# McMASTER

future.mcmaster.ca







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#### How to Use This Book

Thinking about becoming a Marauder? Use this book as a guide to find out what we offer.

#### Unsure of what you want to study?

You're not alone! Flip to page 26 to explore our Academic Programs Directory. The Directory will lead you to pages about the programs that are available to apply to directly from high school.

#### Already know what you want to study?

Spend some time on pages 28 to 95 to learn more about your program of choice.

If you already know the programs inside and out, flip to the inside of the back cover to review our admission requirements and deadlines.

#### Not an Ontario high school student?

Canadian students can learn about their requirements on page 100.

If you're from outside of Canada, visit future.mcmaster.ca to see the requirements based on your educational background.

When in doubt, don't hesitate to reach out! Our contact information can be found on the back cover.

#### Come Take a Tour

When you've determined that McMaster aligns with your academic goals, or if you simply want to learn more about y our options here, join us in-person or virtually for a campus tour. Advance registration is required. For more information and to register for a tour please visit future.mcmaster.ca/visit







President's MESSAGE

Since McMaster University's founding in 1887, our aim has been to develop and realize the potential of individuals and society at large. We believe that unleashing the creativity and curiosity of our diverse and dynamic community of students, researchers, teachers and staff to consider a wide variety of issues of fundamental importance to our local and global communities provides unlimited potential for learning and discovery.

As an institution, and as a community of researchers, teachers and learners, we are committed to improving the health and well-being of all people, contributing to global knowledge and understanding, and advancing the societies and the world in which we live.

At McMaster, we work hard to create an enriching student experience and provide opportunities for students to engage in experiential learning and connect and collaborate with the community and the world at large. This Viewbook outlines McMaster's unique and innovative program combinations which enable you to customize your education to align with your personal strengths and career ambitions.

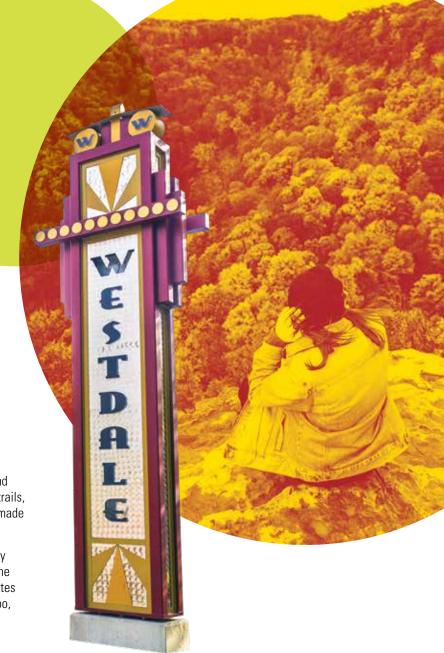
Our goal is to empower innovative thinkers who are eager to share their ideas in a spirit of openness, inclusiveness and collaboration. We believe that bringing together the best and brightest minds within our diverse student body is the spark that makes a brighter world.

Welcome to a Brighter World. | Welcome to McMaster.

Dr. David Farrar, President and Vice-Chancellor







Hamilton,
ONTARIO

Everything you want and need is right here in our city's borders. Hamilton is a city where artists are celebrated at galleries and festivals, history is honoured through historic sites, museums and architecture, nature is preserved and enjoyed through gardens, trails, waterfalls, beaches and conservation areas, and memories are made at sporting events, local shops, and vibrant restaurants.

Also known as "The Hammer", Hamilton is the fourth-largest city in Ontario and the tenth-largest city in Canada. We are part of the Golden Horseshoe, less than an hour's drive from the United States border and only 45 minutes from Toronto, Niagara Falls, Waterloo, and Guelph.

Discover McMaster's Backyard:



Hamilton is home to 100+ waterfalls and situated along the Niagara Escarpment and Bruce Trail. cityofwaterfalls.ca



Find a 320-hectare river-mouth marsh, glacial plateaus, 16 creeks and 25 kilometres of shoreline at Cootes Paradise.

cootestoescarpmentpark.ca



The Art Gallery of Hamilton is home to a variety of Canadian art and an impressive European collection. artgalleryofhamilton.com



Supercrawl, an annual festival on James Street, showcases the cultural character of the street and city. **supercrawl.ca** 



With access from campus, the Royal Botanical Gardens features gardens, trails and nature sanctuaries. rbg.ca



FirstOntario Centre and Tim Hortons Field host spectacular concerts and sporting events. coreentertainment.ca/FirstOntario-Centre & ticats.ca

## Aids & Awards

#### Automatic Entrance Awards

Automatic entrance awards are given to the top incoming students based on academic achievement. These awards will be open to both domestic and international applicants and will be calculated using the top six final grades in U/M courses (or equivalent), including those required for admission to the Level I program. Scholarship offers are based on your admission average at the time of your application. Any offers are conditional until we receive final grades from OUAC.

Students can only be eligible for either the Award of Excellence or faculty-specific achievement awards.

For information on the automatic entrance award values, please visit registrar.mcmaster.ca/entrance-awards

#### The McMaster University Award of Excellence

This award is granted to students with a final admission average in the top 10% of their Faculty's incoming class.

#### 2022-2023 Est. Top 10% Admission Avg. by Faculty

Faculty	Estimated Top 10% Admission Averages*
Arts & Science	99%+
DeGroote School of Business	95%+
Engineering	98%+
Health Sciences	99%+
Humanities	94%+
Science	98%+
Social Sciences	94%+

\* The listed cut off percentages are estimated and subject to change pending the calculation of all final admission averages.



#### Faculty-Specific Achievement Awards

These awards are granted to students with a high final admission average as determined by their Faculty. Please visit registrar. mcmaster.ca/entrance-awards/ for the 2022-2023 estimated admission average cut offs by Faculty and for more eligibility details.

#### **AwardSpring**

We've made applying for aid & awards simple. Using our awards management platform, AwardSpring, you can browse, be matched with and apply for opportunities you're eligible for; all in one place.

Complete a personal profile telling us a little bit about yourself and we'll present opportunities that may be right for you. Applications for entrance awards requiring an application open in November.

Visit registrar.mcmaster.ca to learn about how to apply for awards on AwardSpring

#### Awards By Application

#### **Brighter World Awards**

A total of \$250,000 will be awarded to Black students entering Level I programs, to recognize their outstanding achievements.

#### The Access Award

Up to \$25,000 a year in aid & award funding will be awarded to academically qualified students from equity-deserving groups in the Golden Horseshoe area. Funding goes towards tuition, compulsory fees. books, equipment and living costs. Recipients are also guaranteed one McMaster University work experience.

#### Provost Entrance Scholarship for International Students

- 10 x \$7.500
- Award requires an application; students are nominated by their high schools to recognize involvement in community initiatives and demonstrated leadership

#### Marjorie Anderson Academic Grants

Two awards valued at \$80,000 each, available to Indigenous students entering Level I

#### Schulich Leader Scholarships

Up to \$100,000 available for students entering programs in science, technology, engineering or math (STEM)

- Learn more at schulichleaders.com
- + over \$1,000,000 in Faculty-specific entrance aid & awards

Visit registrar.mcmaster.ca for more on entrance awards and their specific eligibility details.

#### Approximate First-Year Expenses

	Living on	Living off Campus	Living at Home	
	Campus		Local	Commuter
Tuition Fees*	\$6,000	\$6,000	\$6,000	\$6,000
Accommodation (On-campus fee based on double-occupancy room)	\$7,750****	\$7,500**	\$0	\$0
Food (Meals) (On-campus fee based on minimum meal plan)	\$4,545	\$3,600	\$1,800	\$1,800
Books and Supplies	\$1,300	\$1,300	\$1,300	\$1,300
Personal Expenses	\$1,000	\$1,000	\$1,000	\$1,000
Transportation***	\$0	\$0	\$0	\$3,200
TOTAL	\$20,595	\$19,400	\$10,100	\$13,300

Calculate the cost of your university experience via our cost estimator: future.mcmaster.ca/money-matters/cost-estimator

- \* Tuition fees for a full course load (for 2021/22) including all essential fees, range from approximately \$6,000 to \$12,500 for Canadian students and start at approximately \$37,000 for international students.
- \*\* Based on pricing for 2021/22
- \*\*\* Based on shared living expenses and a 12-month lease.
- \*\*\*\* A Hamilton Street Railway (HSR) bus pass is included as part of the student's supplementary fees. Commuter cost based on a transit pass of \$400/month for eight months.

#### **Bursaries**

A bursary is a non-repayable grant intended to assist students in financial need with education-related expenses. Students apply through AwardSpring annually for the McMaster General Bursary Program and the McMaster Summer Bursary Program.

- Application for McMaster bursaries are available in August
- Visit registrar.mcmaster.ca/aid-awards for additional details

#### McMaster Work Program

Finding employment through the McMaster Work Program is a great way to offset some of your university expenses while gaining practical work experience. Students who demonstrate financial need can apply for meaningful employment on campus year-round. Part-time positions are available during the fall and winter terms while full-time and part-time roles are available over the summer.

- 110+ departments participate in work programs
- 1,600+ jobs available across campus
- Jobs include research assistant, library support, website assistant, facility services/maintenance, personal trainers / fitness instructors, and more!
- Find out more at registrar.mcmaster.ca/aid-awards

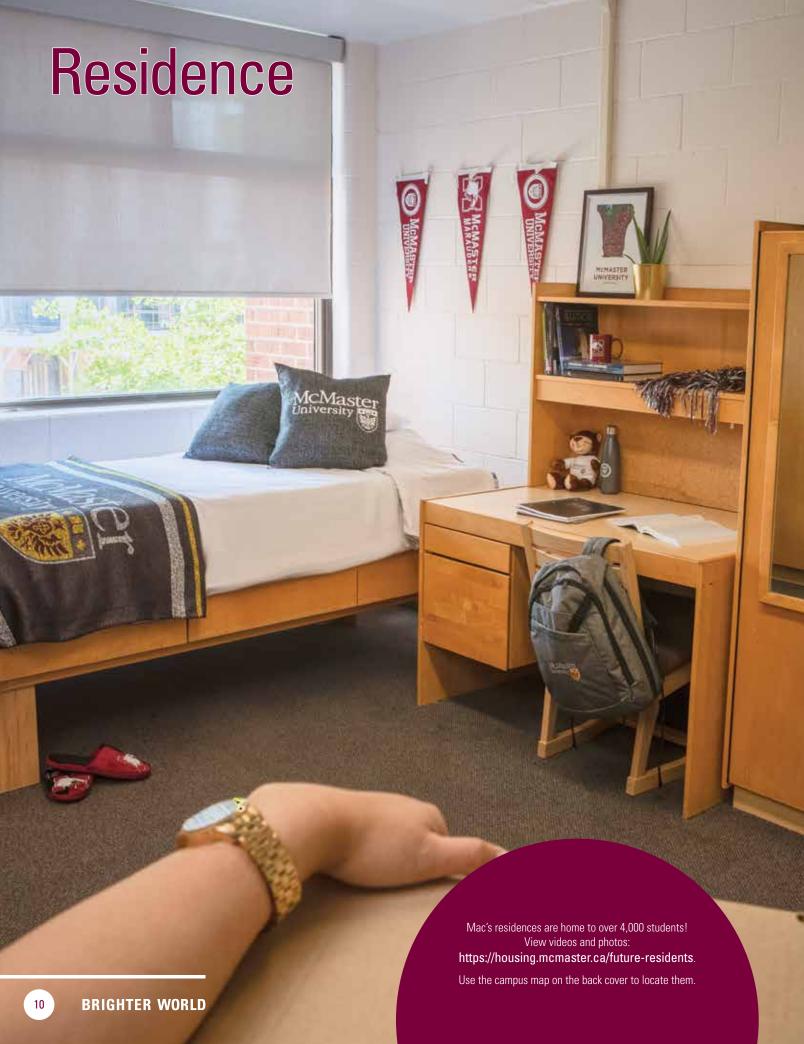
#### **OSAP**

The Ontario Student Assistance Program offers grants and loans to help pay for post-secondary education. Learn more about the program at ontario.ca/osap.

#### We're Here to Help!

Explore the various ways to fund your education at registrar.mcmaster.ca/aid-awards.





#### Welcome to Residence!

Residence life at McMaster offers many academic and social benefits as well as a sense of community, especially within the Living Learning Communities (LLC) available in our residences. Here at McMaster, we understand that learning can extend beyond the classroom. Supported by our professional staff, living in residence provides students with the opportunity to build relationships and gain life skills that will aid in their future success.

#### Residence Options

Our 13 residence buildings are located on our central campus within a five-minute walk to classes, athletic facilities, libraries and many dining options.

We offer a variety of room types across two different styles of buildings – traditional and apartment/suite style.





#### Apartment and Suite Style

- A self-contained apartment or suite with kitchen or kitchenette, washroom and lounge area
- Each student has an individual bedroom within the apartment/suite
- Co-ed buildings
- Minimum of a reduced meal plan required







#### **Traditional Style**

- Dormitory style buildings where students share a washroom, lounge and kitchen area with other residents on their floor
- Single, double, triple and quad rooms are available in a variety layouts with private, shared or communal washroom options.
- All-female buildings/floors available
- Full meal plan required

Floor plans and room layouts may vary For more information about meal plans, please see page 15.

#### How to Apply

- Eligibility criteria for residence is reviewed annually and will be confirmed in early-2022.
- Students are notified of their residence status with their offer of admission
- Students list room-type preferences on their online residence application and may indicate a specific roommate request.
- Students can also indicate their preferences for Living Learning Communities and Themed Communities on their application.
- A room self-selection process is used for students to pick their room and building assignment.

To apply for residence, please complete your online residence application and submit your deposit before 4 p.m. (EDT) on June 1, 2022.

#### **Estimated Residence Costs**

The residence fees below are based on 2021-22 fees and are determined by room type, not building. Fees change annually. For 2022-23 residence fees, visit housing.mcmaster.ca/future-residents/residence-fees in March 2022.

Room Types	Cost
Triple Room	\$7,000
Quad Room	\$6,875
Double Room	\$7,775
Double Room with Access to Single-User Washroom	\$7,975
Double Twin Bed with Connected Shared Washroom	\$8,375
Double Room with Ensuite Washroom	\$8,275
Double Room with Connected Shared Washroom	\$8,675
Single Room	\$8,700
Single Room with Access to Single-User Washroom	\$8,975
Single Room with Ensuite Washroom	\$9,325
Single Room with Connected Shared Washroom	\$9,425
Super Single Room with Connected Shared Washroom	\$9,625
Apartment – Two-Person (Double Room)	\$9,250
Apartment – Four/Six-Person (Single Room)	\$9,250
Suite — Four-Person (Single Room)	\$9,625

Fees include your accommodation and internet access. Fees are subject to change annually.

#### Living Learning Communities (LLC)

Live with other students who share your passions and build great relationships. You'll get to experience the best of residence life together, participating in exciting events, learning more about what you're passionate about, and supporting each other through first-year.

Choose from themed Living Learning Communities, with events, field trips, and experiential learning opportunities all designed around your interests and challenging you to grow. Take a look at our different communities and be sure to apply to an LLC on your residence application. There is no additional cost to be a part of a Living Learning Community, but spaces are limited.

#### Previous Living Learning Communities (LLC)

- Career Hive
- Change Makers
- Creative Expressions
- eSports & Gaming
- Global Perspectives
- Health & Wellness
- Innovation & Society
- Leaders & Influencers
- Outdoor Leadership
- Timeless
- Women in Leadership

#### Themed Communities

- Substance-Free
- All-Female
- Quiet

## **Off-Campus Living**



You may be thinking of living at home and commuting or renting near campus. Thousands of upper-year students live in local neighbourhoods and approximately 40% of all first-year students live off campus. McMaster offers many services to help ensure that your university experience is complete whether you are living on or off campus.

All full-time undergraduate students receive a Hamilton Street Railway (HSR) bus pass, valid for 12 months, as part of their student fees.

Mac Off-Campus Housing Listings offcampus.mcmaster.ca Launched in October 2019, our updated online rental listing website can help you find great off-campus housing.

#### Resources include:

- Searchable online rental listings (most rentals are within a 10–15 minute walk from the campus)
- Education about tenant rights and responsibilities

#### Off-Campus Sample Rents

(Monthly, not including utilities)

- Rooms in a house \$450-\$550
- Bachelor apartment \$800-\$900
- One-bedroom apartment: \$900-\$1,200
- Two-bedroom apartment: \$1,100—\$1,500
- Three-bedroom apartment: \$1,600+

#### Society of Off-Campus Students (SOCS) mac-socs.ca

SOCS strives to help off-campus and commuter students connect to McMaster, and give off-campus students a voice on campus by coordinating social and athletic activities for members throughout the year (e.g., intramural sports teams, peer tutoring, formal dinner and dance, themed social events). SOCS has approximately 400 members each year, who pay a small fee that goes towards organizing all of the above activities.

#### Student Walk-Home Attendant Team msumcmaster.ca/swhat

The Student Walk-Home Attendant Team consists of volunteers (one male and one female) who provide safe and friendly accompaniment for any member of the McMaster community. A SWHAT duo will walk you to or from any location on campus and within a 30-minute radius off campus between 7 p.m. and 1 a.m.





**Dining on Campus** 

Whether you are living in residence or off campus, finding a place to eat at McMaster is simple and convenient. At our various dining locations on campus, vegetarian/vegan choices, international food menus, nutritious options as well as quick snacks are offered to accommodate the diversity of student needs. Most food stations provide fresh, made-to-order selections. Please contact Hospitality Services to discuss any special dietary accommodations required.

#### **Food Allergies**

We know that food allergies can be life threatening and McMaster has established an aggressive and thorough approach to food allergies to ensure that students are well-informed of their options on campus. For a more detailed understanding of our allergy procedures, please contact Hospitality Services.

#### Residence Meal Plans

#### **Basic Meal Plan**

All students in residence must purchase a meal plan. We offer four different meal plans, from Minimum to Varsity, to suit your lifestyle and eating habits. Our most popular plan is the Regular Meal Plan, which allows flexibility and suits the average student's needs. Each plan is available in either a Full or Reduced option, depending on your residence building type.

#### Basic + Options

Your meal plan will include both a "Basic" balance and a "Freedom" balance. The differences between the two have been outlined in the chart below.

Basic	+Freedom
Mandatory	Included
Non-taxable	Taxable
Transferable (minus overhead)	Refundable/Transferable
On-campus food purchases only	On-campus non-food items and participating off-campus food vendor purchases

#### Residence Meal Plan Costs 2021-22



Minimum Full: \$4,545 Reduced: \$3,140\*



Regular Full: \$4,945 Reduced: \$3,540\*



**Light** Full: \$4,745 Reduced: \$3,340\*



Varsity Full: \$5,145 Reduced: \$3,740\*



#### **Off-Campus Vendors**

- BarBuritto
- Basilique
- Boston Pizza
- East Side Mario's
- Fionn's
- Gino's Pizza
- Bean Bar
- Papa John's Pizza

- Pinks Burgers
- Pita Pit
- Pizza Pizza
- Popeve's
- Pita n' More
- Quik Chik
- Twelve Eighty

For additional information on meal plans, dining facilities, daily and weekly menus, nutrition, dietary restrictions, hours of operation, etc., visit hospitality.mcmaster.ca or download our Mac Eats app.

<sup>\*</sup>Reduced is available for Bates and Mary Keyes residences only.



## **Athletics & Recreation**

McMaster Athletics and Recreation has a wide variety of opportunities, including varsity athletics, intramurals, instructional programming, drop-in activities and outdoor recreation. Our facilities include the Ivor Wynne Centre, David Braley Athletic Centre and Ron Joyce Stadium—when combined, our facilities include four gymnasiums that house up to seven courts, three studios, three natural grass fields, three artificial soft-surface fields, 50-metre pool, 200-metre indoor track, 400-metre outdoor track, squash courts, indoor climbing wall, a Mindfulness & Wellness Centre, the only Alpine Tower High Ropes course at a Canadian university, and The Pulse, one of the largest university fitness centres in Canada. A construction project that will expand the David Braley Athletic Centre has officially started. The SAFE (Student Activity and Fitness Expansion) project is expected to be complete by the 2022/23 academic year. The expansion includes additional cardio space, a new bouldering wall, women's only fitness space, 3 studios, 1 spin studio and an expanded weight area.

For try-out information, and coaching contacts, visit marauders.ca.

We're committed to building a safe and inclusive space where diversity is celebrated. All members of our community are welcome to play, learn, and cheer with us.

#### **Club Teams:**

- Cheerleading
- Curling
- Dance
- Field Hockey
- Figure Skating
- Flag Football
- Gymnastics
- Gymnastics
- Ice Hockey
- Kung Fu
- Lifeguarding
- Rowing
- Sailing
- Synchronized Swimming
- Tae Kwon Do
- Ultimate

#### Varsity:

- Badminton
- Baseball
- Cross Country
- Fastpitch
- Fencing
- Football
- Golf
- Lacrosse
- Rugby
- Soccer
- Squash
- Swimming
- Tennis
- Track
- Volleyball
- Water Polo
- Wrestling



#### The Pulse Fitness Centre

This state-of-the-art facility has everything you need to stay fit, regardless of your fitness level, interests, goals or availability. Most full-time undergraduate students (represented by the MSU) have free access to The Pulse. Present your student card to get access to all the equipment, fitness and cycling classes, as well as the indoor climbing wall.

#### The Pulse offers:

- Cardiovascular equipment Treadmills, elliptical trainers, stationary bikes, stair climbers, rowing machines, Adaptive Motion Trainers and several accessible pieces
- Strength training area Over 7,000 square feet of resistance training equipment including single-station machines, free weights, Olympic/power-lifting platforms, and accessible. multi-station areas, including specialty and functional pieces
- Fitness / aerobics / cycling Fitness classes are offered daily and include Zumba, core, yoga, HIIT (high-intensity interval training), and many more; the Cycling Studio contains state-ofthe-art cycling bikes to provide a "revolution" ary experience; classes are run throughout the day at different skill levels
- Outdoor fitness circuit and bouldering wall

#### Something for Everyone!

- Instructional Programs 40+ classes per week; take lessons in yoga, ballet, karate, squash, belly dancing, meditation, Pilates, Latin dancing, fencing, swimming, lifesaving, first aid, hip hop, ballroom dance, lyrical dance, muay thai, Korean sword and krav maga self defense
  - Over 2,300 students enrolled in an instructional program in 2019/20
- Intramural Sports—Everyone Welcome 16 sports,
   40 leagues and tournaments, 2,500+ games for ALL abilities
- Outdoor Recreation Outdoor pursuits, hiking, climbing, kayaking and Alpine Tower
- Jobs Athletics & Recreation is the largest employer of students on campus, spending more than \$1-million a year on student salaries

#### Levels of competition and commitment

- Intramurals once a week time commitment where you can sign up with your friends or as a single. Register for as many sports as you want!
- Club Teams join a student-run and student-funded team
  if you want to keep playing the sport you love without an
  extensive time commitment.
- OUA Teams led by a department appointed coach, these student-funded teams offer competition with other universities in Ontario.
- USPORTS Teams an extensive time commitment and competitive schedule on a national level, members of these teams are typically recruited by our head coaches.



# We Are Here TO SUPPORT YOU

We want you to succeed. From deciding that McMaster might be an option for you to crossing the stage at convocation, there are people in our community to help you along your way. The next few pages recognize some of the organizations in place that can lend a helping hand. When in doubt, the Student Services team can help get your questions answered. Contact us by calling 905-525-4600 or check out future.mcmaster.ca.

#### Student Wellness Centre (SWC)

The Student Wellness Centre is the place on campus to address your wellness needs. We provide a range of counselling options, medical services and wellness programs so that you can get the most out of your McMaster experience, academically and personally!

Some of the services we provide:



#### Counselling

Our experienced counselling staff will sit down with you in a consultation appointment and explore with you what your needs are and some of the best and most effective ways to address those needs.

Counselling services include: individual counselling, group programs and self-help online modules



#### Medical Care

Our medical team, made up of nurses, family medicine doctors and specialist doctors, offers a wide range of health services to provide you with personal healthcare during your time at McMaster.

Medical services include: assessment and treatment for minor illness or injury, referrals, prescriptions, vaccinations, mental health support, psychiatry, naturopathy



#### **Health Promotion**

Our health promotion team team provides prevention and awareness programs to connect you with information, skills and resources on topics such as sexual health, mental health, substance use, food literacy and active living.

