The Royal Military College of Canada

The Royal Military College of Canada (RMCC) enables young Canadians of various cultural backgrounds to become strong leaders for the Canadian Armed Forces (CAF) and our nation. As you join RMCC as an officer cadet, you will embark on an invigorating journey and become a part of a proud heritage. An RMCC education and military experience will provide you with the professional and intellectual skills necessary to assume the responsibilities and meet the demands of leadership in today’s rapidly changing world. A career as an officer in the CAF will offer you experiences and challenges that will enable you to maximize your contribution to Canada at home and abroad. Attending RMCC is the first step you will take on a path destined for success.

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Truth • Duty • Valour
Where to find us

Ideally Located
The RMCC’s campus, rich in history, heritage, and tradition, is located on Point Frederick, a small peninsula just to the east of Kingston, Ontario. The College is situated midway between Toronto and Montreal, and only two hours from Ottawa, the national capital. This scenic location, at the junction of Lake Ontario and the St. Lawrence River, is of great historic importance. It has been an active military site since 1789 and, during the War of 1812, it served as the major naval station in Upper Canada. Ships of the Royal Navy were built and based here. RMCC has two National Historic Sites of Canada, the Royal Naval Dockyard, and Point Frederick.

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Downtown Kingston
Visiting RMCC
Potential undergraduate candidates and their families are encouraged to participate in a tour of the RMCC. Tours are offered on Tuesdays and Thursdays at 1:30 p.m. throughout most of the year but reservations are required. Please contact liaison@rmc.ca or call 613.541.5010 ext. 6984 to schedule your campus tour.

1876
RMCC opened its doors to the first officer cadets, making the College Ontario’s fifth oldest university.
Admissions and Application Procedures

Admissions
By submitting their application, candidates are applying for full-time employment with the CAF, and attendance at RMCC becomes part of their professional development as future officers in the CAF. The goal is to provide exceptional education while developing officer cadets to refine their leadership capabilities in a holistic approach to military education.

Regular Officer Training Plan
The Regular Officer Training Plan (ROTP) gives young Canadians an opportunity to obtain both an officer’s commission in the CAF and an undergraduate degree. Candidates who have been accepted at RMCC or at another Canadian university are enrolled in the CAF as officer cadets.

Under the ROTP, DND pays for all costs of tuition, uniforms, books, instruments, and other essential fees. Officer cadets are also paid a monthly salary (from which mandatory room, board and mess dues are deducted), undergo military occupation training, and if required, second language training during the summer months, and receive full medical and dental care at no cost. Annual vacation with full pay is granted according to CAF regulations.

Officer cadets are obliged to maintain satisfactory academic performance throughout the programme. Those who do not maintain a suitable level of academic performance may be permitted to repeat one year at their own expense and, if successful, be reinstated to full pay and allowances.

Upon successful completion of the ROTP, officer cadets are awarded a university degree, receive their commission, and become officers in the CAF. Normally, graduates are obliged to serve for a minimum of five years in the CAF.

Officer cadets enrolled under the ROTP may apply to release from the CAF prior to the commencement of the second academic year without incurring any obligatory service or financial penalty. ROTP officer cadets seeking release after the commencement of their second academic year, if approved, are required to reimburse the Crown for all expenses incurred while attending RMCC or another university.

Where to Start
Find an occupation that interests you.
RMCC officer cadets have 20 unique and exciting jobs available to them through the CAF after graduation. Explore your options by visiting www.Canada.ca/forces-jobs.

Find a degree programme that interests you.
RMCC offers 19 undergraduate degree programmes, some of which are required for specific occupations. To verify, contact your local CAF Recruiting Center at 1-800-856-8488.

Apply to the Royal Military College of Canada.
To apply for the Regular Officer Training Plan at RMCC, visit www.forces.ca and select Apply Now.
How to Apply

All students interested in pursuing full-time undergraduate degree programmes offered at RMCC must apply through the CAF website www.forces.ca and select ‘Apply Now’. Candidates are encouraged to start their application in September of their final year of high school. In order to ensure that applications are processed in time for early selection, students are highly encouraged to apply once their Grade 11, or Secondary V, final transcripts are received. The deadline for applications is January 31st of the year of enrollment.

Information concerning the application process can be obtained from any Canadian Forces Recruiting Center (CFRC) at 1-800-856-8488 or at www.forces.ca and select ‘Apply Now’.

Regular Officer Training Plan

Since an application to RMCC is also an application to the CAF, all candidates for ROTP are required to complete the following at their local CFRC:

- An aptitude test
- A medical examination
- An interview

Applicants are evaluated on two fundamental criteria:

- Military Potential. The Military Potential score is based on the assessment of an applicant’s Aptitude Test, Personality Traits, and the choice of the proper occupation.

- Academic Performance. This will be assessed by the Admissions Office at RMCC. This is an assessment of a candidate’s top six most recent marks which adhere to the admission requirements for their programme of choice.

