Mill and Cabinet Work 120

SOCIAL STUDIES page 21

Advanced Placement Psychology 120
Canadian Geography 120
Canadian History 122
Law 120
Modern History 112
Modern History 113
Political Science 120
Sociology 120
World Issues 120

TECHNOLOGY page 22

Computer Science 110
Computer Science 120
Digital Production 120
Information Technology 120
Media Studies 120
Technology Support 110

FRENCH IMMERSION COURSES

Advanced Placement French Language Arts 120
Biology 112
Biology 122
Co-Op Ed 120 (2 or 3 credits)
Entrepreneurship 110
French Immersion Language Arts 110
French Immersion Language Arts 120
Modern History 112
Reading Tutor 120