Health promotion programs include: workshops, trainings, drop-in events, campaigns



#### Learn More

Visit wellness.mcmaster.ca for information about services, appointments and programs.







@McMasterSWC

#### Student Accessibility Services (SAS) sas.mcmaster.ca

Student Accessibility Services (SAS) provides compassionate, individualized services for students with disabilities with an integrated support structure, including the facilitation of academic accommodations, programming and support services.

We assist students with disabilities to reach their full potential with a service that aims for students to experience full participation, autonomy, empowerment and equity.



#### Academic Accommodation Plan

SAS will develop an academic accommodation plan, in collaboration with the student, as it relates to individualized needs, program of study and degree requirements. To register with SAS please book an intake appointment (before the beginning of the school year, if possible).



#### Student Supports and Services

Learning Strategies and Assistive Technology Support SAS provides individualized learning strategies and assistive technology support through:

- 1:1 support
- Group sessions
- Workshops

These help students with academic preparation, study skills and other strategies to enhance learning and disability-related needs.



#### Student Support Specialist:

The Student Support Specialist works with students with ASD or who identify as neurodiverse. Support is provided through individual and group programming. This assists students with full participation in their educational experience.



#### Wellbeing Learning Hub

The Wellbeing Learning Hub offers peer-to-peer wellbeing supports and services to students who self-identify with a mental health disability. These include:

- Free interactive courses created by students, for students.
- Mindfulness sessions.
- 1:1 peer support and mentorship to students. Everyone is welcome at the hub students do not have to register with SAS or have a diagnosis to take part.



#### **Transition Program**

The Transition Program supports students through the journey at McMaster. This includes a summer orientation program, outreach and skill building workshops.

Contact us: Email: sas@mcmaster.ca Phone: 905-525-9140 x28652





#### Student Success Centre (SSC) studentsuccess.mcmaster.ca

The Student Success Centre's vision is for all students and alumni to thrive and succeed. From the time you accept your offer of admission, up to ten years after graduation, the SSC will provide and help you to connect with the services, programs and resources you need to support your academic, personal and professional success.

Some of the services we provide:



#### Academic Skills Services

We know that university sometimes has its challenges, which is why we provide a diverse set of academic services. Visit the Academic Skills pages on our website to learn about academic coaching, writing support, workshops, peer tutoring and more. Check out our Online Learning Support page to develop your online learning skills.



#### **Careers and Employment Services**

We believe in your professional goals and also believe that it's okay if you're still figuring things out. Visit the Careers pages on our website to uncover how we can assist with your career path and connect you with ways to gain experience.



#### Personal Development Support

Whether you want to explore options, set goals, develop skills, get experience or make connections, we have services to meet your needs. Try browsing our website using the Take Action section on the home page.







@MacSSC



McMaster Student Success Centre – Careers and Employment

#### McMaster Exchange Program

A study-abroad experience is the perfect complement to your McMaster degree. Gain tangible skills in your program of study, challenge your personal limits, foster a global perspective, and differentiate your résumé—all while working towards your McMaster degree requirements.

With over 70 partnership agreements around the world offering a wide variation in class subjects, clubs, and languages, students can choose the experience that fits best with their personal and academic goals.



#### Where could you go?

- Australia Italy
- Austria
- Belaium
- Jamaica
- Japan
- Brazil
- Mexico
- China
- Netherlands
- Croatia
- New Zealand
- Denmark

- Norway
- England
- Scotland
- France
- Singapore

- Germany
- South Korea
- Hong Kong
- Spain
- India
- Sweden
- Ireland
- Switzerland
- Israel
- Taiwan, ROC

#### What are our students saying?

"A semester abroad allowed me to experience a different part of the world and a completely different education system. These differences are so important to be exposed to because you learn so much about yourself ... and the more you learn about yourself and the earlier you can do that, I think the better prepared you are to face your future. A semester abroad, whether it be for four months or one year, is truly a transformative experience."

- Sophie Poinar, University of Bristol, England

#### McMaster Global Experience Program

Getting involved in a volunteer or work opportunity abroad is a great way to develop skills and gain unique experience while working toward your professional goals.

You can engage globally through various types of work and volunteer opportunities at home or abroad. Including conferences, peer programs, volunteering, internships and more.

#### Learn More

For complete details, including individual listings and eligibility, please visit: https://studentsuccess.mcmaster.ca/global-opportunities/



#### International Student Services (ISS)

#### studentsuccess.mcmaster.ca/international-students

ISS is a division of the Student Success Centre that provides additional services and programs for international undergraduate, graduate, visiting and exchange students at McMaster University.

These services include:

- Access to immigration advice and workshops
- Orientation and transition support, including success coaching and the Buddy Program
- Administration of the University Health Insurance Plan (UHIP) for international students
- Events and programs geared to student transition, peer support and community engagement

#### McMaster Access Strategy community.mcmaster.ca

McMaster's Access Strategy assists academically qualified students from under-represented groups in Hamilton and surrounding communities to access university education at the undergraduate level. We work with students to help navigate the application and admissions process and are here to ensure success through to graduation.

Under-represented groups often include:

- Students with parents who did not attend, or complete, post-secondary studies (first-generation university students)
- Indigenous students
- Students with disabilities
- Certain racialized minority students (especially youth with Afro-Canadian and Latin American backgrounds)
- Students from a low-income family or neighbourhood
- Adult learners who are new to post-secondary education
- Students from rural communities
- Women (in some faculties)
- Students who wouldn't attend post-secondary without additional programs or supports

For more information, please email access1@mcmaster.ca.

#### McMaster Students Union (MSU) msumcmaster.ca

The MSU is the largest student organization on campus and serves students in two main areas: political representation and the enhancement of student life. All full-time undergraduate students are members of the MSU.

MSU membership gives you access to several things, including:

- MSU health and dental plan
- Involvement in over 350 clubs
- Employment at one of the MSU's 35 businesses and services
- Hamilton Street Railway (HSR) bus pass program
- MSU events



@MSU\_McMaster



@MSUMcMaster

#### Student Services registrar.mcmaster.ca

The Student Services Team in the Registrar's Office provides a number of administrative services to students in addition to being the primary information source on enrolment, financial aid, convocation ceremonies and important dates and events throughout the year.



## Equity and Inclusion Office (EIO)

equity.mcmaster.ca
The primary role of the Equity
and Inclusion Office is to:

- Provide expert advice, support, and education on matters of equity, diversity, and inclusion including:
  - Anti-Racism
  - Indigenous Initiatives
  - Accessibility and Disability Inclusion
  - Sexual Violence Prevention and Response
- Advance the University's commitment to building and inclusive community
- Receive concerns and complaints related to Discrimination, Harassment and Sexual Violence and facilitate their resolution
- Promote respect, equity and fairness, and celebrate the rich diversity of the campus community







@macindigenous



Indigenous at McMaster

#### Indigenous Student Services indigservices.mcmaster.ca

Indigenous Student Services provides and connects Indigenous learners to the supports they need to achieve their academic goals. We work to promote a safe place for Indigenous learners by removing barriers and providing holistic supports. You can find us in L.R. Wilson Hall, where we have a student lounge, outdoor courtyard, study space, elders lounge and a kitchen for students to use. Services & events include:

- Welcome Week rep team (Indigenous Students & Studies) and
- transitional supports
   Elders-In-Residence Program
- Indigenous Wellness Counsellor
- Academic Supports & Workshops
- Indigenous Scholarships and Bursaries
- Traditional/Cultural Workshops
- End of Term Haudenosaunee Socials
- Mentorship Program Yonkwahahi:yos
- Indigenous Student Groups
- Indigenous Graduation Ceremony

For more information, please email our recruitment email: issrec@mcmaster.ca





## **Build Your Degree**

Your career goals and learning needs are just as unique as your personality and interests. We offer a multitude of ways for you to design your degree based on those goals. All of our programs offer experiential learning in some way, and we are proud of that. We believe experience develops knowledge, clarifies learning and increases your capacity to contribute to the broader community.

On each of our program pages, you will see icons from the list below. The icons represent some of the program's special features.



#### **Direct-Entry Program**

You can apply to these programs directly from high school if you have the prerequisites.



#### Additional Admission Requirement

In addition to your OUAC application, there are additional requirements that need to be fulfilled for successful application to these programs.



#### **Exploratory First Year**

These programs offer a general first year so that you can explore your choices. At the end of your first year, you will choose your area of focus.



#### Co-Op or Internship Options

Gain valuable work experience through the co-op or internship options in these programs.



#### **Experiential Learning**

Gain real-world, academically-relevant experience in research or professional settings through practicums, labs, fieldwork, and more.



#### Add an Option

If you want to graduate with more than your degree, these programs offer diploma or certificate options for you to expand your future prospects.



#### Advanced Credit for SHSM Graduates

Advanced credit is available for students who have completed eligible SHSM programs.

#### **Helpful Terms**

University learning is not just about exploring your course of study—there is a whole new language you have to master. You'll have your head wrapped around it in no time, but for now, we've created the cheat sheet below to get you started.

#### Course Code

Our course codes are a little different from what you may be used to, but it's not hard to understand them once you know what you're looking for. The first part of the code tells you to which program it belongs. For example, ARTSSCI 1B03 is from the Arts & Science program. The second half of the code tells you what level (year) the course is, as well as how many units it takes up in your course load. In this case, this Arts & Science course is a first-year course (the 1 at the beginning), and it will take up 3-units (the 3 at the end).

#### First Year (Second Year, Third Year etc.)

First-year students are typically students who are new to the University and in their first year of study.

#### Level I (Level II, Level III etc.):

Levels are the common way we talk about your progression through a program. Usually, "Level I" students are "first-year students", but that's not always the case if you study part-time, take some time away from studies for co-op, exchanges or leaves, etc., or need extra time to complete your required courses to move on to the next level of study.

#### Minor

A minor is an option available to students enrolled in four or five-year programs. A minor consists of at least 24 units. In most cases, no more than six of those units would be from Level I courses.

#### Term

A term is a period of study. Much like high school, McMaster is divided into two terms: Fall (September–December) and Winter (January–April), with some programs utilizing a Spring/Summer (May–August) term as well.

#### Units

Units define the number of credits associated with a course. A unit is roughly equivalent to one lecture-hour per week for one term or two hours of laboratories or seminars per week for one term. Three-unit courses are usually one term in length. Six-unit courses are usually two terms in length.

### **Academic Programs Directory**

Using the chart below, you can find information about the program(s) you are interested in studying at McMaster. Highlighted sections indicate a program that students apply to directly from high school (Direct-Entry Programs). For a complete listing of subjects, minors, diplomas and certificates, please visit academiccalendars.romcmaster.ca.

Subjects	Faculty/Program	Page
Accounting	Business	30
Actuarial & Financial Mathematics	Science	70
Anthropology	Social Sciences	88
Art History	Humanities	58
Arts & Science	Arts & Science	28
Astrophysics	Science	70
Automation Engineering Technology	Engineering	36
Automotive & Vehicle Engineering Technology	Engineering	36
Biochemistry	Science	70
Biochemistry – Biomedical Research Specialization	Science	70
Biology	Science	70
Biology Research	Science	70
Biology – Physiology Research	Science	70
Biodiversity & Environmental Sciences	Science	70
Biology & Mathematics	Science	70
Biology & Psychology, Neuroscience & Behaviour	Science	70
Biotechnology	Engineering	36
Business	Business	30
Chemical Biology	Science	70
Chemical Engineering	Engineering	42
Chemical & Physical Sciences	Science	70
Chemistry	Science	70
Civil Engineering	Engineering	42
Classics	Humanities	58
Cognitive Science of Language	Humanities	58
Communication Studies	Humanities	58
Computer Engineering	Engineering	42
Computer Science	Engineering	40
Environmental & Earth Sciences	Science	70
Economics	Social Sciences	84
Electrical Engineering	Engineering	42
Engineering I and Engineering I Co-Op	Engineering	42
Engineering Physics	Engineering	42
English & Cultural Studies	Humanities	58
Environmental Sciences	Science	70
Finance	Business	30
French	Humanities	58
Geography	Social Sciences	88
Geography & Environmental Studies	Social Sciences	88
Gerontology	Social Sciences	88
Health, Aging & Society	Social Sciences	88
Health & Society	Social Sciences	86
Health Sciences	Health Sciences	50

History	Humanities	58
Humanities	Humanities	58
Applied Psychology in Human Behaviour	Science	70
Applied Psychology in Human Behaviour – Autism and Behavioural Science	Science	70
Applied Psychology in Human Behaviour – Early Childhood Studies	Science	70
Human Resource Management	Business	30
Indigenous Studies	Social Sciences	88
	Business	30
Information Systems		48
Integrated Biomedical Engineering and Health Sciences	Engineering and Health Sciences	
Integrated Business and Humanities	Business and Humanities	34
Integrated Sciences	Science	70
Justice, Political Philosophy and Law	Humanities	58
Kinesiology	Science	70
Labour Studies	Social Sciences	88
Life Sciences	Science	70
Life Sciences – Origins of Disease	Science	70
Life Sciences – Sensory Motor Systems	Science	70
Linguistics	Humanities	58
Marketing	Business	30
Materials Engineering	Engineering	42
Mathematical Science	Science	70
Mathematics & Computer Science	Science	70
Mathematics & Physics	Science	70
Mathematics & Statistics	Science	70
Mechanical Engineering	Engineering	42
Mechatronics Engineering	Engineering	42
Medical Radiation Sciences	Science	70
Medical & Biological Physics	Science	70
Midwifery	Health Sciences	55
Molecular Biology & Genetics Research	Science	70
Media Arts	Humanities	58
Music	Humanities	66
Music Cognition	Humanities	58
Neuroscience	Science	70
Nursing	Health Sciences	56
Operations Management	Business	30
Global Peace & Social Justice	Humanities	58
Philosophy	Humanities	58
Physics	Science	70
Political Science	Social Sciences	88
Psychology, Neuroscience & Behaviour	Science/Social Sciences	70/88
Psychology, Neuroscience & Behaviour – Mental Health	Science/Social Sciences	70/88
Psychology, Neuroscience & Behaviour – Music Cognition	Science/Social Sciences	70/88
Social Sciences	Social Sciences	88
Social Work	Social Sciences	88
Society, Culture and Religion	Social Sciences	88
Sociology	Social Sciences	88
Software Engineering	Engineering	42
Strategic Management	Business	30
iArts (Integrated Arts)	Humanities	68
Theatre & Film Studies	Humanities	58

## **Arts & Science**



88% \* MX OUAC Application Code Target Enrolment

\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: February 1, 2022

The Arts & Science Program offers a broad-based, interdisciplinary education. The program has an extensive, integrated core curriculum, which bridges the divide between the arts and sciences and also between academic study and social engagement. The majority of our graduates go on to graduate or professional schools in a wide variety of fields.

#### **Degree Option**

Bachelor of Arts & Science (Honours)

#### Requirements for Admission (Ontario)

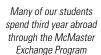
- English
- One of Advanced Functions or Calculus & Vectors
- Completion of four additional 4U/M courses, of which two must be at the 4U level

#### Why Choose McMaster?

- Small program size ensures that students do not feel like a number and fosters close relationships among students, faculty, and staff.
- Highly regarded, challenging program, whose graduates succeed in a remarkable array of meaningful careers.
- Stresses active, cooperative learning, with emphasis on social awareness and on the development of a wide range of transferable skills.
- Offers an integrated set of ARTSSCI courses, plus the option of specializing and a great choice of elective courses.

<sup>\*\*</sup>See Supplementary Application on the next page.







Choose from more than 30 combined honours programs.



The Arts & Science Program is going into its 40<sup>th</sup> year.

#### Supplementary Application

Admission to the Arts & Science Program is limited and by selection only. All applicants are required to provide additional information on the Supplementary Application form to assist us in making decisions on admission. The purpose of the Supplementary Application is to help us learn more about you and your ideas, interests, and activities.

#### First Year at a Glance

Total: 30 units\*\*\*
Required: 24 units\*\*\*

#### First-year courses:

- Practices of Knowledge (ARTSSCI 1A06)
- Writing (ARTSSCI 1B03)
- Argumentation (ARTSSCI 1BB3)
- Inquiry: Global Challenges (ARTSSCI 1C03)
- Contemporary Indigenous Studies (ARTSSCI 1CC3)
- Calculus (ARTSSCI 1D06)

For the remaining 6 units\*\*\*, students have the option of taking two half-year required science courses in first year (one each term) or postponing them to second year in order to take elective courses instead.

#### **Beyond First Year**

Students take specifically designed ARTSSCI courses as well as electives. Elective space increases in upper levels of the program, with two electives per term in second year, and three electives per term in the third and fourth years.

Students can use their electives to specialize in a particular area or simply to satisfy broad interests.

Arts & Science can be combined with 32 different subjects from across the University to achieve a combined honours with:

Indigenous Studies

Molecular Biology & Genetics

Psychology, Neuroscience

Society, Culture & Religion

Theatre & Film Studies

Linguistics

Music

**Physics** 

Mathematics

Philosophy

Political Science

& Behaviour (PNB)

Specialization)

Media Arts

Sociology

PNB (Music Cognition

- Anthropology
- Art History
- Biochemistry
- Biology
- Business
- Chemical Biology
- Chemistry
- Classics
- Communication Studies
- Computer Science
- Economics
- English and Cultural Studies
- Environment & Society
- Environmental Sciences
- French
- Global Peace and Social Justice
- Health & Society
- History

#### **Future Careers**

The majority of graduates enter professional or technical programs, such as:

- Architecture
- Dentistry
- Law

- Medicine
- Social Work
- Teaching

Or pursue work or further education in a variety of fields, such as:

- Biochemistry
- Community Development
- Health Policy
- Sustainability
- Philosophy
- Political Science
- Theatre
- Urban Planning

#### Inquiry

There are 15 different inquiry courses that focus on developing skills essential to the systematic, evidence-based investigation of public issues. Inquiry begins in first year with Global Challenges (ARTSSCI 1C03) and continues in upper years with courses such as:

- How Science Speaks to Power (ARTSSCI 4CF3)
- Digital Society and Public Policy (ARTSSCI 4DS3)
- Research and Creative Writing (ARTSSCI 4CD3)
- Medical Humanities Inquiry (ARTSSCI 4CT3)
- Diversity and Human Rights Inquiry (ARTSSCI 4CI3)
- Visual Culture Inquiry (ARTSSCI 4VC3)
- Global Justice Inquiry (ARTSSCI 3GJ3)

#### McMaster Exchange Program

Many of our students spend all or part of their third year studying abroad at a host institution through the MacAbroad Exchange Program. Students choose to study abroad for a variety of reasons, including language development, exposure to new cultures and perspectives, and unique courses offered only at certain institutions.

Students commonly study in Australia, England, Denmark, France, Ireland, Japan, the Netherlands, New Zealand, and Singapore.



<sup>\*\*\*</sup>Not sure what units are? Flip to page 25 for an explanation.





#### Optional Supplemental Application Deadline: February 1, 2022\*

DeGroote is rethinking business education. Our business impact is measured by our commitment to radically transform business and society. As a future student, you will be the agent of transformation in the years ahead, disrupting how we do business and significantly expanding DeGroote's contributions to Canadian society. With an emphasis on greater collaboration across faculties, minoring in Sustainability, and fostering a greater sense of community, the DeGroote School of Business will best prepare you for a future in an ever-evolving world of business. All students will receive exposure to accounting, finance, human resource management, information systems, marketing, strategic management and operations management.

#### **Degree Options**

- Bachelor of Commerce
- Bachelor of Commerce (Honours)

#### Requirements for Admission (Ontario)

- English U
- Advanced Functions U
- Calculus and Vectors U
- Completion of three additional U or M courses to total six courses

### New at DeGroote BCom with Internship

As the BCom program at DeGroote is transforming, so too is the Commerce Internship Program. Our new BCom with Internship is a five-year degree program, with a mandatory Internship. This program is now open to all students international and domestic.

#### DeGroote Start-Up

Welcome to your start-up experience. DeGroote is committed to ensuring that you are successful in your transition from high school to university. Your start-up experience will focus on three goals: connecting you with your first year classmates; building relationships with our faculty and TAs; and having you involved with the DeGroote community.

\*See Supplementary Application on the next page.



AACSB Accredited: Only 5% of the business schools in the world attain this standard of excellence.



One in seven students participate in the International Exchange Program to gain global perspective.



Students in our internship program make an average of \$3,470 per month.

#### **Supplementary Application**

We want to know more about you and your life outside of the classroom. The Supplemental Application will be used to help with admissions decisions and to award our \$5,000 scholarships for overall excellence and admission. All applicants are encouraged to complete the Supplemental Application to strengthen your overall application.

#### First Year at a Glance

Total: 30 Units\*\* Required: 24 Units\*\*

#### First-year courses:

- DeGroote Student Experience and Development I (COMMERCE 1GR0)
- Introductory Financial Accounting (COMMERCE 1AA3)
- Organizational Behaviour (COMMERCE 1BA3)
- Business Data Analytics (COMMERCE 1DA3)
- Business Environment and Organization (COMMERCE 1E03)
- Introduction to Marketing (COMMERCE 1MA3)
- Introduction to Macroeconomics (ECONOMICS 1BB3)
- Introduction to Microeconomics (ECONOMICS 1B03)
- Applied Calculus (MATH 1MM33)

#### Beyond First Year

- Areas of Focus:

   Accounting
- Finance
- Human Resource Management
- Information Systems
- Innovation
- Marketing
- Strategic Management
- Operations Management

#### **Employers We Work With**

- CIBC
- Dyson
- Deloitte
- Grant Thornton
- Microsoft
- KPMG
- Ford
- Wells Fargo

#### **Professional Designations**

**CFA:** DeGroote has been recognized by the CFA Institute for membership in its University Affiliation Program. Students have the opportunity to obtain a solid grounding in the CFA Program Candidate Body of Knowledge (CBOK) and are well prepared to sit the CFA exams.

**CPA:** Courses are accredited by CPA Ontario and we offer a CPA accredited graduate diploma where graduates will hold advanced standing towards the CPA designation.

CHRP: Coursework completed at DeGroote is accredited by the HRPA in awarding the Certified Human Resources Professional designation.



#### Preparing You for Your Success at University

Through our 1GR0 course, you will develop and apply foundational knowledge of highly sought skills in the workplace, such as critical thinking, collaboration, communication, and self-management. Further, this course offers career development tools and learning experiences that will help you transition to university and ultimately be successful in the program.

You will learn about McMaster University's academic regulations, strategies for academic achievement, and the various services available to them within the university.

#### Why 1GR0?

Here's what our Associate Dean had to say:

"If there's one thing we're seeing more clearly now than ever before, it's that business leaders need to be well-rounded. They need to be deep thinkers and strong collaborators — on top of having very sharp business skills. This is what we're teaching in our BCom. Leadership that succeeds and endures no matter what."

Sue McCracken, Associate Dean



<sup>\*\*</sup>Not sure what units are? Flip to page 25 for an explanation.

#### **Building Traditions through Experiences**

In addition to participating in competitions such as Fast Pace to the Case, JDCC, Canada's Next Top Ad Exec and MARS Apprentice, all first-year students participate in 24-Hour Case.

Over the course of one weekend, DeGroote's 24-Hour Case Challenge will have you working together with your first-year classmates while you solve a business problem. Working with upper-year students, alumni and presenting to our employer partners, you will develop your problem-solving, communication, critical thinking, and entrepreneurship skills.

What our students had to say . . .

"I was expecting to hone my presentation and problem-solving skills by participating in the 24-Hour Case. That is exactly what happened. The ability to develop creative solutions is very important in business, which is what this experience was all about. I learned to trust my team members, play to my strengths, and how to improve my presentation skills. The Case taught all of us to get out of our comfort zone and meet new people because this can bring great assets to your development as a student." — Tina Lam

#### **DeGroote Experience Fund**

The DeGroote Experience Fund (DEF) is used to help provide DeGroote students with experiential learning opportunities. Funding is available to DeGroote students or student teams for national and international competitions, conferences, leadership workshops, and a wide variety of events.

#### Student Life at DeGroote

At DeGroote, what you do outside of the classroom matters. From marketing to finance and entrepreneurship, our clubs and committees will ensure you're involved in the true DeGroote student experience.