Senior ROTP candidates may receive an offer to study in either one of the two military colleges; candidates may not choose the college they will attend, and the selection is random. Senior candidates selected for RMC Saint-Jean will complete their first year of university studies and the Basic Military Officer Qualification in Saint-Jean-sur-Richelieu, after which they will attend RMCC in Kingston for three years. The majority of candidates who received an offer for RMC Saint-Jean greatly enjoyed their stay, namely because of the individualized education (200 officer cadets) and the opportunity of perfecting their proficiency level in French and their leadership abilities.
The Four Components of the Royal Military College of Canada

Leadership
The Leadership Component develops personal skills that officers need to succeed in today’s complex and rapidly changing world. Basic Officer Training will provide you with the fundamental skills of an effective leader and resource manager. This leadership training will be expanded upon as you begin your studies at RMCC. Along with other experiences, it will prepare you to make difficult decisions under stress through deeper understanding of the factors affecting your role as a leader. The nature of military leadership and military operations necessitates an in-depth understanding of human behaviour; therefore, studies in military psychology and leadership are part of the required academic curriculum. Particular emphasis is placed on the importance of personal integrity, ethical behaviour and professional responsibility.

Athletics
Under the Athletics Component, RMCC teaches the importance of fitness and a healthy lifestyle. By striving to achieve a higher level of physical fitness, you can improve the quality of your life, learn more effectively, and inspire those around you. Officer cadets are required to participate in the physical education programme designed to achieve and maintain a high level of fitness and to learn the basics of a wide variety of team and individual sports.

Bilingualism
The Bilingualism Component reflects Canada’s cultural heritage. Officers are expected to be fluent in both of Canada’s official languages. Your responsibilities as an officer in the CAF will require you to lead Canadian men and women who are primarily Anglophone or Francophone. RMCC has been training officers to communicate effectively in both English and French for more than 40 years through in-class instruction and integration into daily life at RMCC.

Academics
The Academics Component develops critical intellectual skills required to understand the complexities of living in the 21st century. RMCC’s academic programmes apply theoretical knowledge to daily operations and military settings. All degree programmes offered at RMCC are designed to provide a balanced liberal arts, scientific and military education.
The Leadership Component

Since RMCC’s goal is to prepare students for their roles as officers in the CAF, it is important for officer cadets to be exposed to and develop leadership traits during their academic studies.

Basic Officer Training
Students accepted to RMCC begin their first year with Basic Officer Training in St-Jean-sur-Richelieu, Quebec. This introductory programme consists of common military subjects such as general military knowledge, the principles of leadership, regulations and customs of the military, basic weapons handling, and first aid. Opportunities will also be provided to apply such newly acquired military skills in training exercises involving force protection, field training, navigation and leadership.

First Year Orientation Programme (FYOP)
Upon successful completion of Basic Officer Training, students begin their full-time studies at RMCC in addition to continuing with elements of basic training. Throughout the Fall Term, students are assessed on their ability to follow orders and work as members of a team. After successfully running the obstacle course, which marks the end of the First Year Orientation Programme, students are inducted into RMCC as officer cadets and issued their scarlet uniform.

Class Project
Each year, students participate in a class project which involves organizing and running a community-based event. Past projects include collecting food for a local food bank, hosting support groups for a day of fun, cleaning up local parks, and staging a talent show.

Summer Training
After completing the first year at RMCC, students return to Saint-Jean-sur-Richelieu, Quebec to complete their Basic Officer Training. After the second year, students complete 10 weeks of Second Official Language Education and Training if required, or they can receive up to 11 weeks of military training which may include military occupation training relevant to their chosen environment or occupation. This training takes place at military bases across Canada. After the third year officer cadets participate in on-the-job-experience or formal occupational training within their field of specialization. After the fourth year and upon graduation you are commissioned as an Officer in the CAF and continue your training at a military base in Canada.

Military Drills and Parades
RMCC is renowned for the quality and diversity of its ceremonial parades. Officer cadets are expected to reach and maintain a high standard in drill with the service rifle, the ceremonial flag, and the sword. Throughout the year, RMCC is called upon to provide formations of officer cadets for ceremonial occasions.

Four astronauts from the Canadian Space Agency are graduates from RMCC
The Athletic Component

The physical education and athletics programme at RMCC is designed to help each officer cadet attain a high level of physical fitness and a satisfactory level of skills in a wide variety of sports. This programme is compulsory and cadets are tested periodically to ensure that they meet fitness standards in terms of stamina, agility and strength.

Physical Education
The four years of physical development at RMCC represent different levels of athletic achievement. Officer cadets must attend a two hour physical education period each week during the academic year, as well as complete a physical fitness test twice per year.

During the first year of studies, the emphasis will be placed on proper training and conditioning techniques; in the second year, on team sports participation; in the third year, on military training which includes hand-to-hand combat techniques and military fitness; and in the fourth year, on specializing in a wide variety of activities and sports that students select.