Below are just some of our clubs and committees:

- DeGroote Accounting Association
- DeGroote Business Challenge
- DeGroote Commerce Society
- DeGroote Committee for Diversity and Inclusion
- DeGroote Entrepreneur
- DeGroote Impact
- JDCC DeGroote
- DeGroote Consulting Association
- DeGroote Finance and Investment Council
- DeGroote Human Resources Association
- DeGroote Marketing Association
- DeGroote Real Estate Association
- DeGroote Operations Association
- DeGroote Women in Business

#### The Importance of Experiential Learning at DeGroote

What our students and alumni had to say . . .

"Experiential learning is important because not only does it enhance students' knowledge and aptitude of content, but it allows them to be engaged. It can be easy to forget content learned in a lecture or read out of a textbook, but what sticks with most people are the experiences they have and the feeling they get from being engaged in an activity." —Sarah Rotella

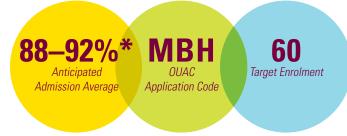
"The classroom setting gives students the foundation to understand material, but experiential learning is truly where they practice what they learned. You have a chance to learn from these experiences, make mistakes, and correct yourself. You learn the secrets to success through time management, taking risks, and studying/working smart."

—Joel MacPherson









\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: February 1, 2022

The Integrated Business and Humanities (IBH) program blends traditional business education with the critical thinking and communication skills of the Humanities. Designed to produce the next generation of Canadian business leaders with the skills to take on a new economy in a complex world, the IBH Program features a variety of learning opportunities via coursework and co-curricular activities.

#### Degree Option

Bachelor of Commerce in Integrated Business and Humanities (Honours)

#### Requirements for Admission (Ontario)

All applicants are required to complete a recorded interview using a video platform. The short-list of applicants will be invited to participate in a two-way interview with the Program Director and a panel of members from the IBH community.

- English
- Calculus & Vectors
- Data Management

#### Why Choose McMaster?

- The (IBH) program seeks to develop graduates that will make both a personal and social impact through a combination of coursework and co-curricular activities.
- A background in Humanities provides students with the skills and knowledge to recognize, understand and constructively engage with complex social needs and diverse perspectives. Through their background in Business, students will develop ways to solve those problems.
- IBH's interdisciplinary program will foster the growth of 21st- century problem-solvers who recognize both the needs of individuals and businesses to generate the most value for both. For example, a Business graduate may ask, "What is the return on investment?" An IBH graduate asks the same question, but also asks, "What is the return to society?"



Limited entry program enables small classes, greater attention and a close-knit community.



Pillars of the program: leadership, community engagement and entrepreneurship.



Global perspective gained through a social enterprise experience, exchanges and/or conferences.

#### First Year at a Glance

#### Fall-term required courses:

- Financial Accounting (IBH 1AA3)
- Leadership Coaching A (IBH 1BA3)
- Insight and Inquiry: Questions to Change the World (IBH 1BB3)
- Fundamentals of Ethics (IBH 1BC3)
- Introductory Microeconomics (ECON 1B03)

#### Winter-term required courses:

- Perspectives on Canadian Business (IBH 1AB3)
- Introduction to Language and Society (IBH 1AC3)
- IBH in the Community (IBH 1AD3)
- Introduction to Peace Studies for IBH (IBH 1BD3)
- Introductory Macroeconomics (ECON 1BB3)

#### First Year IBH Unique Experiences:

- In Leadership Coaching A, students will take part in a Leadership assessment, which is followed up with debriefing workshops with a Leadership Coach.
- IBH in the Community is taught in downtown Hamilton in a space devoted to community-engaged learning. The IBH program believes that in order for our students to truly understand community engagement and build reciprocal relationships, they need to take their learning outside of the classroom.
- Students will participate in CAPSIMCORE business simulations to introduce them to experiential learning and fundamental business concepts.

#### **Beyond First Year**

#### Leadership Coaching

In first year, students go through a leadership assessment that will serve as a foundation for their leadership development. Throughout the four years of their program, students will have the opportunity to receive coaching and possibly participate in leadership workshops and document their leadership journey. In fourth year, all studentstake "Leadership Coaching B", which builds upon the coaching sessions they received and the reports they have completed and informs individual action steps for their final term.

#### **Community Engagement**

Students complete field studies on a topic they are passionate about while interacting with businesses from the local community. Through a combination of experiential learning and research, students will gain an understanding of issues facing businesses today while also giving back to the community.

#### Social Enterprise

Students are introduced to the concept of social enterprise in their first year. In second year, students will engage in an immersive international learning experience in an intensive set of social entrepreneurship building exercises. In third and fourth year, students will take courses on social entrepreneurship, strategic management for for-profit and non-profit organizations, and a capstone on social enterprise.

#### **Future Careers**

In addition to careers in traditional functional business areas, IBH graduates can pursue roles that transform business and society:

- Entrepreneurial start-ups
- Brand Manager (CPG)
- Marketing in a Not-for-profit
- Community-based event organizations
- Supply Chain Specialist
- Management Consulting
- Community NGO Manager
- Financial Analyst
- Organizational Change Management
- Integrated Marketing Manager
- Sustainability Officer

"The Integrated Business and Humanities program is truly progressive. I chose to support this program because it's going to equip the business leaders of tomorrow with more than just practical skills. It will enhance their ability to think critically and act rationally. It will enable them to have a profound, measured impact on business and

#### Kevin Lockhart '87

Global Leveraged Finance Leader, BMO Capital Markets





# Faculty of Engineering

- BTech
- Computer Science
- Engineering
- iBioMed

#### **Supplementary Application**

eng.mcmaster.ca/supplementary-application

The supplementary application is a mandatory part of the admissions process for any of our Faculty of Engineering programs: Bachelor of Technology, Computer Science, Engineering 1 and/or Integrated Biomedical Engineering & Health Sciences (iBioMed). This is an opportunity for us to get to know you better!

The supplementary application will consist of 4 questions (3 video responses and 1 written response) and will take approximately 20 minutes to complete. The system allows for unlimited practice sessions but once you start the formal interview questions you only get one chance - this allows us to see your candid responses.

- Only one application is required if you are applying to more than one Faculty of Engineering program.
- Deadline: January 28th, 2022, unless otherwise noted in your supplementary application invitation email.

#### **Scholarships**

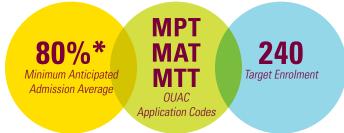
eng.mcmaster.ca/scholarships

McMaster Engineering offers over \$1,000,000 in entrance scholarships and research awards to incoming students. The best part? Only ONE application is required to be considered for all eligible awards. All MacEng application-based scholarship winners are guaranteed a research position (valued at \$6,000) through the Engineering Research Experience Award for the summer after their first year!

- International applicants are eligible for our applicationbased entrance scholarships.
- Specialized awards for involvement in SHAD, FIRST Robotics and DECA, as well as awards for equity-seeking groups, including one from our National Society of Black Engineers McMaster Chapter
- Deadline: February 18, 2022

# Bachelor of Technology





\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: January 28, 2022 at noon EST

See the "Faculty of Engineering" page for details.

# MPT: Automation Engineering Technology MAT: Automotive and Vehicle Engineering Technology MTT: Biotechnology

The Bachelor of Technology (BTech) program positions you to be at the forefront of change in engineering industries. With a unique blend of theory and practice, students spend more than 750 hours in lab settings applying engineering principles to develop innovative technical solutions. Guided by industry advisory committees and taught by professors with relevant experience, each of the three BTech streams is geared to tackle technological change head-on. With 25 percent of the curriculum devoted to business and management courses, graduates are uniquely positioned to take on leadership roles and contribute to the success of an organization. Average class sizes of 80 students means more interaction with your professors and a close-knit student community.

# **Degree Option**

 Bachelor of Technology (McMaster University), Advanced Technology Diploma & Business Management Certificate (Mohawk College)

# Requirements for Admission (Ontario)

- English
- Calculus & Vectors
- Chemistry
- Physics

# Why Choose McMaster's BTech Program?

- Hands-on experience BTech graduates are versatile, innovative, and ready to hit the ground running in many evolving industries.
- **Co-op work**—The mandatory component of co-op allows students to gain meaningful work experience and make career connections.
- Quality of facilities State-of-the-art labs and classrooms dedicated to BTech students in the Engineering Technology Building, McMaster Automotive Resource Centre and at Mohawk College.
- Management advantage Take business management alongside technical courses for the best of both worlds.

### First Year at a Glance

Students apply directly to their desired stream specialization.

Business and management courses are integrated into the curriculum for all streams. There are three streams from which to choose:

- Automation Engineering Technology
- Automotive and Vehicle Engineering Technology
- Biotechnology

Total: 30 units\* Required: 30 units\*

# First-year courses:

- Chemistry (ENGTECH 1CH3)
- Electricity and Electronics I (ENGTECH 1EL3)
- Mathematics I (ENGTECH 1MC3)
- Mathematics II (ENGTECH1MT3)
- Physics (ENGTECH 1PH3)
- Foundations of Business (GENTECH 1BZ3)
- Professional Communications (GENTECH 1PC3)

Plus 9 units\* from course list of the chosen stream:

# Automation Engineering Technology

- Analytical Chemistry (ENGTECH 1AC3)
- Object-Oriented Programming (ENGTECH 1PR3)
- C++ Programming (ENGTECH 1CP3)

# Automotive and Vehicle Engineering Technology

- Statics and Mechanics of Materials (ENGTECH 1ME3)
- Object-Oriented Programming (ENGTECH 1PR3)
- C++ Programming (ENGTECH 1CP3)

#### Biotechnology

- Analytical Chemistry (ENGTECH 1AC3)
- Biology (ENGTECH 1BI3)
- Python Programming (ENGTECH 1PP3)

### The BTech Advantage

# Kickstart Your Career with Co-Op

- Twelve months of required co-op allows students to hit the ground running in their career after graduation.
- BTech students can complete co-op anywhere in the world.
- Top employers include BMW, Tesla, Amazon, CIBC, PepsiCo, General Motors, Estée Lauder, Sanofi Genzyme and IBM.

# ACCREDITATION COUNCIL FOR BUSINESS SCHOOLS AND PROGRAMS (ACBSP)

We are the only school in North America with an accredited business program within an engineering technology degree!

# Did You Know?

- Professors in our BTech program consistently win awards for outstanding teaching—they typically account for around 40% of the Dean's Teaching Honour Roll for the entire Faculty of Engineering!
- From the McMaster Engineering Musical to the MacEng EcoCAR Challenge, BTech students actively participate in a variety of clubs, teams, and associations.
- Students are taught in a world-class "Learning Factory" an innovative lab that simulates the factory of tomorrow.
- 6,000+ jobs are posted annually for Faculty of Engineering students.

# BTech Graduates Can Go on to . . .

- Work in diverse engineering fields.
- Complete graduate school (MEng, MBA, MASc, PhD).
- Achieve a direct path to a Professional Engineer (PEng) licence by completing a set number of technical exams after graduation.

# Typical Co-Op Schedule\*\*

	1st Year			2nd Year			3rd Year			4th Year			5th Year	
Fall	Winter	Spring/ Summer												

<sup>\*\*</sup> Other program structures possible, depending on co-op position length. A total of 12 months of co-op is required to graduate.

<sup>\*</sup>Not sure what units are? Flip to page 25 for an explanation.



# **Automation Engineering Technology**

The Automation Engineering Technology program prepares students to build complex electronic systems that create solutions to everyday problems. By teaching skills from the fields of chemical, mechanical, electrical, and computer engineering, graduates can easily transition between industries. From robotics to food processing—wherever you might find an automatic system that uses sensors, instruments, actuators, and networks—you will find a role suitable for a skilled automation specialist.

# Program curriculum



# Where will you go?

- Use hardware and software to design and implement automation systems to improve the efficiency of plants and labs in industries such as petrochemicals, power generation, pharmaceuticals and primary steel
- Design control systems and assembly lines
- Develop and program robotic applications
- Advise on safety policies and procedures for automated technologies

# Top co-op employers

- RBC
- Linamar Corporation
- PepsiCo
- Advanced MicroDevices

# Did you know?

NEW! The Automation Engineering Technology program has developed a Smart Systems stream option for students. New courses in the field of Smart Engineering Technology have been introduced, including cloud computing, Internet-of-Things, artificial intelligence, machine learning, embedded systems, smart health systems, and smart cities.



# Automotive and Vehicle Engineering Technology

The Automotive and Vehicle Engineering Technology program teaches students to make vehicles safer, faster, cleaner and more sustainable. Students are taught with a systems perspective blending various engineering disciplines, such as mechanical, electrical, computer science, mechatronics and materials. Students develop hands-on skills on 3D CAD modelling, robot programming, controller tuning, electric/hybrid vehicle design, vibration control, troubleshooting and manufacturing.

# Program curriculum



# Where will you go?

- Develop hybrid and green vehicle technologies
- Design power and control systems, engines, and bodies
- Perform complex analysis on mechanical components, assemblies, and systems

# Top co-op employers

- General Motors
- Ford
- Honda
- Magna

# Did you know?

Automotive and Vehicle Engineering Technology students have exclusive access to labs in the McMaster Automotive Resource Centre (MARC), which houses industry-scale labs, classrooms and equipment to prototype the vehicles of the future and research ways to make vehicles better, cleaner and greener.



# Biotechnology

Biotechnology is an interdisciplinary field merging life science, applied science, and engineering. Study genetic engineering; cell biology, molecular biology, and microbiology; analytical instrumentation; and, bioprocessing. Students learn about the latest research in immunology, virology, genomics, proteomics, and bioinformatics. With the combination of theoretical foundation and lab experience, you will be prepared for success in areas in genetic engineering and bioprocessing.

### Program curriculum



# Where will you go?

- Work in bio-fuel, food, and pharmaceutical industries
- Monitoring quality control and assurance of biomaterials and bioproducts
- Work in bioinformatics, genetic and protein engineering, nanobiotechnology, and bioremediation

### Top co-op employers

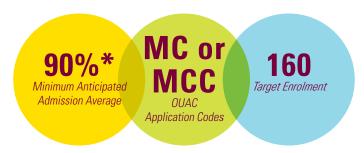
- Estée Lauder
- Roche
- Sanofi Pasteur
- Bunge

# Did you know?

Biotechnology students are the only undergraduate students at McMaster University that have access to a Level II Biosafety lab. Students complete a capstone project in their final year on leading-edge research in the biotechnology field, including projects that look at the efficacy of pharmaceuticals.



# Computer Science I & COMPUTER SCIENCE I (CO-OP)



\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: January 28, 2022 at noon EST\*\*

See "Faculty of Engineering" page for details.

Computer Science takes theory and brings it to life in practical applications. Honours Computer Science is a direct-entry four-year program where students learn programming, software design, systems and theoretical foundations. In five practice and experience courses, the emphasis at McMaster is on lab-based exploration and discovery, including expanded coverage of practical topics such as profiling and tuning, and foundational topics such as operating systems and compilers.

With our totally redesigned first-year curriculum, featuring five computer science, three math, and two electives courses, you'll start gaining specialized knowledge right away and are more employable in co-op positions after first year. By covering foundational topics earlier on, you'll have space to take specialized elective courses in or outside of your field in upper years.

# **Degree Option**

Bachelor of Applied Science (BASc)

# Requirements for Admission (Ontario)

- English
- Calculus & Vectors
- Two of: Biology, Chemistry, Physics, Earth & Space Science, Computer Science, Computer Engineering Technology

# Why Choose McMaster's Computer Science Program?

- Strong academics Comprehensive focus on programming, software design, systems, and theory
- Bright future Our students become skilled systems analysts, database specialists, software developers, and system administrators
- Experiential learning Our students take theoretical foundations and bring it to life in practical applications

#### First Year at a Glance

Total: 30 units\* Required: 24 units\*

# First-year courses:

- Discrete Mathematics for Computer Science (COMPSCI 1DM3)
- Introduction to Computational Thinking (COMPSCI 1JC3)
- Introduction to Programming (COMPSCI 1MD3)
- Computer Science Practice and Experience: Development Basics (COMPSCI 1XC3)
- Computer Science Practice and Experience: Introduction to Software Design Using Web Programming (COMPSCI 1XD3)
- Linear Algebra I (MATH 1B03)
- Engineering Mathematics I (MATH 1ZA3)
- Engineering Mathematics II-A (MATH 1ZB3)

Electives: 6 units\* \*Not sure what units are? Flip to page 25 for an explanation.

# **Beyond First Year**

- In this program, 30 units can be taken as open elective courses, meaning you can easily complete a minor alongside your degree.
- 18 units of technical electives must be taken in upper years and can be fulfilled with courses such as Machine Learning or Software Entrepreneurship.
- Computer Science students complete a Capstone Project course to capoff their experiential learning in their final year.

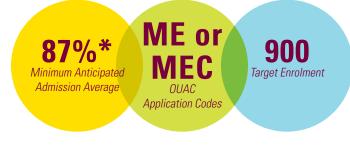
# Co-Op and Future Careers

- 2,000+ Faculty of Engineering students complete co-op each year around the world.
- 6,000+ jobs are posted annually for Faculty of Engineering students.
- Our approach ensures that students understand the core. fundamentals, which provides a key long-term advantage in the evolving job market.
- The program includes a flexible co-op option.
  - More than two-thirds of students graduate with co-op
- Co-op students complete a minimum of 12 months of work experience through a combination of four-, eight-, 12-, or 16-month co-op work terms.
  - 77% of co-op work terms are eight to 16 months long
- Future careers App Developers, Chief Information Officers, Database Developers, Information Security Analysts, Information System Designers, Systems Analysts, Data Scientists and Programmers, e-Commerce Developers.
- Top co-op employers IBM, Google, Microsoft, ArcelorMittal, Ontario Power Generation, Bell Canada, Hatch, McAfee, Advanced MicroDevices.

# Did You Know?

- Computer Science students assisted an orthopedic surgeon by using augmented reality to simulate the placing of screws in the spine, producing an educational app through start-up funding.
- Computer Science students can choose to take the elective "Introduction to Machine Learning" and apply knowledge and principles learned to their Capstone Project course.

# Engineering I & ENGINEERING I (CO-OP)



\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: January 28, 2022 at noon EST\*\*

See "Faculty of Engineering" page for supplementary application details.

At McMaster Engineering, we offer you more than a best-in-class degree. We offer experiences that help create global-ready, socially aware citizens through project-based classes, flexible co-op work terms, research opportunities and dozens of clubs and teams. That is our Degree + Experience promise.

It starts right from day one. We've taken our popular client-focused design course and integrated it throughout one-third of your entire first-year curriculum. With a focus on experiential, collaborative and project-based learning, students take real problems in society and learn the technical and teamwork skills to solve them.

# Degree Options

- Bachelor of Engineering (BEng)
- Bachelor of Engineering and Management (BEng Mgt)
- Bachelor of Engineering and Society (BEng Society)
- Bachelor of Engineering and Biosciences (BEng Biosci)

# Requirements for Admission (Ontario)

- English
- Calculus & Vectors
- Chemistry
- Physics

# Why Choose McMaster Engineering?

- **Highly ranked programs** 16 McMaster Engineering academic disciplines are ranked among the best in the world.
- Customizable co-op Flexible co-op program that allows you to design your own degree.
- Research-intensive Largest undergraduate research program in Canada with 500+ research assistant, teaching assistant, or technical assistant opportunities available.
- **Community** 60 clubs, teams and societies come together as one #FireballFamily to learn through cooperation, not competition.
- Diversity We believe that engineering is for everyone.
   In Fall 2021, female students accounted for more than 30% of our incoming class.

<sup>\*\*</sup> See Supplementary Application on the next page.



# First Year at a Glance

In first year, you'll gain a broad exposure to engineering before choosing a specialization for second year and beyond.

Total: 37 units\* Required: 31 units\*

# First-year courses:

- General Chemistry for Engineering I (CHEM 1E03)
- Engineering Mathematics (MATH 1ZA3, 1ZB3, 1ZC3)
- Introductory Mechanics (PHYSICS 1D03)
- Waves, Electricity and Magnetic Fields (PHYSICS 1E03)
- Integrated Cornerstone Design Projects in Engineering (ENGINEER 1P13 A/B)
  - In Fall 2020, we introduced a full-year project-based learning experience where students are exposed to a series of design projects that will develop both technical and professional skills.
  - Topics in engineering design and graphics, programming, professional engineering practice, and structure and properties of materials are combined in this course.
  - Projects included developing applications of biomedical sensing in robotics and developing sustainable communities through autonomous recycling.
  - Find out more at eng.mcmaster.ca/1P13.

Electives: 6 units\* of approved complementary studies electives.

# **Beyond First Year**

After successful completion of your first year of Engineering, students transition to one of the following disciplines that begin in second year:

- Chemical Engineering
- Chemical Engineering and Bioengineering\*\*
- Civil Engineering
- Computer Engineering
- Electrical Engineering
- Engineering Physics
- Materials Engineering
- Mechanical Engineering
- Mechatronics Engineering
- Software Engineering

Optional (for all disciplines except Chemical Engineering and Bioengineering):

- Engineering & Management\*\*
- Engineering & Society\*\*

Free Choice: Students with a minimum admissions average of mid-90s may qualify for guaranteed choice of discipline in second year and beyond, dependent on successful completion of first-year Engineering. Does not apply to five-year program options.

# Did You Know?

- McMaster Engineering offers two courses that give credit for students participating in clubs and teams
- We are the first Canadian university to offer digital degrees through blockchain technology
- Our annual musical has been created and performed entirely by engineering students for the past 23 years
- EngiQueers, an LGBTQ+ student advocacy group, was started at McMaster and is now in 31 schools across nine provinces
- Ruff day? Our Academic Advising office runs Paws N' Play, a monthly dog therapy program for students to take a break and relieve stress—it's one of the many reasons why our students have a 96% success rate in first year

# Your Co-Op, Your Way!

#### How it works:

Your professional career starts in your first year with an introductory non-credit co-op course.

Throughout the year, a team of 18+ staff from the Engineering Co-op and Career Services office connect with more than 1,000 employers, bringing them directly to you through over 300 virtual and in-person workshops and events annually. We also work with you to help navigate the job search, application, interview and offer process.

Beginning as early as the summer after your first year, you can begin completing four-month co-op positions.

After your third year, you'll have the option to complete longer, more immersive eight-, 12- or 16-month positions.

Twelve months of co-op is needed to graduate with the designation on your degree, but you can gain up to 28 months of work experience before graduating.

# Did you know?

- 2,000+ Faculty of Engineering students complete co-op each year around the world
- 6,000+ jobs are posted annually for Faculty of Engineering students



<sup>\*</sup>Not sure what units are? Flip to page 25 for an explanation.

<sup>\*\*</sup> Five-year program options.



# **Chemical Engineering**

Chemical Engineering involves developing efficient, cost-effective and socially responsible processes that convert chemical components and energy into higher-value products. By taking on grand challenges such as developing access to clean and sustainable energy, providing communities with clean and reliable water, or improving the yield and reliability of the agriculture sector, chemical engineers continue to play a vital role in the development and growth of modern society. Chemical engineers are involved in every step of the consumer supply chain, from the extraction and processing of raw materials that are taken for granted in everyday life to the production of finished commercial products.

# Where will you go?

- Energy production
- Pharmaceuticals
- Biomedical enhancement
- Food and agriculture
- Environmental engineering and analysis
- Water and wastewater treatment
- Commercial chemicals (paints, dyes, industrial chemicals)

# Top co-op employers

- Imperial Oil
- Sanofi Pasteur
- Suez Water Technologies
- ArcelorMittal Dofasco

#### Did vou know?

- You can complete a degree in Chemical Engineering and Bioengineering, which allows you to combine concepts of chemical engineering and apply them in the context of biological fields such as human anatomy, tissue engineering, and immunology.
- The department hires between 60 and 70 undergraduate students each summer to work as research assistants on a variety of exciting research projects led by our faculty members.



# **Civil Engineering**

Civil Engineering requires a sense of curiosity and the ability to not just look at the world around you, but to develop ways to improve it. Civil engineers do exactly that—planning for and safely designing, constructing, maintaining and rehabilitating communities. By using the latest technology to design and construct facilities that are critical to our society, including buildings, bridges, roads, water and wastewater systems, civil engineers collaborate to build a better, more sustainable future.

# Where will you go?

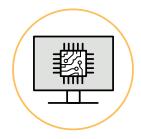
- Constructing innovative and resilient infrastructure
- Sustainability and intelligent energy systems
- Transportation and smarter mobility
- Water security under climate change
- Environmental resource management

# Top co-op employers

- Aecon Group
- Hatch Ltd.
- Ministry of Transportation
- Walters Inc.

# Did you know?

- Civil Engineering students and professors have partnered with the City of Hamilton to contribute to real-life transportation projects related to Light Rail Transit and Bus Transit.
- McMaster Engineers typically dominate the podium at the national Troitsky Bridge Building Competition, where students are challenged to build bridges out of popsicle sticks that can support thousands of pounds of weight.



# **Computer Engineering**

Computer Engineering makes our world more connected, more intelligent, and even healthier by applying advances in electronics and software to develop devices and systems. Our program encompasses computer hardware, programming, electronics, multimedia, augmented and virtual reality, signal processing, robotics, cyberspace, hardware and software for machine learning, and more.

# Where will you go?

- Computer systems and networking
- Hardware design
- Autonomous vehicles and machine learning
- Multimedia, telecommunications, and Internet-of-Things
- Data analytics

# Top co-op employers

- Advanced Micro Devices
- CIBC
- Evertz Microsystems Ltd.
- Celestica

# Did you know?

- Computer Engineering students tackle challenges such as implementing virtual reality, improving health outcomes through data analytics, securing cyberspace, reverse-engineering the brain, and more.
- A video processor designed by the Electrical and Computer Engineering Department is used by several TV networks, including CNN.



# **Electrical Engineering**

Electrical Engineering involves the design of devices and systems that employ the flow of electrons to make the world more connected. Our program encompasses electrical power generation and distribution, electrified and autonomous vehicles, robots and drones, electronics, wired and wireless communications, optoelectronics, signal processing, computers, radar and lidar, medical devices and imaging, and many other technologies that are changing our world for the better.

# Where will you go?

- Power and renewable energy
- Electrified transportation
- Biomedical electronics
- Telecommunications
- Robotics and automation

# Top co-op employers

- Advanced Micro Devices Inc.
- General Motors
- Hvdro One
- L-3 Wescam

# Did you know?

 Students in this program can embark on an exchange with KTH Royal Institute of Technology in Stockholm, Sweden.



# **Engineering Physics**

Push the envelope of new technologies to solve challenges both recognized and undetected. Engineering Physics is an interdisciplinary field of study where new and advanced materials, devices, and systems are engineered based on our fundamental understanding of physics.

# Where will you go?

- Nano- and micro-device engineering
- Nuclear engineering
- Biomedical engineering
- Energy systems and renewable energy
- Lasers, photonics, and optics

# Top co-op employers

- Ontario Power Generation
- L3Harris
- Bruce Power
- Curtiss-Wright Indal Technologies

# Did you know?

- Donna Strickland, who graduated from McMaster Engineering Physics in '81, received a Nobel Prize for her work in pulsed lasers.
- A new student space called the "Quantum Tunnel" recently opened to foster the Engineering Physics community.



# Materials Engineering

Materials Engineering uses innovation, design, and problem solving to develop novel materials. This field of study also characterizes the mechanical, physical and chemical properties of materials to create reliable, sustainable and efficient alternatives. This program focuses on biomaterials, data analytics, computational materials, materials for manufacturing and infrastructure, and smart materials and devices.

# Where will you go?

- Automotive and aerospace
- Energy production
- Manufacturing and infrastructure
- Biomaterials and biocompatible products
- Data analytics and computational materials
- Smart materials and microelectronic devices

# Top co-op employers

- ArcelorMittal Dofasco
- General Motors
- Bombardier
- Stackpole International

### Did you know?

- The department has an exchange agreement with the Grenoble Institute of Technology in France.
- McMaster is the hub of materials research in Canada, including the Canadian Centre for Electron Microscopy, Centre for Automotive Materials and Corrosion, CanmetMATERIALS, and the Steel Research Centre.

Researchers at McMaster Engineering are rigorously testing surgical and N95 mask designs in innovative ways. Their goals? To equip the public with more protective masks, and ultimately create better masks for our future.





# Mechanical Engineering

Mechanical engineers collaborate in interdisciplinary teams using the principles of physics and mathematics to conceive, research, design, manufacture, test, control, and maintain a wide variety of mechanical systems. These systems include vehicles, airplanes, power plants, biomechanical implants, human assistive devices and renewable "green" energy systems.

# Where will you go?

- Biomechanics
- Renewable energy
- Advanced manufacturing in automotive and aerospace industries
- Mechanics and design
- Thermal fluid science

# Top co-op employers

- Stackpole International
- Bombardier
- Loblaw Companies Ltd.
- Ontario Power Generation

# Did you know?

Mechanical Engineering students are deeply involved in a variety of technical teams, including EcoCAR, Formula Electric, Baja Racing, Solar Car Project, and Custom Vehicle, that operate out of their private build spaces in the Gerald Hatch Centre for Engineering Experiential Learning.



# Mechatronics Engineering

Mechatronics Engineering is the study of computer-controlled electromechanical devices, such as robots or cars. It is a highly interdisciplinary field that integrates electrical engineering, mechanical engineering, software engineering, and systems control. Mechatronics engineers have the requisite academic background and training to design and lead the development of sophisticated electromechanical devices.

# Where will you go?

- Robotics and automation
- Electro-mechanical design and devices
- Embedded control systems
- Flexible manufacturing
- Artificial intelligence

# Top co-op employers

- L3HARRIS
- Advanced Micro Devices
- IBM Canada
- Schaeffler Group

# Did you know?

Mechatronics sits at the crossroads of three major disciplines: Mechanical, Software and Electrical. It combines the expertise from all of these subjects to create a discipline that resonates with the technological advances of today.



# Software Engineering

Software Engineering is all around us. Computing is used to solve problems, manage information, create smart products, explore our world, and connect with communities. It provides the means to control hardware with extraordinary power and flexibility. Software engineers use engineering principles to design, implement, test, and maintain computer programs and are ultimately responsible for the quality of the final product.

# Where will you go?

- Computer system and software development
- Power systems
- Programming
- Game design and animation
- Biomedical research

# Top co-op employers

- Intel Security
- Microsoft
- Evertz Microsystems Ltd.
- Celesticas

#### Did you know?

The Software Engineering program is constantly developing new courses in topical areas such as artificial intelligence and neural networking and deep learning.

Vanessa Raponi Materials Engineering Graduate



Vanessa Raponi is the founder of EngiQueers, a student-led organization that promotes intersectional diversity and inclusion within the engineering profession. Under Raponi's leadership, EngiQueers has expanded across Canada, with 31 chapters in nine provinces.

# Five-Year Program Options

# Chemical Engineering & Bioengineering

The Chemical Engineering & Bioengineering program is a unique five-year program that combines the core Chemical Engineering undergraduate curriculum with courses from biological sciences and bioengineering fields. Students in this program will be uniquely positioned to contribute to the biotechnology and bioengineering industry.

# **Engineering & Management**

The Engineering & Management program is a prestigious five-year program designed to provide engineering students with a deeper understanding of the business, project management, and leadership skills needed to thrive in a corporate or entrepreneurial environment.

- Students learn to develop creative solutions for complex industry problems within interdisciplinary teams.
- Established nearly 50 years ago, the program allows graduates to excel in a variety of career fields.
- Exclusive opportunities where students can leverage skills acquired in a classroom to solve cases that replicate industry expectations and timelines.
- Eligible for an accelerated MBA.

# **Engineering & Society**

The Engineering & Society program is the only program of its kind in North America to combine a traditional engineering education with a broader university experience. This five-year program is designed to develop creative, inquisitive, well-rounded, and thoughtful engineers.

- Core courses examine the complex interactions between technology, society and the environment through inquiry-based learning.
- Focused electives let students pursue a field of study that complements their degree, allowing students to complete a minor in a variety of subjects, including sustainability and innovation.
- This program develops engineers with strong communication, critical thinking, and teamwork skills that prepare them to solve open-ended problems they will encounter when working in industry.

# Concurrent Second Degree\*

Mix and match your education with a concurrent second degree in another field. With Engineering as your primary degree, you'll have the chance to complete a three-year Bachelor of Arts simultaneously in areas of study such as:

- Art History
- Classics
- English & Cultural Studies
- History

- Philosophy
- Economics
- Political Science
- Environment and Society

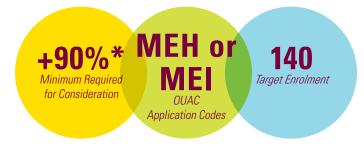
Students interested in a concurrent second degree in one of the above areas should contact their Academic Advisor in the summer prior to their first year of study.

\*Concurrent second degrees typically extend your enrolment period to five years of full-time study.



# Biomedical Engineering & Health Sciences (iBioMed)





\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: January 28, 2022 at noon EST\*\*

We've fused our top-ranked health sciences and engineering programs to deliver a unique project-based learning experience that is second to none. It's the only five-year program of its kind in Canada, and students will learn to work in teams to define problems, pitch ideas, build prototypes and test products with real clients.

# Degree Options

- Bachelor of Engineering and Biomedical Engineering (BEng BME)
- Bachelor of Health Sciences (Honours), Health, Engineering Science and Entrepreneurship (HESE) Specialization (BHSc (Honours))

# Requirements for Admission (Ontario)

English

Calculus & Vectors

Biology

- Physics
- Chemistry

# Why Choose iBioMed?

- The only Health Sciences program in Canada in health, engineering science and entrepreneurship.
- Cross-disciplinary collaborations amongst classmates.
- Flexible co-op options.
- Anatomy labs where Level II iBioMed students learn anatomical concepts from a variety of learning angles.



Hands-on project design courses give students the chance to create solutions to real-world problems.



86% of our students have chosen the co-op options.



56% of our students are female.

<sup>\*\*</sup>Details available at eng.mcmaster.ca/ibiomed/programs/ibehs-1.

# First Year at a Glance

Total: 37 units\* Required: 34 units\*

# First-year courses:

- Health Solutions Design Projects I (IBEHS 1P10)
- General Chemistry (CHEM 1E03)
- Engineering Mathematics I (MATH 1ZA3)
- Engineering Mathematics II-A (MATH 1ZB3)
- Engineering Mathematics II-B (MATH 1ZC3)
- Entrepreneurship in Biomedical Innovation: From Bench to Market (IBEHS 1EP6 A/B)
- Introductory Mechanics (PHYSICS 1D03)
- Waves, Electricity and Magnetic Fields (PHYSICS 1E03)

Electives: 3 units\* of approved complementary studies electives.

\*Not sure what units are? Flip to page 25 for an explanation.

# **Beyond First Year**

- The Integrated Biomedical Engineering and Health Sciences Program shares a common integrated first-year curriculum for both degree options.
- Beginning in second year, students will then pursue more specialized courses of study in the Bachelor of Engineering and Biomedical Engineering (B.Eng.BME.) degree or the Honours Bachelor of Health Sciences (B.H.Sc. (Honours)) degree in Health, Engineering Science and Entrepreneurship (HESE).
- Students enrolled in either the BME or HESE stream will have the opportunity to apply for co-op positions. Co-op placements are flexible and can be taken up at any time.

# Second-Year Program Options

Health, Engineering Science and Entrepreneurship (HESE):

HESE is a five-year program where students are required to complete core project and design-based courses from the iBioMed program in addition to courses that integrate Business and Engineering. Examples of core HESE courses include IBEHS 1EP6 - Entrepreneurship in Biomedical Innovation: From Bench to Market, a project-based course where students explore key concepts in cellular and molecular biology with clinical developments and business perspectives. In IBEHS 4EE6 — Health and Engineering Entrepreneurship III: Innovators in Scrubs, HESE students receive hands-on experience during clinical placements.

# Biomedical Engineering:

The Biomedical Engineering program is a five-year program where students will choose one of eight engineering streams (Chemical, Civil, Electrical, Engineering Physics, Materials, Mechanical, Mechatronics or Software). Students are required to complete core engineering courses related to their chosen stream in addition to project — and design - based courses from the iBioMed program.

# Second-Year Program Selection

- Bachelor of Engineering and Biomedical Engineering (BEngBME) — 90 spaces.
- Bachelor of Health Sciences (Honours), Health, Engineering Science and Entrepreneurship (HESE) Specialization (BHSc (Honours)) — 50 spaces.
- As enrolment is limited in each of the two degree options, where there is more demand than spaces, the competition will be based on first-vear academic achievement.
- All students who successfully complete the first-year of the program will have a space in one of the two degree options.

# **Future Careers**

Graduates can go on to:

- Biomedical engineering, biotechnology, health and biomedical science.
- Start their own companies or innovate within existing organizations.
- Explore further studies in graduate research, professional health science careers or medicine.
- Pursue an accelerated master's in Biomedical Engineering program.

As well, Health, Engineering Science and Entrepreneurship graduates will have the skills in business to develop new private-sector opportunities.

# Cooperative Education: Gain Practical Experience

iBioMed students start innovating from year one, making them ideal co-op students and strong future business leaders. They'll learn to lead teams, drive projects forward and tackle challenges with confidence. Complete co-op in four-, eight-, 12- or 16-month term lengths. In 2020/21, 38 iBioMed students joined co-op placements across several industries ranging from education, government, healthcare and financial institutions. Examples of job titles include Laboratory Assistant, Software Development Intern, Clinical Engineering Intern, Biomedical Engineering Intern.

# **Entrance Scholarships**

iBioMed students can submit an additional application to be considered for scholarships and research experience awards, totalling more than \$1-million in value.



### Red Zone

In the IBEHS 1P10 course this team of students took inspiration during Superbowl season to create a concussion helmet for football players. It measures the whiplash motion associated with being hit. Depending on the severity, one of two LED lights on the front of the helmet light up indicating the level of injury and if the player has received, or is in threat of receiving, a concussion. This information could then be automatically sent to a coach on his or her mobile device.



240 Target Enrolment Admission Average Application Code

\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application due early to mid-February; please visit bhsc.mcmaster.ca for details

The Bachelor of Health Sciences (Honours) Program has a unique interdisciplinary approach to the study of health, wellness and illness from biological, behavioural and population-based perspectives. Our curriculum aims to build the capacities that students need to become transformative leaders in healthcare, health policy, and health research.

# **Degree Option**

Bachelor of Health Sciences (Honours)

# Requirements for Admission (Ontario)

- English
- Biology
- Chemistry
- One of Advanced Functions, Calculus & Vectors or Data Management
- One non-math/non-science/non-technology 4U or 4M credit

# Why Choose McMaster?

BHSc (Honours) draws on the full range of departments within health sciences, including the Departments of Medicine, Pathology & Molecular Medicine, Psychiatry & Behavioural Neurosciences, and Health Research Methods, Evidence & Impact to provide students with a broad, interdisciplinary foundation in health.



Less than 20:1 student to facilitator ratio in first-year inquiry.



48% of the total course load in the core program is electives.



More than 75% of BHSc courses incorporate inquiry or problem-based learning approaches.

# Supplementary Application

- The supplementary application is an important aspect of the admissions process. It is an opportunity for you to demonstrate capacities that are not readily apparent from grades alone, share your experiences, thought processes, and other things you would like us to know and understand about you.
- Supplementary application questions are posted on our website
  in September. Applicants to the program will receive an email
  in late January with detailed instructions for logging in to the
  online system to submit their supplementary applications, which
  must be submitted by mid-February. Admissions decisions for
  the BHSc (Hons) Program are made in early May.

# First Year at a Glance

Total: 30 units\* Required: 21 units\*

# First-year courses:

- Cellular and Molecular Biology (HTHSCI 1106 A/B)
- Introductory Chemistry I & II (CHEM 1A03 and CHEM 1AA3)
- Inquiry I: Introduction (HTHSCI 1E06 A/B)
- Interdisciplinary Problem Solving in Health (HTHSCI 1G02)
- Praxis Pathways Curriculum 1 (HTHSCI 1X01 A/B)
- Introduction to Health and Safety (WHMIS 1A00)

Electives: 9 units\*

\*Not sure what units are? Flip to page 25 for an explanation.

# Interested in Something Different?

Some exciting courses offered in the BHSc (Honours) Program include:

- Biomedical Graphics
- Theatre for Development
- Music, Health and the Community
- Anatomy and Physiology
- Racism & Health
- Science of Fictional Characters
- Sex. Gender & Health
- Special Topics courses, in which a student (or group of students) can work with a supervisor to design their own course in an area of interest

# **Beyond First Year**

The curriculum in the BHSc (Honours) Program offers considerable flexibility, allowing students to explore a broad range of interests in different disciplines, or to cultivate an area of specific focus. With plenty of elective space, students in the BHSc (Honours) Program have the opportunity to pursue a minor in many disciplines offered at McMaster, complete a Concurrent Certificate, or undertake the Child Health Specialization.

# **Future Careers**

Our graduates are a diverse group and find success in a variety of fields:

- Health and medical research
- Health professions, including medicine, dentistry, chiropractic, naturopathy, nursing, midwifery, occupational therapy, physiotherapy, speech language pathology, optometry, veterinary medicine, paramedicine, respiratory therapy, physician assistant, clinical psychology

"Coming to BHSc was the best decision I could make to nurture my interest in health sciences; where we not only challenge the definition of health, but the definition of being a student in the ever-evolving world of health sciences."



- Health policy, law, consulting, global health, MBA, advocacy
- Public health, health promotion, community-based health agencies
- Other professions including social work and teaching
- Arts and design, graphics

# **Educating for Capability**

In the information age, it's crucial to have the abilities to identify a problem, frame and refine good questions, locate information and critically evaluate it.

We make use of inquiry and problem-based learning approaches to facilitate the development of the skills students need to tackle challenging problems collaboratively and creatively. The inquiry learning model used in BHSc emphasizes skill development such as time management, capacities for effective communication, the ability to give and receive feedback, self-reflection, self-assessment and group work—all of which are valuable skills transferable to a wide array of professional contexts, while simultaneously developing foundational knowledge in the health sciences disciplines.

# Research Opportunities

Health Sciences offers students the chance to be involved in innovative, in-depth research with real-world applications.

Here's just a sampling of research projects third and fourth-year students have focused on:

- Examining serum miRNA in endometriosis
- Examining the effect of female sex hormones on susceptibility to HSV-2
- Investigating therapeutic opportunities for COVID-19 through biological network analysis
- The dual role of reactive astrocytes in multiple sclerosis
- Building confidence in the COVID-19 vaccines: Global health strategies to overcome vaccine hesitancy
- Therapeutic yoga interventions for chronic pain
- The under-representation of skin of colour in dermatology education
- Mucosal delivery of IL-10 secreting lactic acid bacteria as a novel food allergy immunotherapy
- Palliative care in international humanitarian aid settings
- Testing the efficacy of augmented reality in anatomical education

# **Upper-Year Programs**

# **MEDICINE**

McMaster's medical program selects candidates who demonstrate the potential to become Canada's future healthcare leaders. The program is designed to involve medical students with a broad range of human health problems and with early exposure to patients.

There is no single background that is ideal preparation for the practice of medicine. Students with university education in any discipline are encouraged to apply. The ideal candidate will have completed a rigorous and coherent course of study, which will provide evidence of an independent, self-directed, and mature learning style. The ideal candidate will also provide evidence of outstanding non-academic qualities, including altruism, reliability, responsibility, perseverance, creativity, and leadership, through this process.

The program is three years in length and runs for 11 months of the year. McMaster admits a total of 203 students, who are distributed to our three campuses (Hamilton Campus, Waterloo Regional Campus and the Niagara Regional campus).

# Requirements for Admission

- Completion of a minimum of three years in a recognized university undergraduate program with at least an overall 'B' average
- MCAT (McMaster will use only the critical analysis and reasoning [CARS] score)
- CASPer (Computer-based Assessment for Sampling Personal Characteristics)
- There are no specific course prerequisites and no preference is given to particular university programs
- Both academic and personal qualities are assessed in the selection process by means of the undergraduate GPA; MCAT CARS; CASPer; and interviews

# FA<sub>0</sub>

# Are some courses better to take than others? What courses should I take?

Just as we do not require prerequisite subjects for the program, we do not favour or discount various academic programs. Many of the successful applicants do come from science backgrounds but this may be, in part, due to the fact that they apply to more than one medical school and must do the prerequisites for the others. It is in your best interest, regardless of academic program, to as least gain some exposure to the basic sciences as well as the social sciences and humanities. The aim is to develop a well-rounded education and also to prepare yourself for alternatives to medicine.

# Do McMaster students have a better chance of being admitted to Mac's Medical Program?

No. Preference is not given to McMaster students. Geographical status is applied during the application process when selecting for interviews. In selecting applicants for interview, the bonafide place of residence will be used in the following order of priority: 1) Province of Ontario; 2) Other.

# Can I practice medicine as soon as I graduate from the Medical Program?

No. A degree in medicine is not enough to practice medicine in Canada. Ontario graduates are also required to:

- Write and pass parts I and II of the Medical Council of Canada Qualifying Examination
- Complete a Residency program i the area of medicine in which they would like to practice (could take 2-6 years, depending on the level of specialization

# PHYSICIAN ASSISTANT

The PA Education Program is a two year course of study delivered over a 24 month period beginning in September. Year 1 will consist of clinical science courses delivered in the first twelve months. Year 2 will consist of clinical training delivered in the consecutive 12 month period.

McMaster was one of the first institutions in Canada to launch a Physician Assistant (PA) Education program. The PA Education Program leads to a Bachelor of Health Sciences (Physician Assistant) degree. The program is taught using inquiry and problem-based learning models, which enhance each student's ability to think critically, solve problems, demonstrate initiative and independence in practice, and promote lifelong learning. Physician Assistants (PAs) are healthcare professionals who work as physician extenders to provide healthcare. PAs are employed across Canada in a variety of settings, including primary care, emergency medicine, internal medicine, cardiology, dermatology, orthopedics, and many others.

Recent legislative changes will lead to the formal regulation of Physician Assistants under the College of Physicians and Surgeons of Ontario. Updates can be found on <a href="https://capa-acam.ca/pa-news/">https://capa-acam.ca/pa-news/</a>

# Requirements for Admission

- Completion of a minimum of two years in a recognized university undergraduate program (there are no specific course requirements)
- A minimum overall average of 3.0 on the OMSAS 4.0 scale based on all undergraduate courses
- Supplementary application and interview process



99% pass rate on certification exam.



Graduates received a weighted average of 8.6 on a 9-point scale in employer satisfaction.

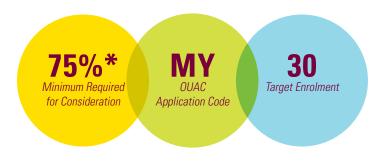


Average entering GPA is 3.63 (A-).





# Midwifery



\*Minimum average required for consideration plus interview. Admission is by selection. Students must obtain a minimum grade of 75% in grade 12 English, Biology and Chemistry. Additionally, students must achieve a minimum overall average acceptable to the Faculty (75%).

High School applicants may apply to Midwifery if one or more of the required Grade 12 prerequisites are in progress by February 1, 2022; however, high school transcripts must show the Grade 11 prerequisite(s) as completed with a minimum grade of at least 75% and submitted by February 1, 2022 so that a preliminary eligibility and interview selection assessment can be made. Any offer of admission will be conditional upon successful completion of all Grade 12 prerequisites.

- OUAC Application Deadline: February 1, 2022
- Interview Invites / Waitlist Notifications: Early April, 2022
- Interview Date: Late April or Early May, 2022

### Interview Process

The top 90 ranked applicants will be invited to the McMaster Midwifery Admissions Multiple Mini Interview (MMI). During the MMI, interviewees will complete no more than 10 back-to-back interview stations in which they will provide timed responses based on structured interview questions, scenarios, or prompts that assess the applicant's personal and professional strengths as both a student and potential midwife. The MMI does not test specific knowledge in any given subject. 20% of the 90 spots are reserved for applicants whose eligibility is assessed solely on High School credits.

A midwife is a registered healthcare professional who provides primary care to women during pregnancy, labour and birth, including conducting normal vaginal deliveries, and providing care to mothers and newborns during the first six weeks postpartum.