Varsity Sports
RMCC is a member of Ontario University Athletics (OUA), one of four conferences that make up Canadian Interuniversity Sport (CIS). RMCC’s varsity teams compete in the following OUA sports:

- Fencing: Men & Women
- Hockey: Men
- Rugby: Men
- Soccer: Men & Women
- Volleyball: Men & Women
- Fencing: Men & Women
- Hockey: Men
- Rugby: Women
- Sailing: Men & Women
- Swimming: Men & Women
- Taekwondo: Men & Women

Competitive Clubs
The Competitive Clubs provide members an enhanced opportunity for training and competition that are otherwise not available as recreation clubs. Some of RMCC’s Competitive Clubs include:

- Running: Men & Women
- Rowing: Men & Women
- Rugby: Men
- Sailing: Men & Women
- Swimming: Men & Women
- Taekwondo: Men & Women

Intramural Sports
Officer cadets who are not on a varsity team or competitive club must participate in the intramural programme twice per week and may also be involved in organizing and running intramural events. RMCC currently offers ice hockey, ball hockey, basketball, soccer, water polo, ultimate frisbee, flag football, and many other sports.

RMCC students do not pay for the use of any of the athletic facilities, equipment or classes.
Recreational Clubs

Recreational Clubs are created and organized by officer cadets with the primary intent of providing leadership opportunities for students. They also help to develop the social skills of those who choose to get involved and to introduce different leisure and athletic activities to the RMCC community that may not already be offered through the varsity and intramural programme. Some of RMCC’s Recreational Clubs include:

- Astronomy
- Climbing
- Judo
- Power Flying
- WarGames
- Band
- Curling
- Paintball/Airsoft
- Stage Band
- Windsurfing
- Chess
- Expedition
- Photography
- Theatre
- Yacht

Athletic Facilities
RMCC's modern athletic facilities offer officer cadets the ability to participate in many different sports and activities. The Kingston Military Community Sports Center houses a 25-metre pool and hot tub, 200-metre track, a spin room, cardio room, squash courts, weight room and hardwood courts. On campus, there are also tennis courts, soccer fields, an ice rink, a beach volleyball court, and ample amount of equipment to allow students to participate in water sports, including windsurfing, canoeing and kayaking. The latest addition to the athletic facilities is the sports dome which contains an 85-metre by 120-metre turf field.

Officer cadets are also able to utilize CFB Kingston's golf and curling clubs, as well as the bowling alley.

The athletic facilities are used on a regular basis by the cadets for intramural sports, physical education courses, and can also be booked by students for personal use throughout the day.
The Bilingualism Component

One of RMCC’s objectives is to ensure that officer cadets can communicate in both official languages and that they understand the principles of bilingualism. Second Official Language Education and Training (SOLET) is thus mandatory for all officer cadets who are not already highly proficient in their second language.

Language Classes

Upon arrival at the College, officer cadets complete a placement test that measures their abilities in their second official language. If an officer cadet does not reach the level required by the curriculum of RMCC, they must take SOLET classes. Officer cadets are grouped according to their proficiency and take classes for fifty minutes every weekday. Classrooms are small (can usually accommodate a maximum of ten officer cadets) and focus on reading comprehension, written expression and oral competency. Officer cadets can also reserve an individual fifty minute tutorial when it is convenient for them with the instructor of their choice via an online registration system for one-on-one tutorials.

Summer Training

Typically, if after their second year at the College, officer cadets still have not reached the bilingualism level required by the curriculum, they will complete an intensive ten week immersion course. Officer cadets are in class for five hours per day with small class sizes, either at RMCC or at the Canadian Forces Language School in Saint-Jean-sur-Richelieu, Quebec.

Testing

Officer cadets will eventually take exams supplied by the Canada School of Public Service. RMCC’s Language Center will allow the officer cadets to take these exams when the teachers believe the officer cadet has a good chance of being successful. To this effect, the Language Center has its own evaluation tools to determine if candidates are ready for the official exams, which consist of two written online tests, and one oral competency test that is administered on the phone.

Daily Life

Academic courses are offered in both English and French, which means that officer cadets may be able to attend classes instructed in either official language and write all papers and essays in their first official language. For one half of each month on campus, all business is conducted in one official language. This means that orders and directives are given in the language of the day, and all activities and events outside of class are performed in that language. As well, every effort is made to board first year officer cadets of a different first official language together to encourage each to use both languages during First Year.

RMCC students graduate with a bilingual proficiency recognized by the Canada School of Public Service
**Numbers matter.**

Approximately 1,100 Full-time undergraduate students
19 Undergraduate programmes
27 Graduate programmes

Approximately 250 number of ROTP graduates each year
21 average number of students in a first year class
20% percentage of female Engineering graduates

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650 number of hours of Second Official Language Education and Training (SOLET) that can be provided over 4 years to each student
7:1 average student to SOLET instructor ratio
250,000+ print books found in the RMCC library, plus tens of thousands of online journals and electronic books
The Academic Component

RMCC’s Academic Component consists of an undergraduate degree and the core curriculum. Students with a secondary school diploma begin their university studies at RMCC. Students completing Secondary V through the Ministry of Education of Quebec begin their studies by completing Preparatory Year and First Year of CEGEP at Royal Military College Saint-Jean in Quebec, and then continue with university studies at RMCC.

Undergraduate Degrees
RMCC offers 19 four-year Baccalaureate degrees in Arts, Science, and Engineering.