# **Degree Option**

Bachelor of Health Sciences (Midwifery)

# Requirements for Admission (Ontario)

- English
- Biology
- Chemistry



To date, all graduates who choose to practice midwifery are working.



90 of 135 units are spent in clinical settings, learning and practicing clinical skills.



Our Midwifery program is the oldest in Canada.

# Why Choose McMaster?

The Midwifery Education Program at McMaster University has been preparing midwives for practice for two decades (1993—present) and because our faculty are accomplished clinicians and researchers, Midwifery at McMaster is internationally recognized for its innovative educational programming.

Using both large- and small-group learning situations, the curriculum builds from foundation courses in the basic sciences, social sciences and the health sciences to the application of that knowledge in clinical practice. Graduates are prepared for their role as professional primary healthcare providers. The program works closely with practicing midwives and other maternity-care providers to ensure a high-quality clinical environment for students.

# First Year at a Glance

Total: 30 units\*\*
Required: 30 units\*\*

\*\*Not sure what units are? Flip to page 25 for an explanation.

# First-year courses:

- Anatomy and Physiology (HTHSCI 1D06 A/B)
- Social Justice and Healthcare (HTHSCI 1C06 A/B)
- One of the following courses:
  - Indigenous Medicine I Philosophy (INDIGST 3H03)
  - Indigenous Medicine II Practical (INDIGST 3HH3)
- Introduction to Research Methods and Critical Appraisal (MIDWIF 1F03)
- Midwifery The Profession I (MIDWIF 1D03)
- Midwifery The Profession II (MIDWIF 1G03)
- Life Sciences for Clinical Practice (HTHSCI 1J03)
- One elective from the faculties of Health Sciences, Humanities or Social Sciences

# **Clinical Placements**

Clinical terms comprise at least half of the Midwifery Program. Clinical courses consist of a practical and theoretical component and concurrent problem-based weekly tutorials. Students are assigned to a midwifery practice as well as to interprofessional placements including nursing, neonatal intensive care nursery, and obstetrical practices. Throughout the program, students will be placed in more than one midwifery practice within the McMaster Midwifery Program catchment area and will gain clinical experience in a hospital setting and with an obstetrician. During a clinical placement, students are expected to live within a reasonable travel distance to the practice workplace and must be prepared to relocate. Students must have access to a vehicle and hold a G2 or G licence prior to the first clinical placement course and for all subsequent placement courses.



85%\*
Minimum Required for Consideration

MN
MNC
MNC
MNM\*\*

120
Target Enrolment (per site)

\*Minimum average required for consideration. Admission is by selection.
\*\*MN (McMaster University), MNC (Conestoga College), MNM (Mohawk College)

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline:
   Please visit takecasper.com for test dates\*\*\*

\*\*\*See Mandatory CASPer Test Requirement next page.

Graduates are prepared to be professional nurses who will practice in a variety of healthcare settings. Central to our mission is the preparation of nurses who will work to enhance the quality of health of individuals, families, communities and society.

# Degree Option

Bachelor of Science in Nursing

# Requirements for Admission (Ontario)

- English
- Biology
- Chemistry
- One of Advanced Functions, Calculus & Vectors or Data Management
- Total of 6 grade 12 U/M courses are required

# Why Choose McMaster?

- Students looking to enter a career in nursing choose McMaster for its problem-based, self-directed undergraduate curriculum that places students at the centre of all learning.
- A group-learning context fosters close relationships between faculty and students and among the students themselves, enabling learning to be customized to the strengths and needs of the group.
- The Centre for Simulation-Based Learning (CSBL) offers a vital component in the education and training of our nursing students.
- Multiple, and varied, professional practice placements enhance student learning while offering hands-on experience.



96% pass rate for NCLEX (National Council Licensure Examination for RNs)



Ranked 15th in the 2019 QS World University Ranking and second-best school in Canada for Nursing



Professional practice hours begin in first year

# Mandatory CASPer Test Requirement

(Computer-based Assessment for Sampling Personal Characteristics)

- Academic and personal qualities are assessed based on your high school admission average and CASPer scores respectively.
- For general information and due dates, visit takecasper.com.
- During the selection process, the weighting of the GPA is 80% and CASPer is 20%.

#### First Year at a Glance

Total: 30 units\*\*\*\*
Required: 27 units\*\*\*\*

# First-year courses:

- Introduction to Health and Safety (WHMIS 1A00)
- Human Biochemistry I (HTHSCI 1LL3)
- Human Anatomy and Physiology I (HTHSCI 1H06)
- Introduction to Social Determinants of Health (HTHSCI IRR3)
- Introduction to Nursing and Health I (NURSING1F03)
- Introduction to Nursing and Health II (NURSING 1G03)
- Introduction to Nursing Practice (NURSING 1102)
- Professional Nursing Practice I (NURSING 1J02)
- Community Engagement & Citizenship (NURSING 1K02 S)
- Introduction to Psychology, Neuroscience and Behaviour (PSYCH 1X03)
- Foundations of Psychology, Neuroscience and Behaviour (PSYCH 1XX3)

# **Beyond First Year**

McMaster's BScN program is classified as "direct entry," meaning that students are considered to be specializing/majoring in Nursing from first year to the end of the program. Beyond first year, greater emphasis is placed on interpersonal skills, independent learning and the development of leadership skills. Students in their final year may qualify for a professional practice placement in an international setting or a northern/outpost setting within Canada.

### **Future Careers**

Registered Nurses practice independently or in teams with other health professionals to care for diverse clients across the lifespan. Nurses practice in a variety of settings such as:

- Hospitals, long-term care facilities and hospices
- Public health departments
- Case managers for community care access centres
- Entrepreneurs owning and managing health/nursing care businesses
- Researchers in nursing care, education, and healthcare
- Educators of individuals, families, communities and nursing students
- Correction and detention centres
- Parishes
- Telehealth
- On the streets with vulnerable populations
- In a variety of industrial settings
- Poison control centres

Their practice may focus on any of the following areas: pediatrics, emergency, maternity, psychiatry, palliative, care of older adults and public health.

# **Professional Practice Hours**

Locally, placement locations include Niagara, Haldimand Norfolk, Brant, Halton, Peel and Hamilton/Wentworth. Students begin their professional practice placements in hospitals in second year.

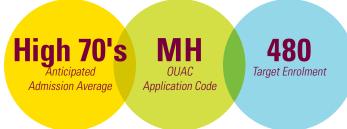
	Hours/Week	Location/Placement		
Year 1	Four	Centre for Simulation Based Learning (CSBL) — lab		
Year 2	Eight	Hospital – medical/surgical units		
Year 3	12	Varied settings – maternal-child/ pediatrics/psychiatry		
Year 4	24–36	Varied settings — acute-care, adult/pediatrics critical care, women's health, public health, community, long-term care facilities, global health or northern outpost placements, etc.		



practice nursing.

<sup>\*\*\*\*</sup>Not sure what units are? Flip to page 25 for an explanation.





In the Faculty of Humanities, we're curious about our world. The history, philosophies and cultures that have shaped it. The literature, language and media that have evolved from it. In Humanities at McMaster, we bring all of those areas together and allow you to explore them through a range of unique disciplines.

# Degree Options

- Honours Bachelor of Arts
- Combined Honours Bachelor of Arts
- Bachelor of Arts

# Requirement for Admission (Ontario)

English

# Why Choose McMaster?

At McMaster, Humanities means leadership. If you look at the attributes of effective leaders in the 21st century, what do you find?

- They have strong personal and ethical values.
- They must know themselves, and they must be able to see the world from the perspective of others.
- They know when to lead, and when to follow.
- They know how and when to communicate complex ideas in clear and inspiring ways.
- They know how and when to listen, to really listen, and to learn.
- They respect and seek to understand diverse cultures and peoples.
- They are curious, creative and constructive.

Those skills build leaders in our communities, in our neighbourhoods, in our classrooms, in our social agencies, in our arts organizations, and in businesses, from corporations to start-ups. Employers in all sectors are finding that these skills are hard to find and hard to train. That's where Humanities comes in.

In all of our disciplines, we focus on ethical values, on knowing yourself, on looking at the world from many different perspectives, on developing persuasive and rational arguments, on communicating complex and challenging ideas, on collaboration, creativity, and critical and constructive thinking. That is why our graduates go on to successful leadership roles as lawyers, doctors, teachers, policy analysts, journalists, museum curators, artists, musicians, translators, speech language pathologists, professors, and business executives, to name just a few.

We look forward to having you in our classrooms, our workshops, our performance spaces and our laboratories. We will work with you to build the skills you need to be the agents of change that our world so desperately needs.



55% of business leaders are arts grads. (Universities Canada 2020)



Seven concurrent certificates available to enhance degree and increase job prospects.



Over \$200,000 in awards and prizes distributed every year.

# **Degree Programs in Humanities**

After successful completion of Humanities I, you will enter a degree program in the following disciplines:

- Art History
- Classics
- Cognitive Science of Language
- Communication Studies
- English and Cultural Studies
- French
- History

- Justice, Political Philosophy and Law
- Linguistics
- Media Arts
- Global Peace & Social Justice
- Philosophy
- Theatre and Film Studies

Most programs have the option to be taken on their own, combined with another program, or as a Minor. For more information on each discipline and their degree options, see pages 61–65. Some programs can also be combined with programs from Social Sciences.

#### First Year at a Glance

Total: 30 units\* Required: 15 units\*

# First-year courses:

All first-year Humanities students must take:

Voice and Vision: Words to Change the World (HUMAN 1VV3)

12 units\* of first-year Humanities courses from the following list:

#### Course List 1:

(Introductory courses that provide entry into a degree program)

- World Art and Cultural Heritage I (ARTHIST 1A03)
- World Art and Cultural Heritage II (ARTHIST 1AA3)
- Arts in Society: Social Constructions of Race and Gender (ARTHIST 1PA3)
- Introduction to Classical Archaeology (CLASSICS 1A03)
- Gender, Race, Culture, Power (GENDRST 1A03)
- An Introduction to Ancient Myth and Literature (CLASSICS 1B03)
- History of Greece and Rome (CLASSICS 1M03)
- Introduction to Communication (CMST 1A03)
- Studying Culture: A Critical Introduction (ENGLISH 1CS3)
- The Written Word (ENGLISH 1F03)
- Making and Unmaking Literary Traditions (ENGLISH 1G03)
- Words in Place (ENGLISH 1H03)
- Introduction to French Studies: Advanced Level (FRENCH 1A06 A/B)
- Beginner's Intensive Ancient Greek I (GREEK 1Z03)
- Beginner's Intensive Ancient Greek II (GREEK 1ZZ3)
- The Rise of Empires, 500–1950 (HISTORY 1CC3)
- The Making of the Modern World, 1750–1945 (HISTORY 1DD3)
- The Historical Roots of Contemporary Issues (HISTORY 1EE3)
- Exploring History in a Small Group Setting (HISTORY 1FF3)
- History of Greece and Rome (HISTORY 1M03)
- A History of Magic (HISTORY 1P03)
- A History of Medicine (HISTORY 1003)
- Beginner's Intensive Latin I (LATIN 1Z03)
- Beginner's Intensive Latin II (LATIN 1ZZ3)
- Introduction to Linguistics: Sounds, Speech and Learning (LINGUIST 1A03)

- Introduction to Linguistics: Words, Sentences and Meaning (LINGUIST 1AA3)
- Media Arts (MEDIAART 1A03)
- Introduction to the History of Music I (MUSIC 1A03)
- Introduction to the History of Music II (MUSIC 1AA3)
- Peace, Justice, Human Rights (PEACJUST 1A03)
- Voices at Mac: Understanding our World (PEACJUST 1VM3)
- Philosophical Texts (PHILOS 1A03)
- Philosophy, Law and Society (PHILOS 1B03)
- Philosophical Questions (PHILOS 1E03)
- Meaning in Life (PHILOS 1F03)
- Introduction to Theatre, Cinema and Society (THTRFLM 1T03)

15 remaining units\*, which can be chosen from either Course List 1, Course List 2, or courses offered by other faculties.

\*Not sure what units are? Flip to page 25 for an explanation.

### Course List 2:

(Humanities courses available to Level I students but do not provide entry into a degree program)

- Making Art and Understanding Technology & Images (ART 1TI3)
- Making Art and Understanding Images (ART 1UI3)
- Mandarin Chinese for Beginners (CHINESE 1Z06 A/B)
- Beginner's Intensive French I (FRENCH 1Z06 A/B)
- Intermediate German I (GERMAN 1B03)
- Intermediate German II (GERMAN 1BB3)
- Beginner's Intensive German (GERMAN 1Z06 A/B)
- Intermediate Italian I (ITALIAN 1A03)
- Intermediate Italian II (ITALIAN 1AA3)
- Introduction to Farsi I (FARSI 1Z03)
- Introduction to Farsi II (FARSI 1ZZ3)
- Introduction to Korean I (KOREAN 1Z03)
- Introduction to Korean II (KOREAN 1ZZ3)
- Beginner's Intensive Italian (ITALIAN 1Z06 A/B S)
- Beginner's Intensive Japanese (JAPANESE 1Z06 A/B S)
- Structure of Modern English I (LINGUIST 1Z03)
- Structure of Modern English II (LINGUIST 1ZZ3)
- Solo Performance\*\* (MUSIC 1EE6 A/B)
- Ensemble Performance: McMaster Concert Band\*\*
  (MUSIC 1GB3 A/B)
- Ensemble Performance: McMaster University Choir\*\* (MUSIC 1GC3 A/B)
- Ensemble Performance: David Gerry Flute Ensemble\*\* (MUSIC 1GF3 A/B)
- Ensemble Performance: McMaster Jazz Band\*\* (MUSIC 1GJ3 A/B)
- Ensemble Performance: McMaster Percussion Ensemble\*\*
   (MUSIC 1GP3 A/B)
- Ensemble Performance: McMaster Chamber Orchestra\*\*
  (MUSIC 1GR3 A/B)
- Ensemble Performance: Cantemus Vocal Ensemble\*\* (MUSIC 1GW3 A/B)
- Rudiments of Music (MUSIC 1CR3)
- Beginner's Polish I (POLISH 1Z03)
- Beginner's Polish II (POLISH 1ZZ3)
- Intensive Beginner's Russian I (RUSSIAN 1Z03)
- Intensive Beginner's Russian II (RUSSIAN 1ZZ3)
- Intermediate Spanish I (SPANISH 1A03)
- Intermediate Spanish II (SPANISH 1AA3)
- Beginner's Intensive Spanish (SPANISH 1Z06 A/B)
- Women Transforming the World (GENDRST 1AA3)
- Acting Skills for Life and Work (THTRFLM 1H03)

<sup>\*\*</sup>Students wishing to take Music courses other than MUSIC 1A03 or MUSIC 1AA3 must make arrangements with the School of the Arts for qualifying tests.



# Research-focused. Student-centred.

In Humanities, you'll encounter productive, award-winning professors who bring their experience as researchers and writers to the classroom, and who believe that the best university education is research-focused and student-centred. You'll join a community of scholars who are not afraid to cross the boundaries between subjects, who have diverse interests, experiences, and talents, but who share an enthusiasm and curiosity about the past, present, and future.

# **Exchange Opportunities**

Humanities students in Honours programs are encouraged to participate in the amazing opportunity to study abroad through the McMaster Exchange Program! Broaden your horizons spending part or all of your third year at one of our partner universities around the world while earning credit towards your degree. You'll study at an international location while still paying McMaster tuition. Humanities programs also offer numerous travel scholarships to help fund international study.

# An Introduction to Humanities Essentials

To assist with your transition to university, we have established a course that offers an introduction to university-level studies for all Humanities students. Making the most of the technology-enriched environment of the Active Learning Classrooms in the new L.R. Wilson building, students will acquire invaluable communication and writing skills that are essential for their university, personal, and professional careers.

Voice and Vision: Words to Change the World (HUMAN 1VV3) Is the pen mightier than the sword? It depends on the writer. Effective leaders understand that clear writing is persuasive writing. In this course, students will explore the elements of effective writing for a range of audiences and situations, from a tweet to academic writing to a job application letter. These critical skills will serve as the foundation for student and career success.

# Unique Certificates and Minors to Take Your Career Further

A degree in Humanities gives you the essential skills you need to build a successful career, but why stop there? Through these unique offerings, you can enhance your expertise and credentials to help take your career even further.

# Concurrent Certificate in Professional French

Offered by the Department of French, the concurrent certificate in Professional French provides students with substantial vocabulary from such fields as business, law, medicine, journalism and the hospitality industry. Through a focus on the study of sample cases, the certificate will help prepare students for possible real-life situations that they could encounter in their careers.

# Concurrent Certificate in International Engagement

This certificate recognizes students' efforts to gain meaningful experiences outside the classroom while promoting the concept of international engagement through an emphasis on the development of linguistic and cultural awareness. The Certificate recognizes both academic and cocurricular efforts on the part of the student to gain an international perspective and knowledge of what it means to be a global citizen.

# Concurrent Certificate in Leadership & Cross-Cultural Literacy

This certificate fills a critical need for undergraduate students to learn about and develop professional skills that are highly desirable for the pursuit of graduate studies, professional programs, and employment opportunities, following undergraduate studies. A key objective of the course sequence is to help students develop leadership skills within a rigorous academic framework that balances both theory and practice.

# NEW Concurrent Certificate for Applied Ethics and Policy (CAEP)

Offered by the Department of Philosophy, the certificate for Applied Ethics and Policy (CAEP) is designed to prepare undergraduate students from health sciences, engineering, business, humanities, science, and social science to work together on teams to identify and resolve the ethical, institutional, and policy challenges posed by novel technologies that are highly promising but also potentially socially disruptive. The Certificate will recognize students for having gained core subject matter competencies and experience as members of such interdisciplinary research teams under the direction of faculty and staff associated with the McMaster University Institute for Ethics and Policy Innovation (IEPI).

# Concurrent Certificate in the Language of Medicine & Health

Offered by the Department of Classics, this concurrent certificate provides students with formal recognition of competency in the etymology, word formation, and logic of medical terminology. Students complete a mix of courses in Classics, Greek, Latin, Linguistics and English.

# Concurrent Certificate in Essential French

Offered by the Department of French, the concurrent certificate in Essential French is intended for those students seeking a solid foundation in essential French, including receptive linguistic skills in French (listening, reading, comprehension), and fundamental productive communication skills (speaking, writing).

# NEW Concurrent Certificate in Creative Writing and Narrative Arts (CWNA)

Offered by the Department of English & Cultural Studies, this concurrent certificate is designed for students who wish to develop their creative writing skills through workshops, groups, public-facing community work, and individual projects.

# Specialized Minor in Commerce

A special partnership with McMaster's DeGroote School of Business allows single honours students in Art History, Classics, Cognitive Science of Language, Communication Studies, English & Cultural Studies, French, History, Justice, Political Philosophy and Law, Linguistics, Media Arts, Philosophy, or Theatre & Film Studies to complement their studies with business courses designed to maximize career potential and gain skills in accounting, marketing, and human resources. Those who complete this Specialized Minor may be eligible for the accelerated MBA Program at the DeGroote School of Business.

# **Experiential Education**

In the Faculty of Humanities, we see learning outside the classroom as an important part of a university education, and an important part of creating future leaders.

Available to upper-level Humanities students, our Applied Humanities courses allow students to gain real-world experience in a field related to a Humanities discipline. Students will apply skills and knowledge acquired in undergraduate studies through research projects, pedagogy and work placements.

In addition, many of our departments run experiential education courses that allow students to gain practical experience while earning credits towards their degree programs—it's the best of both worlds!

# A few examples include:

- Applied Art History: Internship Placement
- Communication Studies: Practical Aspects of Media Production
- Cognitive Science of Language:
   Speech-Language Pathology Practicum
- English & Cultural Studies Experiential Practicum: Reading and Writing in the Community
- French as a Second Language: From Theory to Practice
- History: History Practicum
- Linguistics: TESL Practicum
- Philosophy, Pedagogy and Community
- Theatre & Film Studies: Performance and Community Engagement

# **Degree Programs**



# Art History sota.mcmaster.ca

The study of art history helps develop the critical faculties that will allow you to examine the beautiful, complex, and challenging objects produced as a result of human creativity throughout the ages, and to explore the ways humanity is interconnected beyond the barriers of time and cultural diversity. At McMaster, we focus on the Western tradition from the Middle Ages to the present day, on the art of Asia, and on the art of the Ancient World.

As a student in this dynamic program, you'll benefit from the presence of the McMaster Museum of Art (MMA) that houses one of the most impressive collections on any campus in North America. We incorporate materials from the MMA into our curriculum in several courses. Students can also complete a Practical Internship, for example curating exhibitions at the MMA, the Art Gallery of Hamilton or doing projects at regional galleries. An active program of Visiting Artists offers students opportunities to meet contemporary artists working in a variety of media and fields.

# First-year courses

At least 3 units from:

- World Art and Cultural Heritage I (ARTHIST 1A03)
- World Art and Cultural Heritage II (ARTHIST 1AA3)
- Arts in Society: Social Constructions of Race and Gender (ARTHIST 1PA3)

# Program/degree options

- Honours Art History
- Combined Honours Art History and another subject
- Art History BA
- Minor in Art History

# Possible careers

Curating, art conservation, connoisseurship (e.g., auction houses), evaluating, arts administration



# Classics classics.mcmaster.ca

To study Classics is to be introduced to the peoples of Ancient Greece and Rome, to their societies, and to the historical events of which they were a part.

As a Classics student, you'll explore ancient civilizations which flourished from around 2500 B.C. to 500 A.D., whose enormous impact on the development of the Western tradition continues to be felt today. Our courses focus on art and archaeology, on ancient history and the way societies functioned, on literature and ancient philosophy, and on language (Ancient Greek and Latin).

If you are passionate about archaeology, an interdisciplinary minor will allow you to take a range of courses in the arts and sciences (including anthropology, geography and geology) relevant to the practice of archaeology.

# First-year courses

At least 3 units from:

- Introduction to Classical Archaeology (CLASSICS 1A03)
- Introduction to Ancient Myth and Literature (CLASSICS 1B03)
- History of Greece and Rome (CLASSICS 1M03)
- Beginner's Intensive Greek I & II (GREEK 1Z03, 1ZZ3)
- Beginner's Intensive Latin I & II (LATIN 1Z03, 1ZZ3)

# Program/degree options

- Honours Classics
- Combined Honours Classics and another subject
- Classics BA
- Concurrent certificate in the Language of Medicine & Health
- Minor in Classics
- Minor in Greek
- Minor in Latin

# Possible careers

Teaching, research, journalism, civil service, politics and policy



# Cognitive Science of Language linguistics.mcmaster.ca

Cognitive Science examines the mind and its processes, including emotion, memory, attention, and language. Linguistics is the study of how sounds become meaning in speech comprehension and how symbols (such as text or QR codes) acquire meaning in reading. At McMaster they come together to form a unique undergraduate program: Cognitive Science of Language. If you're interested in how we understand language, how we produce it, where and how your brain "does" language, how you learn another language, then this program is for you.

We examine how language is represented and used in the mind: psycholinguistics, and how language is processed in the brain: neurolinguistics. These areas combine in the study of language acquisition, speech production, speech perception, reading and writing across all age groups, from infants to older adults, in both first and second languages. We also look at cases of both normal and impaired language, the latter including developmental disorders and those acquired through strokes or other brain injuries.

# First-year courses

9 units from:

- Introduction to Linguistics: Sounds Speech and Learning (LINGUIST 1A03)
- Introduction to Linguistics: Words, Sentences and Meaning (LINGUIST 1AA3)
- Introduction to Psychology, Neuroscience and Behaviour (PSYCH 1X03) or Survey of Psychology (PSYCH 1F03)

# Program/degree options

- Honours Cognitive Science of Language
- Combined Honours Cognitive Science of Language and another subject

#### Possible careers

Speech language pathology or audiology, computer speech recognition, child psychology, speech technology



# Communication Studies csmm.mcmaster.ca

We are living in the information age, and our society needs highly literate graduates with advanced knowledge of the nature, function and evolution of communication. The Communication Studies program at McMaster offers an academic and interdisciplinary approach to the study of multiple aspects of communication, allowing our students to develop both a strong understanding of the ways humans communicate with one another and the implications of the rapid changes in this dynamic field. As a student, you'll get a solid grounding in important core areas such as communication theory, research methods, history and multimedia. You'll also be able to choose a range of courses from the fascinating and varied fields of communication, such as cultural and performance studies, language and professional communication, and mass and political communication. We also encourage our students to gain practical hands-on experience and skills through our professional writing courses and communication internship courses with private, government, or not-for-profit organizations.

# First-year courses

3 units from:

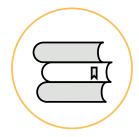
 Introduction to Communication (CMST 1A03)

# Program/degree options

- Honours Communication Studies
- Combined Honours Communication Studies and another subject

# Possible Careers

Marketing, public relations, advertising, broadcasting, health administration



# English & Cultural Studies english.mcmaster.ca

Studying English & Cultural Studies at McMaster will introduce you to an inexhaustible storehouse of cultural and imaginative expression, ranging from the earliest English manuscripts to contemporary examples of popular culture. It will equip you with the critical tools needed to analyze and interpret the diverse media used by writers and other creators of cultural products and will increase your own powers of expression and critical thinking.

Drama, poetry, novels, short stories, and critical theory all form the basis of literary study. You can examine texts using a variety of critical orientations and from various national and historical perspectives; investigate the relations between artistic expression and social or historical circumstance; and explore cultural studies, which examines the vital role played by popular culture in the construction of our social realities. We also offer courses in creative writing and host a professional writer-in-residence, with whom students and the community are encouraged to discuss their current creative works.

# First-year courses

At least 3 units from:

- Studying Culture: A Critical Introduction (ENGLISH 1CS3)
- The Written World (ENGLISH 1F03)
- Making and Unmaking Literary Traditions (ENGLISH 1G03)
- Words in Place (ENGLISH 1H03)

# Program/degree options

- Honours English and Cultural Studies
- Combined Honours English & Cultural Studies and another subject
- Honours English and Cultural Studies & Mathematics
- English and Cultural Studies BA
- Concurrent certificate in Creative Writing and Narrative Arts (CWNA)
- Minor in English and Cultural Studies

#### Possible careers

Publishing, editing, professional writing, business, human resources



# French french.mcmaster.ca

As a student of French at McMaster, you'll be immersing yourself in one of Canada's official languages and one of the world's most widespread, spoken by millions of people across the globe! With our concentration on Francophonie et Diversité (the Francophone World and Diversity), you'll also be introduced to the rich literary and cultural traditions of French-speaking peoples. The language of instruction and communication in the Department is French, which will enable you to increase your fluency. Each year, we welcome new graduates from France who work as language assistants, helping students to hone their skills, and interested students can apply to spend their third year studying on exchange at a university in France or in Quebec. In addition to language instruction, we offer courses in the literature and cultures of the Francophone world (which includes Quebec and Franco-Canada, Europe, Africa, and the Caribbean), as well as linguistics, translation, and literary theory.

# First-year courses

6 units from:

 Introduction to French Studies: Advanced Level (FRENCH 1A06 A/B) Requires Grade 12 French)

# Program/degree options

- Honours French
- Combined Honours French and another subject
- Honours French and Mathematics
- French BA
- Concurrent certificates in Essential French or Professional French
- Minor in French

#### Possible careers

Diplomacy, travel industry, translation, interpreting international relations



# History history.mcmaster.ca

There are many reasons to study history: If you are curious about how the world has worked and how things got to be the way they are, if you love mysteries and puzzles and trying to solve them, and if you want to study human nature not in the abstract, but by looking at how men and women have thought and behaved when faced with real-life challenges.

History is a liberal art, which encourages both empathy and imagination, as we can only understand past times and past actions by trying our best to look at the world through the eyes of others. We will help you better understand the challenging worlds that you and your family have come from; to better appreciate the challenges faced by individuals distant in time and space; to learn about other peoples and countries; and to understand your place in the world.

# First-year courses

At least 3 units from:

- The Rise of Empires, 500–1950 (HISTORY 1CC3)
- The Making of the Modern World, 1750–1945 (HISTORY 1DD3)
- The Historical Roots of Contemporary Issues (HISTORY 1EE3)
- Exploring History in a Small Group Setting (HISTORY 1FF3)
- History of Greece and Rome (HISTORY 1M03)
- A History of Magic (HISTORY 1P03)
- A History of Medicine (HISTORY 1003)

# Program/degree options

- Honours History
- Combined Honours History and another subject
- Honours History and Mathematics
- History BA
- Minor in History

# Possible careers

Librarian, archives, museum curator, advocacy, documentary filmmaking



# Justice, Political Philosophy & Law ippl.humanities.mcmaster.ca

Building on McMaster's internationallyrecognized expertise in legal philosophy and constitutional law, Justice, Political Philosophy, and Law (JPPL) is housed in the Department of Philosophy. The program fosters a sophisticated understanding of the law and legal institutions, and of the political and moral theories that address the value and justice of these institutions. In addition to a solid core of required courses, interdisciplinary course lists allow students to choose from a wide range of subjects, which focus on issues that lie at the heart of contemporary society. Subjects include courses on law, policy, global politics, political philosophy and moral theory, feminist jurisprudence, human rights, globalization, international law, and war and peace.

JPPL is a limited enrolment program with a strong sense of community within its cohort. Approximately 60 students are admitted each year, and selection is based on academic achievement together with a written statement of interest submitted by students at the end of their first year at McMaster.

# First-year courses

We recommend:

 Philosophy, Law and Society (PHILOS 1B03)

# Program/degree options

 Honours Justice, Political Philosophy and Law

# Possible careers

Law, government, international aid and development, education



# Linguistics linguistics.mcmaster.ca

Language and the ability to acquire languages is one of the most fascinating properties of human behaviour and cognition. Linguists study how people acquire and learn languages, how their language faculty interfaces with other cognitive processes, and how to model that knowledge computationally.

Linguistics is a science in which you learn about the many different characteristics of human language, including sounds, words sentences, and meaning. You'll explore how languages have evolved over time; are used in different situations and different social groups; are acquired or learned by children and adults; and are processed, produced and comprehended. You'll learn about the universal properties of languages, language teaching and translation, second language learning, language and the law, computer processing of human language, interactional sociolinguistics, and intercultural and interpersonal communication. Students can also gain excellent preparation for teaching languages with our practicum in Teaching English as a Second Language (TESL) and there is the possibility of applying for an official TESL certification.

# First-year courses

6 units from:

- Introduction to Linguistics: Sounds, Speech and Learning (LINGUIST 1A03)
- Introduction to Linguistics: Words, Sentences and Meaning (LINGUIST 1AA3)

# Program/degree options

- Honours Linguistics
- Combined Honours Linguistics and another subject
- Minor in Linguistics
- Minor in German Studies
- Minor in Italian Studies
- Minor in Japanese Studies

# Possible careers

ESL teaching, lexicography, legal language consulting, speech technology



# Media Arts csmm.mcmaster.ca

Media Arts is a production-oriented program uniting new media with traditional arts and humanities subjects. Through experiential learning, students in the program will engage with creative, theoretical and critical aspects of digital media production and develop both the practical and conceptual skills necessary to pursue careers in Media Arts. Students work alongside faculty members who are active in the creation and dissemination if diverse media projects.

Stressing the intersection of theory and practice, our courses are designed to cultivate critical thinking through an engagement with various histories and theories of media arts.

With a cohort of 50 student per year, the Media Arts program provides individualized attention through small class sizes, as well as opportunities for collaboration — with both peers and faculty — inside and beyond the classroom.

# First-year courses

3 units from:

Media Arts (MEDIAART 1A03)

# Program/degree options

- Honours Media Arts
- Combined Honours Media Arts and another subject

# Possible careers

Filmmaking, video production, animation, web design, social media management



# Global Peace & Social Justice peace.mcmaster.ca

Global Peace & Justice is an interdisciplinary program where students investigate systems of social inequity and injustice at the local, national and global levels.

Students in the program develop research skills and practical knowledge to understand the root causes and perpetuation of social conflict, violence, and oppression in politics and culture. They learn strategies for reimagining and making transformative change in order to build peaceful, equitable, and just communities.

The program offers many opportunities for community-based learning through our experiential learning courses and public engagement events.

McMaster offers one of the few programs of its kind in Canada and is home to a well-established and active Centre for Global Peace and Social Justice studies.

# First-year courses

3 units from:

- Introduction to Peace Studies (PEACJUST 1A03)
- Voices at Mac: Understanding our World (PEACJUST 1VM3)

# Program/degree options

- Combined Honours Global Peace & Social Justice and another subject
- Minor in Global Peace & Social Justice

# Possible careers

Mediation, consulting, aid and development, negotiating, human rights education



# Philosophy philos.mcmaster.ca

Philosophical reasoning is used to clarify and interpret important concepts such as truth, God, mortality, beauty, knowledge, and reality. These concepts play an important role in our self-understanding and our interpretation of the world.

The study of philosophy will allow you to explore answers to questions about how we know things or what kind of things we are capable of knowing; about the ultimate nature of the human self, of mind, of time, or of space; about the meaning and practical implications of moral or political concepts (e.g., justice, fairness, kindness, equality); about the existence and nature of God; and many, many others. Examination of these questions has led philosophers into complicated theories because human reason needs them to make sense of things. Studying philosophical questions and theories will help you take a more holistic view of our world, organize your own thinking, improve your communication skills, and teach you to use argument and valid reasoning to arrive at any conclusion.

# First-year courses

- Philosophical Texts (PHILOS 1A03)
- Philosophy, Law and Society (PHILOS 1B03)
- Philosophical Questions (PHILOS 1E03)
- Meaning in Life (PHILOS 1F03)

# Program/degree options

- Honours Philosophy
- Combined Honours Philosophy and another subject
- Honours Philosophy and Biology
- Honours Philosophy and Mathematics
- Philosophy BA
- Concurrent Ethics and Policy for Technological Innovation Certificate (EPTIC)
- Minor in Philosophy

### Possible careers

Bioethics, policy analysis, corporate management, legal affairs



# Theatre & Film Studies sota.mcmaster.ca

Theatre & Film Studies at McMaster offers a broadly based program of study in the history, theory, and critical understanding of dramatic performance in both live and recorded media. Starting with an overview of the field, students take both analysiscentred and creation-centred courses in upper years to build core skills and explore differentiated applications of skills and knowledge, with final year courses allowing them to synthesize and expand their skills and knowledge.

Experiential learning in the program centres on devising, an approach that allows students to learn multiple methods for building a live-performance work by taking up a broad range of cultural experiences. To support this devising-centred curriculum, undergraduate students have regular access to a state-ofthe-art Performance Lab. The Lab has been specifically designed to support a dynamic creative process in which students create performance texts through a hands-on exploration of the integration of voice, movement, sound effects, lighting design, and/or video projection. Theatre & Film students will also benefit from a fantastic new black box theatre in the new Wilson Hall for Liberal Arts.

# First-year courses

3 units from:

 Introduction to Theatre, Cinema and Society (THTRFLM 1T03)

# Program/degree options

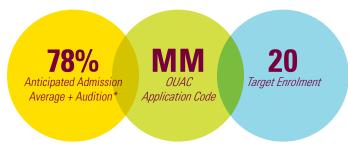
- Honours Theatre & Film Studies
- Combined Honours Theatre & Film Studies and another subject
- Theatre & Film Studies BA
- Minor in Theatre & Film Studies

# Possible careers

Acting, directing, arts administration, sales and events, arts programming







The Music program gives students a thorough grounding in the four fundamental areas of music instruction — theory, general musicianship, history and performance, and allows students who are interested in teaching careers to specialize in Music Education. Those interested in academic studies and graduate school may emphasize such topics as Music History and Music Theory. Students may also choose Music Cognition that explores exciting new research into how music is perceived in the brain and how music intersects with other aspects of intellectual development.

# **Degree Options**

- Honours Bachelor of Music
- Honours Bachelor of Music (Music Cognition)
- Combined Honours Bachelor of Arts
- Bachelor of Arts (Music)

# Requirement for Admission (Ontario)

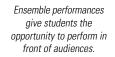
English

\*See Auditions next page.

# Why Choose McMaster?

- The Music programs at McMaster are designed to meet students' needs in performance and education and to provide academic opportunities that are both challenging and exciting.
- We feature small, intimate classes with individual attention to enable students to reach their full potential.
- We pride ourselves on innovative teaching methods supported by the latest technology, and in providing a friendly, supportive environment with approachable, caring faculty. Our curriculum is designed to offer students considerable input into the structure of their degree.







Opportunity to study our groundbreaking specialization in Music Cognition.



Annual Concert Series is an opportunity to see world-class artists on campus.

# **Auditions**

To enter Music I, students must meet the Humanities admission requirements and pass an audition consisting of a performance (the minimum level required for both equates to Royal Conservatory of Music Honours Grade 8), a theory test (equivalent to RCM Advanced Rudiments), as well as an ear-training test. Most auditions take place between February and April. For more information, please visit sota.humanities.mcmaster.ca/music/.

#### First Year at a Glance

Total: 33 units\*\* Required: 24 units\*\*

# First-year courses:

- Theory and Analysis I (MUSIC 1CA3)
- Theory and Analysis II (MUSIC 1CB3)
- Practical Musicianship I (MUSIC 1DA3)
- Practical Musicianship II (MUSIC 1DB3)
- Solo Performance (MUSIC 1E06 A/B)
- Music History I: Music and Culture (MUSIC 1MH3)
- Rudiments of Music (MUSIC 1CR3)
- 3 units\*\* of Ensemble Performance
- 9–12 units\*\* of electives chosen from courses offered by the Humanities or other faculties.

Students planning to enter the Music Cognition program must include Introduction to Psychology, Neuroscience & Behaviour (PSYCH 1X03) and Foundations of Psychology, Neuroscience & Behaviour (PSYCH 1XX3) in their first-year program. Students who do not have Grade 12 Biology should also take Introductory Biology (BIOLOGY 1P03) concurrently with PSYCH 1X03.

# **Beyond First Year**

Students can specialize in voice or any instrument from the classical or jazz field. Students are assigned a specialist instructor based on their audition and can receive private lessons throughout the program.

Students may also choose our groundbreaking specialization in Music Cognition, which explores exciting new research into how music is perceived in the brain and how music intersects with other aspects of intellectual development.

It is possible to combine the study of music with another subject from Humanities or Social Sciences. Students can also choose to complete a Diploma in Music Performance concurrently with their degree or minor in music.

# Music Cognition Specialization

This unique opportunity is offered through our partnership with the McMaster Institute for Music and the Mind (MIMM). MIMM is an interdisciplinary institute bringing together researchers from music, psychology, neuroscience, mathematics, kinesiology, and computer science. This specialization, along with the state-of-the-art Large Interactive Virtual Environment (LIVE) Lab, offers music students unprecedented opportunities to engage in research on the psychological roots of the musical experience.

# **Future Careers**

Our graduates pursue careers in many musical fields, such as:

- Music education
- Performance
- Music business management
- Musicology
- Music therapy
- Music cognition research

Through the advanced study of music, our students develop many important and sought-after transferable skills, such as the ability to research, to reason and analyze, to think critically, and to make informed decisions. In addition to careers focusing on music, our graduates have applied these skills to diverse areas, including the media, law, government and business.

# Performance Opportunities

All Music programs at McMaster involve performance. There are many opportunities to perform in public, such as the Student Concert Series for soloists and chamber groups.

# Ensemble performance

Music students must also participate in one of our seven major ensembles for at least the first two years of study:

- McMaster Chamber Orchestra
- McMaster Concert Band
- McMaster Jazz Band
- David Gerry Flute Ensemble
- McMaster Percussion Ensemble
- McMaster University Choir
- McMaster Cantemus Vocal Ensemble

Admission to these ensembles is by audition. Auditions are held at the beginning of the fall term in September. They are open to music and non-music students.

# New 350-Seat Concert Hall

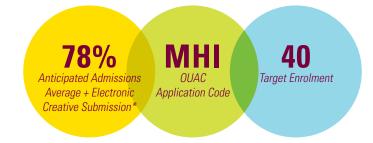
Central to our latest building L.R. Wilson Hall, is our brand new, state-of-the-art concert hall, bringing phenomenal acoustics to the heart of campus, which will be used for numerous concerts and music performances. L.R. Wilson Hall also houses numerous practice spaces.



<sup>\*\*</sup>Not sure what units are? Flip to page 25 for an explanation.

# iArts (Integrated Arts)





\* See electronic creative submission section below. Initial round of Electronic Creative Submissions due February 1, 2022.

The iArts BFA is a small, highly-selective program that emphasizes interdisciplinary creative practice. Students will have the opportunity to engage with a range of hands-on media and techniques in art and performance, while also learning about the histories and critical contexts of art and performance. The iArts program allows students to explore their creative talent, develop a significant body of work, and foster the skills needed for a creative career.

# **Degree Option**

Bachelor of Fine Arts – Honours iArts

# Requirement for Admission (Ontario)

English

# Why Choose McMaster?

- iArts is a unique integrated arts degree that invites students to direct their path including: acting, painting/drawing, printmaking, sculpture, ceramics, devising plays, researching cultural and critical histories, creating videos and more.
- iArts is committed to issues of social justice, equity and diversity in the arts and society.
- iArts believes in environmentally-responsible studio practices and are the only program in Canada to declare a commitment to this initiative.
- iArts faculty members are practicing cultural producers and pride themselves on teaching both the creative and entrepreneurial skills needed for a career in the arts.

# **Electronic Creative Submission**

Students intending to study iArts at McMaster, must meet the general entrance requirements to the Faculty of Humanities and qualify through the Creative Submission selection process. All applicants are required to submit an Electronic Creative Submissions through SlideRoom. A creative submission package is a compilation of creative work and/or practice that an applicant has done either in school, at home, or possibly in the community. A Creative Submission package is similar to a portfolio or audition reel but can feature work from a range of disciplines.

More information can be found at: sota.humanities.mcmaster.ca/undergraduate-programs/iarts/apply-now/



Artists-in-Residence Program connects students with high calibre artists.



State-of-the-art facilities including the Performance Lab, Black Box Theatre, and bronze and aluminum casting foundry (one of only three in Ontario).



50+ city cultural institutions accommodate the flourishing arts scene in Hamilton.

# First Year at a Glance

Total: 30 units Required: 21 units

# First-year courses:

- Perspectives A: Arts in Society: Social Constructions of Class, Race and Gender (iARTS 1PA3)
- Perspectives B: Arts in Society: Technology and the Environment (iARTS 1PB3)
- Project Development 1 (iARTS 1RR3)
- Project Production 1 (iARTS 1RP3)

# 9 units from the list below:

- Introduction to Histories of the Arts (iARTS 1HA3)
- 2D Practices in Art (iARTS 1BD3)
- Acting and Performance: Self, Society and Change (iARTS 1CR3)
- Working in the Arts Today (iARTS 1SW3)
- Designing for Performance: Perspectives and Possible Worlds (iARTS 1T03)
- 3D Practices in Art (iARTS 1SS3)

9 units of electives chosen from courses offered by the Faculty of Humanities or other faculties.

#### Hamilton—A Great City for Artists!

Did you know that Hamilton has a flourishing creative scene? With over 50 cultural production spaces, from grassroots galleries along James Street North to the century-old Art Gallery of Hamilton, Hamilton Fringe, Frostbites Festival, and Aquarius Theatre, the city of Hamilton is the perfect home for iArts students.

# **Beyond First Year**

The Bachelor of Fine Arts (iArts) program gives students exceptional opportunities to explore and develop their creative talents. As a single honours degree with its own direct-entry first-year program, this option allows them to focus on creative production throughout their university careers. Upper-level iArts courses give students in-depth knowledge of numerous areas of study: printmaking, acting, devising, drawing, cultural histories, film studies, video production, contemporary art histories, curatorial studies, sculpture, painting, mixed-media, installation, and ceramics/foundry, which along with major capstone courses, allow students to build a significant body of work.

# **Innovative Courses**

The iArts Program at McMaster highly values the unique creative opportunities offered by team-teaching and collaborative learning opportunities, including research partnerships with students in Engineering, courses providing hands-on experience in exhibition preparation, and fieldwork experience.

# Beyond the Program

With faculty connections to Communications Studies and Media Art, Arts and Science and other disciplines, our students benefit from collaborative learning and opportunities that extend beyond the program. The university environment provides access to many resources such as the anatomy lab, the library archives, and the Royal Botanical Gardens nature reserves.

# Annual Culminating Exhibition and/or Performance

Upper-level independent iArts courses help our students form personal, cohesive bodies of work that lead to a final degree exhibition and/ or public performance. Students work with professional curators and production teams to present an interdisciplinary festival of the arts, exhibitions, and public performances in the main space of the McMaster Museum of Art, and the brand new Black Box Theatre.

# The McMaster Museum of Art (MMA)

The MMA houses one of the best university art collections anywhere in the country. The museum is a fantastic on-campus resource for artists and art lovers, allowing students to examine first-hand internationally-acclaimed historic and contemporary artworks.

# Black Box Theatre (BBT)

The BBT is a state-of-the-art performance space that can be configured to for theatre in the round, end-on staging, thrust staging, or alley staging. It is equipped with the latest LED lighting technology, the highest quality surround sound system, and multiple projectors for multi-media performances and installations.

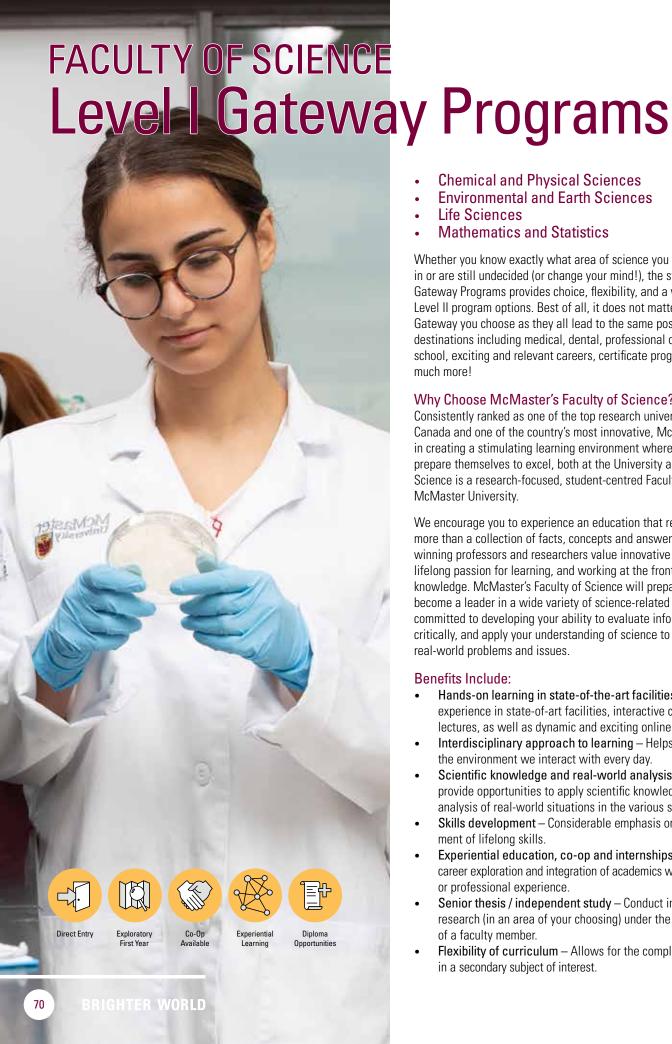
# **Future Careers**

An education in the arts can open many doors and take you many places. During your time in iArts you will have the opportunity to explore ideas and expand your skills in a variety of creative practices, including art, performance and critical theory. With a focus on social justice, cultural literacy and collaboration, iArts prepares students with skills and knowledge that are in demand in today's professional environments. Graduates from the program can follow many different paths including: professional careers in the arts; advanced studies in graduate programs with a focus on creative practice and/or social justice; careers and professions that require the highly transferrable skills learned through arts practices.

# iArts Facilities

Our facilities also include:

- Print studio focusing on sustainable practice
- Bronze and aluminum casting foundry
- Wood and metal shops
- Ceramics studio
- Painting and drawing studios
- Professional gallery setting for student critiques
- Student and community gallery for public exhibitions
- Performance Lab
- Black box theatre
- Film screening classrooms



- **Chemical and Physical Sciences**
- **Environmental and Earth Sciences**
- Life Sciences
- Mathematics and Statistics

Whether you know exactly what area of science you are interested in or are still undecided (or change your mind!), the structure of our Gateway Programs provides choice, flexibility, and a wide range of Level II program options. Best of all, it does not matter which Level I Gateway you choose as they all lead to the same post-graduate destinations including medical, dental, professional or graduate school, exciting and relevant careers, certificate programs, and much more!