Bachelor of Arts (Major and Honours)
- Business Administration
- Economics
- English
- French Studies
- History
- Politics
- Military and Strategic Studies
- Military Psychology and Leadership

Bachelor of Science (Major and Honours)
- Chemistry
- Computer Science
- Mathematics
- Physics
- Space Science

Bachelor of Engineering
- Aeronautical
- Chemical
- Civil
- Computer
- Electrical
- Mechanical

All of RMCC’s Engineering programmes are accredited by the Canadian Engineering Accreditation Board
**Arts**

By virtue both of its diversity and its emphasis on providing to Canadians well-rounded citizens capable of excelling both within and beyond the domain of the CAF, an RMCC Arts degree ensures that officer cadets gain knowledge and experience that will prepare them for a career in the military and for their role as leaders in contemporary Canadian (and an increasingly global) society. Officer cadets take courses that offer knowledge relevant to their academic specializations, alongside which they can expect to develop crucial oral and written communication skills, creative and critical thinking capabilities, and problem-solving strategies. Central to the overall vision of the Faculty of Arts is that officer cadets graduate prepared to contemplate and engage in, and with, the vast array of social, political, psychological, economic, philosophical, artistic, cultural, and human experiences that they will encounter as global citizens of the 21st century.

Officer cadets in the Arts programmes at RMCC are required to take a common set of core courses in the first year and then declare a Major field of study in the second, during which the programme consists of a combination of compulsory and elective courses.

**Science**

The Faculty of Science provides quality Science based programmes to officer cadets within the RMCC framework of a broad-based education so that these officer cadets may acquire the intellectual and ethical foundations needed to lead with distinction in the CAF.

The Faculty of Science offers Minors in Life Science and in Environment, which can be taken by officer cadets in any Science programme. Officer cadets follow a common first year programme consisting of a mixture of Science courses (Algebra, Calculus, Chemistry, Computer Science, Physics) and Arts courses (English, Psychology, History). After first year, officer cadets choose the departmental programme they wish to follow.

**Engineering**

The Faculty of Engineering is responsible for the education of future officers for professional careers in engineering in the CAF. Of primary concern is the development of professional competence in areas applicable to the military and society at large. The curriculum is a mixture of domain-specific engineering courses rounded out by knowledge-broadening courses in the humanities.

All engineering programmes are based on a common first year with specialization commencing in the second year of study. The fourth year programme includes a realistic engineering project for which officer cadets must define the problem as well as find an appropriate engineering solution which will inevitably involve the interaction of several subject areas.

The RMCC Engineering programmes are highly regarded due to their practical application to military problems and the low officer cadet to professor ratio. These unique characteristics, along with a commitment for excellence in education, assures successful candidates of an Engineering degree with a difference.

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RMCC Chemical Engineering laboratory is state-of-the-art and hosts the College’s SLOWPOKE II nuclear reactor.
The Faculty of Arts

Business Administration
The study of business administration involves a number of functional areas including accounting, information systems, finance, marketing, operations management and human resource management. The practice of business administration does not take place in a vacuum, and understanding the environmental context and its relationship with a functional area is essential to the development of effective decisions, policies and strategies. The programme will provide the officer cadet with a basic understanding of certain core disciplines such as quantitative methods, economics and psychology as well as providing the student with a basic understanding of each of the functional areas listed above.

Economics
Economics is the social science that studies how individuals, firms, and governments make choices on allocating scarce resources to satisfy unlimited wants. Economics is everywhere: from officer cadets choosing how much time to allocate to studying versus going to the gym or going out, to governments choosing how to allocate resources to education, health care, or security; all these decisions involve a choice of one or more alternatives given limited resources, such as time and/or money. There are two main branches of economics: microeconomics and macroeconomics. Microeconomics studies the behaviour of individual decision makers such as firms and households. It deals with determination of prices and quantities in individual markets and with the relationship among markets. In contrast, macroeconomics is concerned with the behaviour of the economy as a whole, in particular, with factors such as unemployment, national income, economic growth, inflation, and price levels.

English
Designed to develop and refine basic communication skills and enhance problem-solving abilities, the English Studies programme introduces officer cadets to the importance of cultural and social values in the modern world. Through the consideration of various literary works, the programme explores both traditional and non-traditional values in contemporary societies and examines how these are often as relevant as economic, political and historical factors to an understanding of our world. The programme is designed to foster both the general intellectual development achieved through university education and the particular skills and insights derived from the study of literary culture and language.

French Studies
The programme is designed to improve the officer cadets’ communication skills, teach them to analyze information and problems thoroughly and provide them with a solid experience of francophone literature. By studying numerous literary works, officer cadets gain an understanding of the importance of cultural and social values in the development of societies and in today’s world, with particular emphasis on la Francophonie. The programme also shows that sociocultural standards may vary considerably from one society to another.
History
Appreciating the origins and complexities of the society in which we live requires an understanding of history, the study of which has also been described as one of the best possible educations for military leaders, short of actual battlefield experience. The programme places considerable emphasis on the study of international relations, civil-military relations and the impact of war on society while providing a broad exposure to the study of the histories of Canada, the Commonwealth, Europe, the United States, the former Soviet Union, the Middle East, China and Africa. Specialized thematic courses are also available.