# Why Choose McMaster's Faculty of Science?

Consistently ranked as one of the top research universities in Canada and one of the country's most innovative, McMaster believes in creating a stimulating learning environment where students can prepare themselves to excel, both at the University and beyond. Science is a research-focused, student-centred Faculty at the heart of McMaster University.

We encourage you to experience an education that represents far more than a collection of facts, concepts and answers. Our awardwinning professors and researchers value innovative teaching, a lifelong passion for learning, and working at the frontiers of knowledge. McMaster's Faculty of Science will prepare you to become a leader in a wide variety of science-related careers. We are committed to developing your ability to evaluate information, think critically, and apply your understanding of science to a wide range of real-world problems and issues.

#### **Benefits Include:**

- Hands-on learning in state-of-the-art facilities Lab experience in state-of-art facilities, interactive classroom lectures, as well as dynamic and exciting online content.
- Interdisciplinary approach to learning Helps to understand the environment we interact with every day.
- Scientific knowledge and real-world analysis Many courses provide opportunities to apply scientific knowledge to the analysis of real-world situations in the various scientific fields.
- Skills development Considerable emphasis on the development of lifelong skills.
- Experiential education, co-op and internships Allows for career exploration and integration of academics with a community or professional experience.
- Senior thesis / independent study Conduct independent research (in an area of your choosing) under the supervision of a faculty member.
- Flexibility of curriculum Allows for the completion of a minor in a secondary subject of interest.

# **Degree Options**

Bachelor of Science (Honours)

Bachelor of Applied Science (Honours) Bachelor of Science

# **GATEWAY STUDENTS**

- 1. Select the Level I Gateway program that best suits your academic interests and strengths.
- 2. Complete courses in Level I that reflect the admission requirements of the Level II program(s) you are considering, complemented by electives.
- 3. Apply to up to four Level II programs, at the end of first year.





# Chemical and Physical Sciences

# Requirements for Admission (Ontario)

- English
- Advanced Functions
- Calculus & Vectors
- Chemistry
- Physics



# Environmental and Earth Sciences

# Requirements for Admission (Ontario)

- English
- One of: Advanced Functions or Calculus & Vectors
- One of: Biology or Chemistry
- One of: Advanced Functions, Calculus & Vectors, Biology, Chemistry, Physics



# Life Sciences

# Requirements for Admission (Ontario)

- English
- Biology
- One of: Advanced Functions or Calculus & Vectors
- One of: Advanced Functions, Calculus & Vectors, Chemistry, Physics

# **Mathematics and Statistics**

# Requirements for Admission (Ontario)

- English
- Advanced Functions
- Calculus & Vectors

# **Level II Program Options**

Following is the list of Level II program options available to students in any of our Gateway Programs. Detailed information is available in the Undergraduate Calendar at academiccalendars.romcmaster.ca.

# Programs leading to the Honours Bachelor of Science degree (HonsBSc)

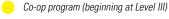
Level II Program	Admission Requirements (completion of at least 24 units including):		Offered by:
Actuarial and Financial Mathematics	<ul> <li>1 of MATH 1A03, 1LS3, 1X03</li> <li>1 of MATH 1AA3, 1LT3, 1XX3</li> <li>MATH IB03</li> </ul>	•	Department of Mathematics and Statistics
Astrophysics	<ul> <li>2 of MATH 1A03, 1AA3, 1LS3, 1LT3, 1X03, 1XX3</li> <li>PHYSICS 1A03 or 1C03</li> <li>PHYSICS 1AA3 or 1CC3</li> <li>CHEM 1A03</li> <li>3 courses from Science I Course List</li> </ul>	•	Department of Physics and Astronomy
Biochemistry	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>2 courses from Science I Course List</li> </ul>		Department of Biochemistry & Biomedical Sciences
Biology	<ul><li>BIOLOGY 1A03 &amp; 1M03</li><li>CHEM 1A03 &amp; 1AA3</li></ul>		Department of Biology
Biology – Biology Research Specialization	<ul> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>2 courses from Science I Course List</li> </ul>		
Biology – Physiology Research Specialization	2 courses from Science I Course List		
Biodiversity and Environmental Sciences	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>EARTHSC 1G03 or ENVIRSC 1C03</li> <li>MATH 1A03 or 1LS3</li> <li>4 courses from: ASTRON 1F03, BIOPHYS 1S03, CHEM 1A03, 1AA3, COMPSCI 1JC3, 1MD3, ENVIRSC 1C03, EARTHSC 1G03, ENVSOCTY 1HA3, 1HB3, MATH 1AA3, 1B03, 1LT3, LIFESCI 1D03, PHYSICS 1A03, 1AA3, 1C03, 1CC3, PSYCH 1F03, 1FF3, 1X03, 1XX3, SCIENCE 1A03</li> </ul>		Department of Biology School of Earth, Environment and Society
Biology and Mathematics	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>1 of MATH 1A03, 1LS3, 1X03</li> <li>1 of MATH 1AA3, 1LT3, 1XX3</li> </ul>		Department of Biology Department of Mathematics and Statistics
Biology and Psychology, Neuroscience & Behaviour	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>PSYCH 1FF3 or 1XX3</li> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>1 course from Science I Course List</li> </ul>	•	Department of Biology  Department of Psychology, Neuroscience & Behaviour
Chemical Biology	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>2 courses from Science I Course List</li> </ul>	•	Department of Chemistry and Chemical Biology
Chemistry	<ul> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>4 courses from Science   Course List</li> </ul>		Department of Chemistry and Chemical Biology
Earth and Environmental Sciences	<ul> <li>EARTHSC 1G03 &amp; ENVIRSC 1C03</li> <li>CHEM 1A03 or CHEM 1R03 and 1 course from Science I Course List</li> <li>MATH 1A03 or 1LS3</li> <li>4 courses from: BIOLOGY 1A03, 1M03, CHEM 1AA3, MATH 1AA3, 1B03, 1LT3, PHYSICS 1A03, 1AA3, 1C03, 1CC3, SCIENCE 1A03</li> </ul>		School of Earth, Environment and Society
Environmental Sciences	<ul> <li>2 courses from EARTHSC 1G03, ENVIRSC 1C03, ENVSOCTY 1HA3, ENVSOCTY 1HB3</li> <li>1 course from: MATH 1A03, 1LS3, 1MM3</li> <li>3 courses from Science I Course List</li> </ul>		School of Earth, Environment and Society

Science I Course List: ASTRON 1F03, BIOLOGY 1A03, 1M03, BIOPHYS 1S03, CHEM 1A03, 1AA3, EARTHSC 1G03, ENVIRSC 1C03, ENVSOCTY 1HA3, 1HB3, LIFESCI 1D03, MATH 1A03, 1AA3, 1B03, 1LS3, 1LT3, 1MP3, 1MM3, PHYSICS 1A03, 1AA3, 1C03, 1CC3, PSYCH 1F03, 1FF3, 1X03, 1XX3, SCIENCE 1A03



Field placements





Level II Program	Admission Requirements (completion of at least 24 units including):		Offered by:
Life Sciences Life Sciences – Sensory Motor Systems Specialization	<ul> <li>BIOLOGY 1A03</li> <li>CHEM 1A03</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>1 of BIOLOGY 1M03, EARTHSC 1G03, ENVIRSC 1C03, PSYCH 1FF3, 1XX3</li> <li>3 courses from Science I Course List</li> </ul>		School of Interdisciplinary Science
Life Sciences – Origins of Disease Specialization	<ul> <li>BIOLOGY 1A03</li> <li>CHEM 1A03, CHEM 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>1 of BIOLOGY 1M03, ENVIRSC 1C03, EARTHSC 1G03, PSYCH 1FF3, 1XX3</li> <li>2 courses from Science 1 Course List</li> </ul>	•	School of Interdisciplinary Science
Mathematics and Statistics	<ul> <li>1 of MATH 1A03, 1LS3, 1X03</li> <li>1 of MATH 1AA3, 1LT3, 1XX3</li> </ul>		Department of Mathematics and Statistics
Mathematics and Statistics – Mathematics Sub-Plan	• MATH 1B03	•	
Mathematics and Statistics – Statistics Sub-Plan		•	
Mathematics and Computer Science	<ul> <li>1 of MATH 1A03, 1LS3, 1X03</li> <li>1 of MATH 1AA3, 1LT3, 1XX3</li> <li>MATH 1B03</li> <li>COMPSCI 1MD3 or MATH 1MP3</li> <li>COMPSCI 1DM3</li> <li>COMPSCI 1XC3 or COMPSCI 1XD3</li> </ul>	•	Department of Mathematics and Statistics
Mathematics and Physics	<ul> <li>1 of MATH 1A03, 1LS3, 1X03</li> <li>1 of MATH 1AA3, 1LT3, 1XX3</li> <li>MATH 1B03</li> <li>PHYSICS 1A03 or 1C03</li> <li>PHYSICS 1AA3 or 1CC3</li> <li>1 course from Science I Course List</li> </ul>		Department of Mathematics and Statistics  Department of Physics and Astronomy
Medical and Biological Physics	<ul> <li>2 of MATH 1A03, 1AA3, 1LS3, 1LT3, 1X03, 1XX3</li> <li>PHYSICS 1A03 or 1C03</li> <li>1 of BIOPHYS 1S03, LIFESCI 1D03, PHYSICS 1AA3, 1CC3</li> <li>CHEM 1A03</li> <li>1 of BIOLOGY 1A03, CHEM 1AA3, MATH 1B03</li> <li>2 courses from Science I Course List</li> </ul>		Department of Physics and Astronomy
Molecular Biology and Genetics Research Specialization	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>2 courses from Science I Course List</li> </ul>	•	Department of Biology
Neuroscience	<ul> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>CHEM 1A03 &amp; 1AA3</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>PSYCH 1FF3 or 1XX3</li> <li>1 of MATH 1AA3, 1B03, 1LT3, 1MP3, COMPSCI 1MD3</li> </ul>	•	Department of Biology  Department of Psychology,  Neuroscience & Behaviour
Physics	<ul> <li>2 of MATH 1A03, 1AA3, 1LS3, 1LT3, 1X03, 1XX3</li> <li>PHYSICS 1A03 or 1CC3</li> <li>PHYSICS 1AA3 or 1CC3</li> <li>CHEM 1A03</li> <li>3 courses from the Science I Course List</li> </ul>		Department of Physics and Astronomy
Psychology, Neuroscience & Behaviour Psychology, Neuroscience & Behaviour – Mental Health Specialization	<ul> <li>PSYCH 1FF3 or 1XX3</li> <li>MATH 1A03 or 1LS3</li> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>1 of BIOPHYS 1S03, CHEM 1A03, PHYSICS 1A03, 1C03</li> <li>3 courses from Science I Course List</li> </ul>		Department of Psychology, Neuroscience & Behaviour
Psychology, Neuroscience & Behaviour – Music Cognition Specialization	<ul> <li>PSYCH 1FF3 or 1XX3</li> <li>MATH 1A03 or 1LS3</li> <li>BIOLOGY 1A03 &amp; 1M03</li> <li>1 of BIOPHYS 1S03, CHEM 1A03, PHYSICS 1A03, 1C03</li> <li>MUSIC 1A03 or 1AA3</li> <li>3 courses from Science I Course List</li> </ul>	-	Department of Psychology, Neuroscience & Behaviour

Science I Course List: ASTRON 1F03, BIOLOGY 1A03, 1M03, BIOPHYS 1S03, CHEM 1A03, 1AA3, EARTHSC 1G03, ENVIRSC 1C03, ENVSOCTY 1HA3, 1HB3, LIFESCI 1D03, MATH 1A03, 1AA3, 1B03, 1LS3, 1LT3, 1MP3, 1MM3, PHYSICS 1A03, 1AA3, 1C03, PSYCH 1F03, 1FF3, 1X03, 1XX3, SCIENCE 1A03



#### Programs Leading to the Honours Bachelor of Applied Science Degree (HonsBASc)

Graduates from the Honours BASc Applied Psychology in Human Behaviour programs are well-equipped to enter any work environment that requires understanding the determinants of human behaviour and is an excellent preparatory degree for a range of applied certificate/diploma training. Students in the specializations graduate with both an honours degree from McMaster University and a Graduate Certificate/Diploma from Mohawk College.

The Honours Sustainable Chemistry program provides students with a uniquely integrated and inquiry-based approach to research and problem-solving in chemistry and chemistry-related areas. The traditional practices of chemistry are examined through the lens of sustainability, with the objective to develop students who can identify and implement better ways to practice chemistry.

Level II Program	Admission Requirements (completion of at least 24 units, including):		Offered by:
Applied Psychology in Human Behaviour	<ul><li>PSYCH 1F03 or 1X03</li><li>PSYCH 1FF3 or 1XX3</li></ul>		Department of Psychology, Neuroscience & Behaviour
Applied Psychology in Human Behaviour — Autism and Behavioural Science Specialization	<ul> <li>BIOLOGY 1P03 (or SBI4U)</li> <li>1 of MATH 1F03, 1K03, STATS 1LL3 (or either MHF4U or MDM4U)</li> </ul>	<b>♦</b>	
Applied Psychology in Human Behaviour – Early Childhood Studies Specialization			
Honours Sustainable Chemistry	<ul> <li>2 of CHEM 1A03, 1AA3, 1E03</li> <li>1 of MATH 1A03, 1LS3, 1M03, 1MM3 1X03, 1ZA3</li> <li>2 courses from the Science I Course List</li> </ul>		Department of Chemistry and Chemical Biology

<sup>\*</sup>Program includes two four-month field placements, done within the community.

Science I Course List: ASTRON 1F03, BIOLOGY 1A03, 1M03, BIOPHYS 1S03, CHEM 1A03, 1AA3, EARTHSC 1G03, ENVIRSC 1C03, ENVSOCTY 1HA3, 1HB3, LIFESCI 1D03, MATH 1A03, 1AA3, 1B03, 1LS3, 1LT3, 1MP3, 1MM3, PHYSICS 1A03, 1AA3, 1C03, PSYCH 1F03, 1FF3, 1X03, 1XX3, SCIENCE 1A03

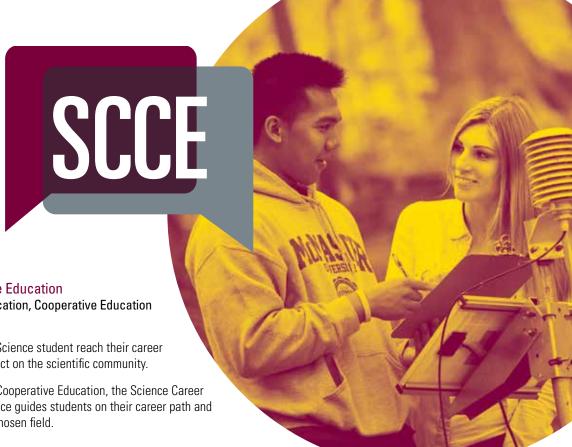
Field placements Co-op program (beginning at Level III) Limited-enrolment program

#### Programs leading to the Bachelor of Science degree (BSc)

Level II Program	Admission Requirements (completion of at least 24 units, including):	Offered by:
Chemical and Physical Sciences	<ul> <li>MATH 1A03 or 1LS3</li> <li>3 of CHEM 1A03, 1AA3, PHYSICS 1A03, 1AA3, 1C03, 1CC3</li> <li>4 courses from Science I Course List</li> </ul>	Department of Chemistry and Chemical Biology Department of Physics and Astronomy
Environmental Sciences	<ul> <li>EARTHSC 1G03 or ENVIRSC 1C03</li> <li>MATH 1A03 or 1LS3</li> <li>6 courses from Science I Course List</li> </ul>	School of Earth, Environment and Society
Life Sciences	<ul> <li>BIOLOGY 1A03</li> <li>CHEM 1A03</li> <li>MATH 1A03 or 1LS3</li> <li>PHYSICS 1A03 or 1C03</li> <li>1 of BIOLOGY 1M03, EARTHSC 1G03, ENVIRSC 1C03, PSYCH 1FF3, 1XX3</li> <li>3 courses from Science I Course List</li> </ul>	School of Interdisciplinary Science
Mathematical Sciences	<ul> <li>2 of MATH 1A03, 1AA3, 1LS3, 1LT3, 1X03, 1XX3</li> <li>1 of COMPSCI 1MD3, MATH 1B03,1MP3</li> <li>2 courses from Science I Course List</li> </ul>	Department of Mathematics and Statistics

Science I Course List: ASTRON 1F03, BIOLOGY 1A03, 1M03, BIOPHYS 1S03, CHEM 1A03, 1AA3, EARTHSC 1G03, ENVIRSC 1C03, ENVSOCTY 1HA3, 1HB3, LIFESCI 1D03, MATH 1A03, 1AA3, 1B03, 1LS3, 1LT3, 1MP3, 1MM3, PHYSICS 1A03, 1AA3, 1C03, PSYCH 1F03, 1FF3, 1X03, 1XX3, SCIENCE 1A03

# START YOUR JOURNEY If making these important decisions feels like a daunting task, not to worry. Our interactive Science MAP (mapsci.ca) will guide you. As well, we have a team of qualified Academic Advisors ready to keep you on track!



Science Career and Cooperative Education Career Education, Experiential Education, Cooperative Education science.mcmaster.ca/scce

Our vision is to see every McMaster Science student reach their career potential and have a meaningful impact on the scientific community.

Focusing on Career, Experiential and Cooperative Education, the Science Career and Cooperative Education (SCCE) office guides students on their career path and helps them to be successful in their chosen field.

#### Career Education

We provide students with tools and knowledge to plan for success today and prepare for a future in the field of science. Choosing a career is an involved process, which requires that students reflect upon their interests, work style preferences and values to determine a career path that best suits their short- and long-term goals.

SCCE is committed to assisting students with the transition from school to work through:

- Career advising
- Cover letter and resume critiques
- Career information sessions and workshops
- Personal statement critiques
- Mock interviews

#### Cooperative Education (Co-Op)

Science Cooperative Education is an integrated approach to higher education that enables highly motivated students to alternate academic terms with paid, relevant work experience. The term "cooperative education" emphasizes the partnership between the employer, the student and McMaster University.

#### Current Faculty of Science co-op programs, all of which begin at Level III:

- Actuarial and Financial Mathematics
- Biochemistry Biomedical Research Specialization
- Chemical Biology
- Chemistry
- Earth and Environmental Sciences
- **Environmental Sciences**
- Life Sciences
- Mathematics and Statistics (including sub-plans)
- Medical and Biological Physics
- Molecular Biology and Genetics Research Specialization
- **Physics**
- Sustainable Chemistry

#### **Experiential Education**

Experiential Education provides students with the opportunity to gain real world, academically relevant experience in a community, research, or professional setting. That combination of academics and applied learning helps students to further develop the necessary qualities and skills that will be transferable to future career paths.

#### Experiential education opportunities include:

- **Applied Placements**
- Research Practicums
- Science Internships



#### Biochemistry and Biomedical Sciences healthsci.mcmaster.ca/biochem

Biochemistry is the study of the chemical and molecular basis of life, seeking to describe and understand the structure, function, and organization of living matter in molecular terms. Biochemistry is a continuum with structural and molecular biology, and builds on a strong foundation of the other natural sciences.

#### Research areas

- Biotechnology & Drug Discovery
- Genetic Engineering
- Protein Structure & Enzyme Mechanisms
- Membrane Structure & Function
- Molecular Pharmacology
- Nutrition & Metabolism
- Nucleic Acid Structure & Functions
- Gene Expression
- Stem Cell Technology
- Infectious Disease
- Neurodegenerative Disease

#### Post-graduate opportunities

- Medicine
- Pharmacy
- Veterinary Medicine
- Cancer and Stem Cells
- Structural Biology
- Eukaryotic Cell Biology and Human Disease
- Microbiology and Antimicrobial Drug Discovery

#### Possible career areas

- Immunology
- Nutritional Science
- Bioinformatics Science
- · Gene Therapy
- Pharmacology
- Pathology
- Toxicology
- Embryology
  Medicine and Medical Research



#### Biology biology.mcmaster.ca

The Department of Biology is the hub of research and teaching related to living systems and environments, and how knowledge contributes to advances in environmental and medical biotechnology. The Department offers students the opportunity to prepare for careers in scientific research, industry and the public sector.

#### Research areas

- Bioinformatics and Functional Genomics
- Cell and Developmental Biology
- Ecology and Evolution
- Environmental Physiology
- Genetics and Molecular Biology
- Microbiology and Plant Biology

#### Post-graduate opportunities

- Medicine
- Dentistry
- Pharmacy
- MBA
- OptometryLaw School
- Veterinary Medicine

#### Possible career areas

- Genetics
- Environmental Biology
- Psychology
- Bioinformatics Neuroscience
- Pathology Horticulture
- Epidemiology
- Immunology
- Conservation Biology
- Food Science
- Biostatistics
- Microbiology



#### Chemistry and Chemical Biology chemistry.mcmaster.ca

The Department of Chemistry and Chemical Biology is a vibrant place to learn about the molecules and materials that make up the world around us. Chemistry deals with the properties and reactions of chemical substances, and their interactions with energy and with one another. Chemical Biology addresses problems in drug discovery, the molecular basis of disease and using small molecules to regulate biological functions.

#### Research areas

- Analytical and Environmental Chemistry
- Chemical Biology
- Inorganic Chemistry
- Materials ChemistryOrganic Chemistry
- Organic Chemistry
   Physical and Theoretical Chemistry
- Catalysis
- Polymer Synthesis
- Nanotechnology

#### Post-graduate opportunities

- Master's and Doctoral Studies in Chemistry
- Bachelor of Education
- Medicine
- Law
- MBA
- Pharmacy

#### Possible career areas

- Advanced Materials
- Catalysis Design
- Nanotechnology
- Environmental Science
- Radiochemistry/Isotopes
- Biotechnology
- Medicine and Medical Research
- Forensic Science
- Pharmacy and Pharmaceutical Research
- Computational Chemistry



#### Earth, Environment and Society science.mcmaster.ca/ees

McMaster's School of Earth, Environment and Society is an internationally recognized centre for research and training. Students in the School develop broad knowledge and understanding of the linkages between societal and environmental problems and how those relate to human health, transportation, urban planning and environmental policy issues. They learn about earth history, soils, earth surface processes, environmental and contaminant geochemistry, surface climate processes, plant biodiversity and ecology, hydrology and hydrogeology and much more. Lecture material is complemented with hands-on lab experiments and field work.

#### Research areas

- Earth Surface Process
- Environment and Health
- Geochemistry
- Hydrologic Sciences
- Social Geography
- Spatial Analysis

#### Post-graduate opportunities

- Earth Science/Geology
- Environmental Assessment
- Environment and Health
- Geochemistry
- HydrologyLaw
- Medicine
- Spatial Analysis
- Sustainability

#### Possible career areas

- Climate Change
- Environmental Assessment
- Environment and Health
- Geochemistry
- Geographic Information Science
- Hydrology
- Mineral Exploration
- Petroleum Exploration
- Sustainability
- Urban Planning



#### Life Sciences science.mcmaster.ca/sis

The Life Sciences programs (housed within the School of Interdisciplinary Science) provide students with the opportunity to study various topics in human health, aging, and disease. Our curriculum is organized under the categories of communication, experiential learning, and research skills. A unique aspect to our programs involves the implementation of community-based projects and peer-mentoring experiential opportunities that are tied to in-course experiences.

#### Pillars of learning

- Communication Skills
- Laboratory Skills
- **Experiential Learning**
- **Knowledge Translation**

#### Post-graduate opportunities

- Medicine
- Law
- Optometry
- Dentistry
- Education
- Rehabilitation Science
- Master of Science
- Global Health
- Pharmacy
- **Public Policy**
- Veterinary Medicine

#### Possible career areas

- Ecology
- **Epidemiology**
- Genetics
- **Nutritional Science**
- Climatology
- Toxicology
- Counselling
- Pharmacology
- Policy
- Clinical Research
- Healthcare
- Scientific Communications



#### Mathematics and Statistics math.mcmaster.ca

Mathematics and Statistics study patterns underlying diverse phenomena such as the weather, human and animal populations, stock markets, the form of a molecule, or the structure of space and time. The Department of Mathematics & Statistics emphasizes a student-centred, interdisciplinary approach to teaching and research.