Military and Strategic Studies
This programme employs a multidisciplinary approach to the study of international relations, strategic thought and military history, through a combination of core courses in History, Political Science and Psychology. This programme is organized to provide a solid foundation for those who intend to pursue careers in the areas of international relations, defence and security studies either inside or outside of the CAF.

Military Psychology and Leadership
The Military Psychology and Leadership Department provides officer cadets at RMCC with the philosophical and psychological framework on which to build a sound understanding of the dynamics of leadership in the military. As much as possible using a military backdrop, this vision focuses on self awareness and appreciation of human behaviour; ability to understand and apply influence in social situations; skill in adapting effective leadership approaches in a variety of circumstances; and an appreciation of the necessity for personal integrity, importance of human dignity, and need to reflect continually on one’s values and professional conduct.

Politics
Courses in political science are multidisciplinary and focus on a broad spectrum of philosophical, social, political, strategic, military and security issues, both domestic and international, and their political implications. The Politics programme is divided into six major fields of study: Canadian government, international relations, comparative politics, political theory, public administration and policy, and geography. The programme focuses on methods of inquiry and political philosophy, as well as addressing the big questions of peace, justice, democracy, and equality.
The Faculty of Science

Chemistry
Chemistry provides a basic building block for a broad understanding of the world around us. The principles and chemical properties learned will pervade every aspect of one’s personal and professional life. Chemistry graduates find employment in a wide range of areas, including the petrochemical, pharmaceutical and food industries, in materials and environmental sciences, and in many areas of medicine. The Department of Chemistry and Chemical Engineering offers a BSc in Chemistry (Honours and Major) covering fundamental aspects of the chemical sciences, with applications related to the military, nuclear science, the environment, and materials. Officer cadets also have the option of specializing in Life Sciences (courses geared towards chemical biology) and/or Environmental Sciences by taking advantage of our two available Minors.

Computer Science
The importance of computers and their applications continues to grow in almost every sector of human endeavour. With a solid foundation in mathematics, algorithm analysis, computational complexity and programming fundamentals, graduates are well-equipped to cope with the complex systems employed throughout the CAF.

Mathematics
Apart from being a subject of study in its own right, Mathematics provides practitioners in many fields with the tools to measure, analyze, and understand problems and phenomena within their respective disciplines. In today’s complex world, mathematics graduates are required in virtually all parts of our lives where mathematical modeling provides the basis of our understanding and control. Mathematics graduates are often employed as consultants, as systems analysts or engineers, in operations research and in numerous other roles.

Physics
Physics is a natural science based on experimentation, measurement and quantitative analysis with the purpose of explaining and predicting all physical phenomena, ranging from the nanoscale to the macrocosmos. It involves the study of matter and its motion through space and time, along with related concepts such as energy and force.
Physics is one of the oldest academic disciplines, perhaps the oldest through its inclusion of astronomy. It intersects with many interdisciplinary areas of research, and its boundaries are not rigidly defined. Physics makes significant contributions through advances in new technologies that arise from theoretical and experimental advances.

The RMCC Physics undergraduate programme offers a wide range of courses addressing many aspects of the physical sciences, such as mechanics, classical and modern physics, as well as electromagnetism and optics. Many specialized courses are offered in senior years to cater to the various branches of physics. These courses are mainly related to the three axes of research within the Physics Department at RMCC: acoustics and oceanography, materials science, and space science, including astronomy and astrophysics. Hands-on experimental courses form a core component in every year of this programme. In the honours program, officer cadets are provided an opportunity to explore individual subfields in greater depth, as well as to pursue independent research under the supervision of a faculty member.

**Space Science**

The Space Science programme at RMCC is offered by the Physics Department, which is a more specialized physics-based degree focused principally on topics related to space mission development and operations, space research and astronomy/astrophysics. The majority of courses in junior years of the Space Science programme are identical to those in the Physics programme. The programmes diverge in senior years, where officer cadets are required to complete advanced space-related courses, including orbital mechanics and space concepts and applications. In the honours programme, officer cadets take more specialized courses, including space communication and navigation and physics of the space environment. Honours officer cadets work as a team to complete a capstone project designing a realistic space mission.

RMCC houses a Space Surveillance and Research Laboratory, which has a primary goal of fostering learning and aiding in the development of a Canadian knowledge base in the areas of space science and astronomy. In collaboration with Defence Research and Development Canada (DRDC), the research laboratory has been an integral part of the Canadian Surveillance of Space Concept Demonstrator, a fully automated network of small, satellite tracking telescopes across Canada.
Faculty of Engineering

Aerospace Engineering
Aerospace Engineering focuses on the design, construction and science of aircraft, spacecraft and airborne weapons technologies. Developing vehicles and systems for atmospheric and space environments, Aerospace Engineers have a thorough knowledge of aerodynamics, fluid dynamics, propulsion, aircraft performance, structures, flight dynamics, control and navigation systems, and avionics. Working with highly interrelated systems, Aerospace Engineers must understand all aspects of a complicated project. Venturing into state of the art technologies, Aerospace Engineers are at the forefront of exploring all possibilities to allow us to travel faster and farther, both in the atmosphere and into space.

Chemical Engineering
The Chemical Engineering programme has a strong Materials Engineering component. Nuclear and Environmental Engineering are also included to reflect the spectrum of chemical engineering interests of value to the CAF and DND. In addition to the basic Chemical Engineering core, the programme emphasizes the areas of corrosion, fuel cells, batteries, alloys, polymers, ceramics, composite development, explosives, combustion processes, nuclear energy applications and environmental stewardship. All of these areas highlight the unique nature of the Chemical Engineering degree at RMCC.

Civil Engineering
Civil Engineering courses include strength of materials, structural theory, engineering survey, engineering economics, soil mechanics, concrete and steel design, foundation design and analysis, highway design, environmental and sanitary engineering, and many other topics. In their Third Year, officer cadets complete a two week survey school, further developing their knowledge of surveying, report writing and presentation skills, and ability to manage projects. Upon completion of survey field school, officer cadets will gain practical engineering experience by travelling to a Canadian Forces Base and working on site.
**Computer Engineering**

Computer Engineers work with and understand both the hardware and software of computer systems. They fuse together aspects of Electronics and Applied Computer Science. The Computer Engineering programme at RMCC offers elective concentrations that allow officer cadets to focus on the Software Engineering aspects of computer system design or on the Electronic Systems Engineering aspects. Software Engineering is the application of Computer Science to the design of new computer based products and systems. The Electronic Systems Engineering concentration focuses more on the computer hardware aspects of system design, studying the application of electrical and electronic systems engineering to the design of computer based systems and the embedding of computer systems in more complex products.

**Electrical Engineering**

This discipline involves knowledge of the theories and principles of mathematics, science, electronics and engineering to develop a deeper understanding of analog, digital, control and electromagnetic/optical design principles. Officer cadets studying within the Electrical Engineering programme will take courses that build their knowledge within one of the following streams: Power and Control, or Communications and Electronics.

Electrical Engineers use their knowledge of electrical and electronic system design to engineer some of the most complex systems of our time. They are involved in the development of smart grids for delivery of reliable energy, advanced telecommunications networks, development of electric vehicles and robotics.

**Mechanical Engineering**

Mechanical Engineering is one of the oldest and broadest of the engineering fields. Mechanical Engineers are innovators, focusing on the analysis, design, manufacturing and maintenance of items of all size which extend humans physical abilities, from small nano-machines to large manufacturing plants. With a solid understanding of mechanics, kinematics, thermodynamics, fluid mechanics, materials science, control systems, and energy, Mechanical Engineers possess exceptional problem solving skills which are required to tackle today’s most challenging technical problems. Mechanical Engineers work in a team environment, with solid leadership and communications skills, in all levels of industry, public service and military organizations.
Royal Military College Saint-Jean

The RMC Saint-Jean is located on the historic site of Fort Saint-Jean, originally built in 1666, which is now part of the city of Saint-Jean-sur-Richelieu, Quebec, 40 kilometers south of Montreal. It offers a low teacher-officer cadet ratio, a superior physical fitness programme, high-quality teaching with an experienced military team, and a variety of leadership activities.

Mission and Education
The mission of RMC Saint-Jean is to educate duly selected CAF members in order to instill them with the competencies required to maintain excellence in the profession of arms.

Programmes
RMC Saint-Jean ensures officer cadets a seamless transition from high school to university by providing College-level and first year university programmes in Science and Social Sciences. Each programme is offered in the first official language of the candidate and includes the Preparatory Year and First Year.

Preparatory Year
Preparatory Year is equivalent to Grade 12 in most provinces and to the first year of College-level studies (CEGEP) in Quebec. The CEGEP programme is the normal entry point into the Canadian Military Colleges for Quebec high-school graduates. This academic year is also designed for officer cadets from across Canada who demonstrate strong academic ability but are missing prerequisites for direct admission to First Year. Following successful completion of Preparatory Year, officer cadets typically begin their undergraduate degree at RMC Saint-Jean.

First Year
This academic year is designed to provide the same university-level programmes offered at RMCC in Kingston, Ontario. Officer cadets who meet the prerequisites may be given the opportunity to complete RMC Saint-Jean without the need to attend Preparatory Year. Officer cadets who complete First Year at RMC Saint-Jean continue toward an undergraduate degree beginning in the Second Year at RMCC. Upon completion of their two years of study, officer cadets who meet all the requirements of the Quebec Department of Education receive a Diploma of College Studies (DCS). After completing their Preparatory Year and First Year at RMC Saint-Jean, officer cadets then pursue their studies at RMCC in Kingston.

Visiting RMC Saint-Jean
RMC Saint-Jean holds an Open House event each year in November, the weekend before Remembrance Day. It is also possible to visit the College during the academic year by contacting the Liaison Cell by email at Requete-Request@forces.gc.ca. Senior ROTP candidates may receive an offer to study in either one of the two military colleges; candidates may not choose the college they will attend, and the selection is random. Senior candidates selected for RMC Saint-Jean will complete their first year of university studies and the Basic Military Officer Qualification in Saint-Jean-sur-Richelieu, after which they will attend RMCC in Kingston for three years. The majority of candidates who received an offer for RMC Saint-Jean greatly enjoyed their stay, namely because of the individualized education (200 officer cadets) and the opportunity of perfecting their proficiency level in French and their leadership abilities.
Potential undergraduate candidates and their families are encouraged to visit RMC Saint-Jean. Campus tours are offered throughout the year, and can be requested through requete-request@forces.gc.ca.

The Preparatory Year at RMC Saint-Jean is designed for students who have completed high school in Quebec, as well as students outside the province of Quebec who demonstrate strong academic ability but are missing prerequisites for direct admission to the Royal Military College of Canada in Kingston, Ontario.
<table>
<thead>
<tr>
<th>Province</th>
<th>ARTS</th>
<th>SCIENCE</th>
<th>ENGINEERING</th>
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</thead>
</table>
| BC       | • English 12  
          • Pre-Calculus 11 or Pre-Calculus 12 | • English 12  
          • Calculus 12  
          • And any two of the following:  
            - Mathematics 12  
            - Chemistry 12  
            - Physics 12  
            - Biology 12 | • English 12  
          • Calculus 12 or Mathematics 12  
          • Chemistry 12  
          • Physics 12 |
| YT       | • English 30-1  
          • Mathematics 30-2 or Mathematics 30-1 | • English 30-1  
          • Mathematics 30-1 or Mathematics 31  
          • And any two of the following:  
            - Mathematics 30-1 or Mathematics 31 (whichever one has not already been taken)  
            - Chemistry 30  
            - Physics 30  
            - Biology 30 | • English 30-1  
          • Mathematics 30-1  
          • Mathematics 31  
          • Chemistry 30  
          • Physics 30 |
| AB       | • English 30A  
          • English 30B  
          • Foundations of Mathematics 20 or Foundations of Mathematics 30 or Pre-Calculus 30 | • English 30A  
          • English 30B  
          • Pre-Calculus 30 (or Mathematics 30A and Mathematics 30B)  
          • And any two of the following:  
            - Calculus 30  
            - Chemistry 30  
            - Physics 30  
            - Biology 30 | • English 30A  
          • English 30B  
          • Pre-Calculus 30 (or Mathematics 30A and Mathematics 30B)  
          • Calculus 30  
          • Chemistry 30  
          • Physics 30 |
| NWT      | • English 40S or French 40S  
          • Pre-Calculus 30S or Pre-Calculus 40S | • English 40S or French 40S  
          • Pre-Calculus Mathematics 40S  
          • And any two of the following:  
            - Applied Mathematics 40S  
            - Chemistry 40S  
            - Physics 40S  
            - Biology 40S | • English 40S or French 40S  
          • Pre-Calculus Mathematics 40S  
          • Chemistry 40S  
          • Physics 40S |
| NU       | • English ENG4U or French FRE4U  
          • Functions MCF3M or Functions and Relations MCR3U or Advanced Functions MHF4U | • English ENG4U or French FRE4U  
          • Advanced Functions MHF4U or Calculus and Vectors MCF4U  
          • And any two of the following:  
            - Advanced Functions MHF4U or Calculus and Vectors MCV4U (whichever one has not already been taken)  
            - Chemistry SCH4U  
            - Physics SPH4U  
            - Biology SBH4U | • English ENG4U or French FRE4U  
          • Advanced Functions MHF4U  
          • Calculus and Vectors MCV4U  
          • Chemistry SCH4U  
          • Physics SPH4U |
| MB       | • English (French) - 2 core courses  
          • CEGEP Calculus or Algebra, or:  
            - Sec V Mathematics Technical & Scientific Option (064506 or 564506); or  
            - Sec V Mathematics Science Option (065506 or 565506); or  
            - (Prior to 2010) Sec V Mathematics 536 or 526 | • English (French) - 2 Core courses Mathematics (two of the following):  
            - 201-GGF-05  
            - 201-NYA-05  
            - 201-NYC-05  
            - 201-NYB-05  
          • And any two of the following:  
            - An additional Math not previously taken  
            - Chemistry 202-NYA-05  
            - Physics 203-NYA-05  
            - Biology 101-NYA-05 | • English (French) - 2 Core courses  
          • Mathematics (two of the following):  
            - 201-GGF-05,  
            - 201-NYA-05  
            - 201-NYB-05  
            - Chemistry 202-NYA-05  
            - Physics 203-NYS-05 |
| QC       | • English (French) - 2 core courses  
          • CEGEP Calculus or Algebra, or:  
            - Sec V Mathematics Technical & Scientific Option (064506 or 564506); or  
            - Sec V Mathematics Science Option (065506 or 565506); or  
            - (Prior to 2010) Sec V Mathematics 536 or 526 | • English (French) - 2 Core courses Mathematics (two of the following):  
            - 201-GGF-05  
            - 201-NYA-05  
            - 201-NYC-05  
            - 201-NYB-05  
          • And any two of the following:  
            - An additional Math not previously taken  
            - Chemistry 202-NYA-05  
            - Physics 203-NYA-05  
            - Biology 101-NYA-05 | • English (French) - 2 Core courses  
          • Mathematics (two of the following):  
            - 201-GGF-05,  
            - 201-NYA-05  
            - 201-NYB-05  
            - Chemistry 202-NYA-05  
            - Physics 203-NYS-05 |
### Province

<table>
<thead>
<tr>
<th>Province</th>
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<th>SCIENCE</th>
<th>ENGINEERING</th>
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</table>
| **NB** (English Sector) | • English 122 or French 10411  
• Pre-Calculus 110 | • English 122 or French 10411  
• Pre-Calculus A 120  
• Pre-Calculus B 120  
• And any two of the following:  
  • Physics 122  
  • Chemistry 122  
  • Biology 122 | • English 122 or French 10411  
• Pre-Calculus A 120  
• Pre-Calculus B 120  
• Physics 122  
• Chemistry 122 |
| **NB** (French Sector) | • French 10411 or English 122  
• Mathematics 30311B and 30321B, or Mathematics 30331C | • French 10411 or English 122  
• Mathematics 30331C or Mathematics 30411B or Mathematics 30411C  
• And any two of the following:  
  • Mathematics 30331C/30411B/30411C (whichever one has not already been taken)  
  • Physics 51411  
  • Chemistry 52411 | • French 10411 or English 122  
• Mathematics 30411C  
• Mathematics 30331C or Mathematics 30411B  
• Physics 51411 or Physics 51421  
• Chemistry 52411 |
| **NS** | • English 12 or French 12  
• Pre-Calculus 11 or Pre-Calculus 12, or Academic Mathematics 11 | • English 12 or French 12  
• Pre-Calculus 11  
• And any two of the following:  
  • Pre-Calculus 12  
  • Chemistry 12  
  • Physics 12  
  • Biology 12 | • English 12 or French 12  
• Pre-Calculus 11  
• Pre-Calculus 12 or Calculus 12  
• Chemistry 12  
• Physics 12 |
| **PEI** | • English 621 or French 621  
• Mathematics 521 or Mathematics 611 or Mathematics 621A or Mathematics 621B | • English 621 or French 621  
• Mathematics 611 or Mathematics 621A or Mathematics 621B  
• And any two of the following:  
  • Mathematics 611/621A/621B (whichever one has not already been taken)  
  • Chemistry 621  
  • Physics 621  
  • Biology 621 | • English 621 or French 621  
• Mathematics 611  
• Mathematics 611B  
• Chemistry 621  
• Physics 621 |
| **NL** | • Any English or French (Level 3)  
• Mathematics 2200 | • Any English or French (Level 3)  
• Mathematics 3205/3200 or Mathematics 3207/3208  
• And any two of the following:  
  • Math 3205/3200 or Mathematics 3207/3208 (whichever one has not already been taken)  
  • Chemistry 3202  
  • Physics 3204  
  • Biology 3201 | • Any English or French (Level 3)  
• Mathematics 3205  
• Mathematics 3202  
• Chemistry 3202  
• Physics 3204 |

**NOTES**

1. Candidates intending to pursue their studies in French should have completed secondary school level courses in French equivalent to the course in English required above.
2. Candidates who do not meet the prerequisite course requirements but have high academic standing may be considered for admission.
3. Elective courses taken to complete a secondary school programme should be chosen carefully to strengthen academic preparation.
4. Required course codes may vary in response to changes in provincial education course coding system.
5. RMCC reserves the right to reject candidates on the basis of their overall academic record, even where entrance requirements have been met. Normally, a candidate who has been required to withdraw from another university or college for academic reasons will not be considered for admission until a full academic year has elapsed.
Admission Requirements

General Qualifications
To qualify for admission to RMCC, a candidate must:
• Be a Canadian citizen
• Meet the minimum medical standard required for CAF enrolment
• Pass pre-enrolment tests
• Be 16 years of age to submit an application
• Possess the necessary academic qualifications

Academic Qualifications
To qualify for admission to RMCC, a candidate must be in the process of completing or have completed secondary school at a university preparatory level (Grade 12 or the provincial equivalent). Candidates are required to have the necessary credits for admission to a university in the province where they are completing secondary education. Quebec students enrolled in CEGEP must be completing or have completed the first year of a two year pre-university programme, and will normally be expected to have completed fourteen credit courses.

Additional requirements for admission to Arts, Science and Engineering programmes are summarized below.

Arts
• A university preparatory Mathematics course, preferably Calculus (Grade 12 or the provincial equivalent), is strongly recommended. Candidates who have not completed Grade 12 Mathematics must have completed Grade 11 Mathematics at the university preparatory level, and will be required to take an additional pre-university level Mathematics course in their first year of the Arts programme.
• University preparatory Chemistry and Physics courses (Grade 12 or the provincial equivalent) are preferred but not required. Candidates who have not completed Grade 12 Chemistry and Physics will be required to complete supplementary courses as part of their RMCC programme.

Science
Chemistry is required for a major concentration in Chemistry, while physics is required for a major concentration in Physics and Space Science.

Engineering
In addition to the general academic qualifications applicants for the Engineering programme must have completed high school university preparatory courses (normally Grade 12 or provincial equivalent) in the following subjects: English, Chemistry, Physics, and two Mathematics; Functions, and Calculus (if available within the provincial system).

Students must have a minimum course mark of 75% for each of the required courses and have an overall average of 75% on the best 6 courses completed in Grade 12 including the required courses.