#### Research areas

- Algebra
- Analysis
- **Applied Mathematics**
- Computational Statistics and Data Science

the property and casualty insurance industry.

- Financial Mathematics
- Geometry and Topology
- Mathematical Biology
- Mathematical Logic
- Probability and Statistics

#### Post-graduate opportunities

- Actuarial Science
- Medicine
- Financial Mathematic
- MRA
- **Applied Mathematics**
- Law

The Honours Actuarial & Financial Mathematics program received the 2020 CAS University Award in recognition for the exemplary and innovative ways in which it prepares students for a career in

- Probability and Statistics
- Mathematical Biology

#### Possible career areas

- Actuarial Science
- Auditing
- Financial Analysis
- Accounting
- **Biostatistics**
- Cyber Security
- **Economics** User Experience Design
- Stock Market Analysis
- Web and Software Development

#### Physics and Astronomy physics.mcmaster.ca

McMaster's Department of Physics and Astronomy is research intensive, with a strong commitment to excellence in teaching. Our unique undergraduate programs begin by teaching students the fundamental concepts and ideas through which physics has transformed the modern world. Students learn how to translate these ideas into the elegant language of mathematics, solve questions and develop understanding.

#### Research area

- Astrophysics
- **Elementary Particle Physics**
- Soft Condensed Matter and Biophysics
- Quantum Condensed Matter Physics
- Laser Physics, Quantum Optics and Ultracold Atoms
- Medical Physics

#### Post-graduate opportunities

- Masters of Science
- Medicine
- Dentistry
- MBA
- Law
- Bachelor of Education

#### Possible career areas

- Aerospace
  - Materials Science Financial Risk Analysis Medical Physics

Astrobiology

Forensics

Addiction Counselling

**Human Resources** 

- Information Technology Nuclear Industry
- **Energy Sector**
- Manufacturing Industry
- Climatology

#### Psychology, Neuroscience & Behaviour pnb.mcmaster.ca

Psychology, Neuroscience and Behaviour is the scientific study of the brain and behaviour. It is a science and a practice. As scientists, experimental psychologists conduct research to help understand why people think, feel, and behave the way they do. As clinicians, counsellors, or other practitioners, psychologists apply scientific understanding towards helping individuals, institutions, and society deal with issues relating to human behaviour and happiness.

#### Research areas

- Animal Behaviour
- Cognition/Perception
- **Developmental Psychology**
- **Evolution and Social Behaviour** Systems and Behavioural Neuroscience
- Research and Clinical Training

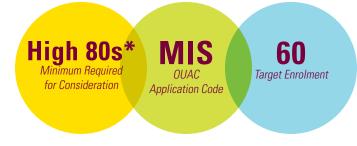
#### Post-graduate opportunities

- Experimental Psychology
- Research and Clinical Psychology
- Neuroscience
- Medicine
- Masters of Business Administration
- Counselling
- Social Work

#### Possible career areas

- Experimental Psychology •
- Clinical Psychology
- Rehabilitation Sciences •
- Data Analytics
- Business Intelligence
- **Environmental Research**
- Respite Care Marketing Behaviour Therapy





\*Minimum average required for consideration. Admission is by selection.

- OUAC Application Deadline: January 13, 2022
- Mandatory Supplementary Application Deadline: February 1, 2022

Tackling the global challenges of climate change, pandemics, and identification of new energy sources requires research in multiple fields of science. Modern scientists must have a multi-disciplinary foundation, and be encouraged to ask creative, critical, interdisciplinary questions while possessing a wide range of communication tools to provide answers to the world's most pressing issues.

#### Degree Option

Honours Bachelor of Science

#### Requirements for Admission (Ontario)

- English
- **Advanced Functions**
- Calculus & Vectors
- Two of Biology, Chemistry, Physics (Completion of all three is strongly recommended)

#### Why Choose McMaster?

- Integration of research and education spanning all disciplines of science.
- Hands-on learning with leading researchers in state-of-the-art facilities.
- Problem-based learning in small class settings.
- Taught by interdisciplinary teams of faculty applying innovative approaches to teaching and learning.
- Completion of a minor may also be considered.
- Opportunities to work closely with faculty members on research projects in laboratory and field settings.
- Research collaborations and internships with government, industrial and community partners.
- Integrated scientific literacy component in which students learn and develop scientific writing and presentation skills, ethical approaches to research, and the effective use of library and internet resources.
- Integrated learning of science allows students to understand how knowledge has accumulated within and across scientific disciplines, and how new scientific thought is created and communicated.



#### First Year at a Glance

Total: 30 units\*\*
Required: 24 units\*\*

#### First-year courses:

 ISCI 1A24 A/B - Integrated Science I ISCI 1A24 A/B serves as a prerequisite for most Level II courses in Astronomy, Biochemistry, Biophysics, Biology, Chemistry, Chemical Biology, Geography, Earth Sciences, Life Sciences, Mathematics, Medical Physics, Physics, Psychology, Neuroscience & Behaviour, and Statistics.

Electives: 6 units\*\*

\*\*Not sure what units are? Flip to page 25 for an explanation.







Start your journey at mapsci.ca.

#### **Beyond First Year**

Beginning in Level II, students take ISCI 2A18 and may register in a **concentration** in one of the following areas:

- Biochemistry
- Biology
- Chemical Biology
- Chemistry
- Earth and Environmental Sciences
- Environmental Sciences
- Mathematics and Statistics
- Medical and Biological Physics
- Physics
- Psychology, Neuroscience & Behaviour

#### **Future Careers**

The iSci program opens doors to a wide range of future options. This program will prepare students for post-graduate work through the application of problem-based learning within the classroom, the provision of many practical laboratory and field experiences, and the development of scientific communication skills.

A few post-graduate options include:

- Graduate programs (M.Sc. and Ph.D.)
- Research and Development
- Innovative industry careers
- Medicine
- Law
- Teaching
- Consulting

#### **Facilities**

- iSci has over 3,000 square feet of redesigned lab space and is the first university lab in Canada to use neutrodine-filtered ductless fume hoods.
- The iStudy is a dedicated study space for registered iSci students.
- The ThInK Space (Thode Interactive Knowledge Space), a library teaching classroom featuring multimedia integration and assistive teaching technology.



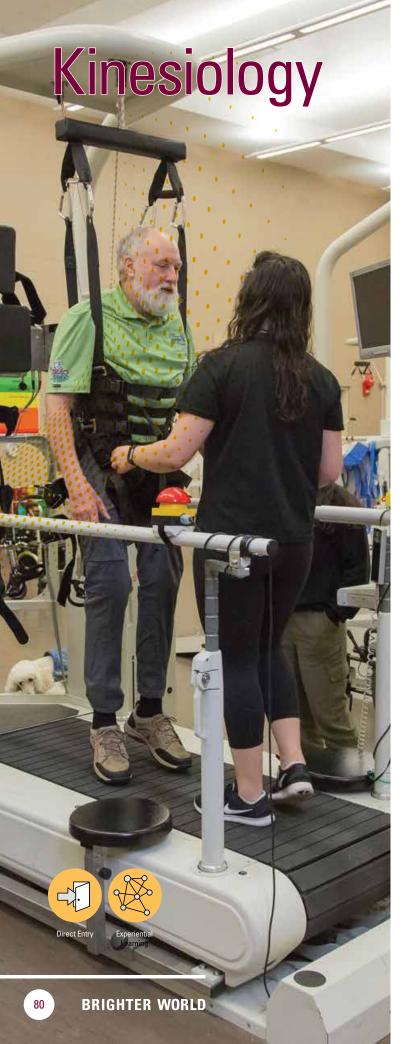
#### Level I Course

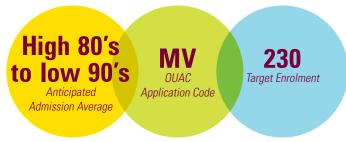
ISCI 1A24 includes the following:

- Integrated Concept Seminars (iConS) are where key concepts and links are introduced, research project material is shared, and faculty members interact with the iSci group.
- **Field trips** challenge students to think about fieldwork, the local environment, and data collection outside the lab.
- Labs begin by introducing students to essential scientific skills and techniques, and progress to include experiments based on research project objectives.
- Invited Speakers Seminars will be presented by researchers, policymakers, and industry leaders – practicing scientists both within and outside McMaster.
- Science Literacy Sessions are integrated with research project requirements for information management, written and oral communication skills, and the use of scientific literature.

## Exchange Opportunities University of Leicester, UK

iSci students have the option to go on an exchange to the University of Leicester in the UK in their third year. The University of Leicester is home to our sister program, the Natural Sciences program. Natural Sciences at Leicester features a very similar learning model to that at McMaster and is well-respected as one of the leading scientific universities in the UK.





Kinesiology at McMaster is an applied, multidisciplinary program that studies human movement, exercise and the relationships between physical activity and health.

#### **Degree Option**

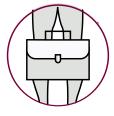
Bachelor of Science Kinesiology (Honours)

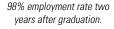
#### Requirements for Admission (Ontario)

- English
- Biology
- Calculus & Vectors

#### Why Choose McMaster?

- The Honours Bachelor of Science Kinesiology degree recognizes our strong, science-based curriculum.
- The quality of research being done by committed faculty members.
- Enrolment limit of 230 students allows for small lectures and even smaller labs.
- Flexibility of course selection allows for the completion of a minor in another area of interest.
- Our engaged, enthusiastic Kinesiology Society fosters a healthy and successful academic-learning environment.







First-year anatomy labs allow students to learn using human cadavers.

#### First Year at a Glance

Total: 30 units\* Required: 15 units\*

#### First-year courses:

- Human Anatomy and Physiology I (KINESIOL 1A03)
- Human Anatomy and Physiology II (KINESIOL 1AA3)
- Motor Control and Learning (KINESIOL 1E03)
- Human Nutrition and Health (KINESIOL 1F03)
- Foundations in Kinesiology (KINESIOL 1K03)

Electives: 15 units\*

Note: Calculus for Science I (MATH 1A03) or Calculus for Life Sciences I (MATH 1LS3) must be completed by the end of Level II. See the Undergraduate Calendar for course descriptions at academic calendars.romcmaster.ca.

\*Not sure what units are? Flip to page 25 for an explanation.







Start your journey at mapsci.ca

#### **Beyond First Year**

In Level II, students take six required Kinesiology courses which include:

- Biomechanics
- Cardiorespiratory and Metabolic Exercise Physiology
- Health Psychology
- Growth, Maturation and Physical Activity in Children and Youth
- Musculoskeletal Anatomy
- Neuromuscular Exercise Physiology

In Levels III and IV, students will be able to choose from a list of over 30 Kinesiology courses! While some students tailor their course selection toward their intended career path, others choose courses from across many sub-disciplines.

#### **Future Careers**

Our graduates are well-equipped to pursue careers in the following areas:

- Kinesiology
- Ergonomics
- Clinical Biomechanics
- Strength and Conditioning
- Occupational Health and Safety
- Exercise Rehabilitation

Our graduates are well-prepared to continue their studies in many professional or graduate programs, including:

- Medicine
- Physiotherapy
- Chiropractics
- Occupational Therapy
- Dentistry
- Education
- Biomechanics
- Cardiac Rehabilitation
- Ergonomics
- Exercise Physiology

#### Areas of Study



#### **Biomechanics**

Facilities and research tools include anatomic computer simulation, electromyography, isokinetic systems, 3D motion capture and virtual reality.



#### **Exercise Rehabilitation**

Research is focused on the role of exercise in improving strength, fitness, health and well-being in special populations, such as senior citizens, people with spinal cord injury and in those coping with chronic diseases (e.g., cardiovascular disease, multiple sclerosis, osteoarthritis).



#### Exercise Psychology

Research examines psychological factors that are related to adoption and maintenance of physical activity in order to better understand and develop methods to enhance participation or adherence.



#### **Exercise Physiology**

Physiology is essentially the study of how the body works. Our research group is particularly interested in the response of the cardiovascular and musculoskeletal systems to exercise in both healthy and diseased states.



#### Motor Control & Learning

The research labs are equipped with state-of-the-art research tools including, 3D motion-capture TMS and image-guided stimulators, eye-trackers, electrophysiological measurement devices, robotic manipulanda and driving simulators.

### PACE: Physical Activity Centre for Excellence pace.mcmaster.ca

Many Kinesiology professors undertake their research in the Physical Activity Centre for Excellence in Health Research (PACE), which contains five community-based exercise programs: MSFITT, MacWarriors, MacCardiac Rehabilitation, MacSeniors, and MacWheelers. The centre is state-of-the-art and contains some of the most sophisticated exercise rehabilitation equipment in the world. The research laboratories and community programs provide opportunities for undergraduate students to gain both practical and theoretical experiences.



## **Medical Radiation Sciences**



High 80's MRS

Anticipated Admission Average

MRS

OUAC

Application Code

Target Enrolment

Medical Radiation Sciences encompass the health professions that employ various forms of radiation in the diagnostic and therapeutic care of patients and is one of the fastest-growing primary healthcare fields.

The Medical Radiation Sciences health professions are intellectually, emotionally and physically demanding. It is important that students become familiar with the profession(s) before entering the program to ensure that they are able to function at an acceptable standard.

#### Degree Option

Bachelor of Medical Radiation Science + Advanced Diploma

#### Requirements for Admission (Ontario)

- English
- Advanced Functions
- Calculus & Vectors
- Biology
- Chemistry

#### Why Choose McMaster?

- Common Level I program.
- Three areas of specialization to choose from after Level I.
- Four-year integrated curriculum linking theory and clinical education that includes two Spring/Summer terms.
- Limited enrolment program allows for small class sizes
- Practice of pre-clinical skills in simulated skills labs.
- Access to extensive medical imaging facilities, including enhanced radiography, computed tomography, and ultrasound.
- Three terms of clinical education allow for valuable hands-on experience in a variety of healthcare settings across Ontario.



#### First Year at a Glance

Total: 30 units\* Required: 24 units\*

#### First-year courses:

- Medical Imaging Physics (LIFESCI 1D03)
- Introduction to Pathology (MEDRADSC 1B03)
- Inquiry in Medical Radiation Sciences (MEDRADSC 1E03)
- Professions in Medical Radiation Sciences (MEDRADSC 1F03)
- Cellular and Molecular Biology (BIOLOGY 1A03)
- Human Anatomy and Physiology I (KINESIOL 1Y03)
- Human Anatomy and Physiology II (KINESIOL 1YY3)

#### 3 units\* from:

- Calculus For Science I (MATH 1A03)
- Calculus for the Life Sciences I (MATH 1LS3)
- Applied Calculus (MATH 1MM3)

Electives: 6 units\*

See the Undergraduate Calendar for course descriptions at academic calendars.romcmaster.ca.

\*Not sure what units are? Flip to page 25 for an explanation.







Start your journey at mapsci.ca.

#### **Beyond First Year**

The attainment of both an Ontario College Advanced Diploma and a Bachelor of Medical Radiation Sciences Degree is achieved through a fully integrated program offered jointly through Mohawk College and McMaster University. This program allows students to specialize in one of the following three areas, starting in Level II:

- Radiation Therapy (BMRSc)
- Radiography (BMRSc)
- Ultrasonography (BMRSc)

#### **Future Careers**

#### Radiation Therapy

Medical Radiation Therapists design treatment plans, calculate radiation dose, position the patient and administer radiation therapy.

#### Radiography

Medical Radiation Technologists play a vital role in the diagnosis and treatment of many illnesses and injuries, using X-ray and other forms of electromagnetic energy.

#### Ultrasonography

Diagnostic Medical Sonographers use sound waves to generate an image that is used to assess and diagnose various medical conditions.

### Medical Radiation Sciences graduates are well-equipped to work in following settings:

- Community and teaching hospitals
- Independent diagnostic imaging centres
- Physicians' offices
- Commercial companies
- Regional cancer centres

Post-graduate studies in magnetic resonance, cardiac or ultrasound are also an option.

#### **Program Facilities**

#### Medical Imaging Laboratories

- Five general radiography units with computed radiography (CR) capabilities
- One direct-read (DR) digital radiography unit
- A multi-slice computed tomography (CT) scanner
- A mammography unit
- Five state-of-the-art ultrasound units
- A simulated ultrasound scanning system
- Connectivity to digital imaging networks
- Radiation therapy simulator and treatment planning systems

#### Patient Care and Nursing Skills Laboratory

- Simulated hospital-ward environment
- Computerized patient mannequins
- Anatomical models

#### Image Viewing and Manipulation Laboratory

- Two Picture Archiving and Communication Systems (PACS)
- Database of teaching files of medical images

#### Clinical Practice: Experiential Learning

Beginning in Level II, clinical practice is integral to the program. As a Medical Radiation Sciences student, you will gain hands-on experience in the field, through placements in a variety of hospitals and independent health facilities across Ontario. You must prepare financially and personally to pay the course fees (equal to one-term tuition) for your clinical placement as well as any relocation and commuting costs.

## Program Structure for All Specializations (Beginning in Level II)

	SEP, OCT, NOV, DEC	JAN, FEB, MAR, APR	MAY, JUN, JUL, AUG	
	Term 1	Term 2	Summer Term	
Level II	30 units from Ac	ademic Level II	Clinical Practicum I	
	Term 1	Term 2	Summer Term	
Level III	45 un	el III		
	Term 1	Term 2	Summer Term	
Level IV	Clinical Practicum II	Clinical Practicum III		

**Note**: All students will be required to act as simulated patients for their peers during skills laboratory classes and practice sessions.





Social Sciences examine the social, cultural, and global phenomena that impact individuals, groups, institutions, and society. Our 12 departments offer unique, but interconnected disciplines for students to pursue their undergraduate degree. With 260+ degree combinations, you'll be able to customize your experience and be ready to make a difference in the world. Our graduates enjoy considerable success, whether they enter the job market, become entrepreneurs, apply to professional schools, or pursue graduate studies.

#### **Degree Options**

- Honours Bachelor of Arts
- Combined Honours Bachelor of Arts
- Bachelor of Arts
- Honours Bachelor of Social Work

#### Requirement for Admission (Ontario)

English

#### Why Choose McMaster?

- Ranked as one of the top Social Sciences Faculties in Ontario (Shanghai Jiaotong University Academic Ranking of World Universities in Social Science - ARWU-SOC 2021).
- First-class faculty of world-renowned researchers, scholars and instructors at Canada's most research-intensive university.
- Earn a McMaster University degree and a Mohawk College certificate at the same time, with no additional fees.
- Gain hands-on work experience through internships and placements with help from the Careers & Experiential Education team.
- Exclusive first-year foundation courses help you succeed by developing core academic abilities and habits.
- Incoming Ontario students who completed an approved Specialist High Skills Major (SHSM) program in high school can apply to receive 3 units of advanced credit in Level I.







Ranked as the second best Social Sciences program in Ontario.

Four certificates available to enhance your degree and increase your job prospects.

90% employment rate within six months of graduating.

#### Degree Programs in Social Sciences

After successful completion of Social Sciences I, students will enter a degree program in the following disciplines:

- Anthropology
- Economics
- Environment and Society
- Health, Aging & Society
- Indigenous Studies
- Labour Studies
- Political Science
- Psychology, Neuroscience and Behaviour
- Social Psychology
- Social Work
- Society, Culture and Religion
- Sociology

Most programs have the option to be taken on their own, combined with another program, or as a minor. Some programs can also be combined with programs from Humanities. For more information on each discipline and their degree options, see pages 92–95.

#### Preparing You for Academic Success

The transition to university can pose challenges as students get used to new routines and academic expectations. To help with your transition and prepare you for success in Social Sciences at McMaster, we've designed the following two "foundation" courses:

#### Life, the University, and Everything (SOCSCI 1T03)

In our first-year transition course, students will build the core academic abilities and habits that are crucial for success in student life and in the transition into and through university. Through a unique blend of online and active in-person learning, students will explore issues and ideas from each of the programs in the Social Sciences to develop their academic interests and plan for success.

#### Inquiry in the Social Sciences (SOCSCI 1SS3)

This course is taught in small, highly engaging seminar classes of about 35 students. It provides an opportunity to learn how to ask good questions, search for and evaluate evidence, develop well-reasoned conclusions and effectively present outcomes to the class. This class develops valuable foundational research, writing, and presentation skills that are essential for upper-level study in Social Sciences programs. Research has shown that students who complete this course are more likely to receive higher grades, complete their degrees on time, and obtain Dean's Honour List standing.



#### First Year at a Glance

Total: 30 units\* Required: 18 units\*

Social Sciences I students are required to take at least six 3-unit courses (18 units) from the following two lists:

#### Course List 1

(Introductory courses that provide entry into a degree program)

- Introduction to Anthropology: Sex, Food and Death (ANTHROP 1AA3)
- Introduction to Anthropology: Race, Religion, and Conflict (ANTHROP 1AB3)
- Introductory Microeconomics (ECON 1B03)
- Introductory Macroeconomics (ECON 1BB3)
- Society, Culture and Environment (ENVSOCTY 1HA3)
- Populations, Cities and Development (ENVSOCTY 1HB3)
- Introduction to Health & Society (HLTHAGE 1AA3)
- Introduction to Aging & Society (HLTHAGE 1BB3)
- Introduction to Mental Health & Illness (HLTHAGE 1CC3)
- Introduction to Indigenous Studies (INDIGST 1A03)
- Introduction to Contemporary Indigenous Studies (INDIGST 1AA3)
- Reconciling What? Indigenous Relations in Canada (RECONCIL 1A03)
- Will Robots Take All of Our Jobs? (LABRST 1D03)
- Navigating the World of Work (LABRST 1E03)
- Government, Politics, and Power (POLSCI 1AA3)
- Politics and Power in a Globalizing World (POLSCI 1AB3)
- Survey of Psychology (PSYCH 1F03)
- Survey of Biological Basis of Psychology (PSYCH 1FF3)
- Introduction to Psychology, Neuroscience & Behaviour (PSYCH 1X03)
- Foundations of Psychology, Neuroscience & Behaviour (PSYCH 1XX3)
- What on Earth Is Religion? (SCAR 1B03)
- Introduction to Anthropology: Race, Religion and Conflict (SCAR 1R03)
- The Big Questions: Introduction to Society, Culture & Religion (SCAR 1SC3)
- An Introduction to Social Psychology (SOCPSY 1Z03)
- So You Think You Can Help? Introduction to Social Work I (SOCWORK 1AA3)
- Re-Imagining Help: Introduction to Social Work II (SOCWORK 1BB3)
- An Introduction to Sociology (SOCIOL 1Z03)

#### Course List 2:

(Courses available to Level I students but are not required for entry into a degree program)

- Introduction to Cayuga Language and Culture (CAYUGA 1Z03)
- Global Citizenship (GLOBALZN 1A03)
- Introduction to Inuit Language and Culture (INUKTUT 1Z03)
- Introduction to Mohawk Language and Culture (MOHAWK 1Z03)
- Introduction to Ojibwe Language and Culture (OJIBWE 1Z03)
- Canadian Society: Social Problems, Social Policy, and the Law (SOCIOL 1C03)
- How Do We Know? Doing Social Sciences Research (SOCSCI 1RM3)
- Inquiry in the Social Sciences (SOCSCI 1SS3)
- Life, the University, and Everything (SOCSCI 1T03)

#### Electives: 12 units\*

The remaining courses may be selected from the lists above or may be courses from other Faculties.

<sup>\*</sup>Not sure what units are? Flip to page 25 for an explanation.

#### Minors

A minor is a great way to add another area of expertise to your degree and enhance your skills. You can obtain a minor by utilizing your electives to take a small concentration of courses throughout your undergraduate studies.

Minors are available in almost all Social Sciences disciplines, but we have highlighted a few below:

- Minor in Mental Health, Addiction and Society
- Minor in Public Leadership
- Minor in Health, Well-Being and Religion

#### Interdisciplinary Minors

An interdisciplinary minor works in the same way as our other minors; however, the concentration of courses come from a variety of disciplines from Social Sciences and other Faculties. There are many available to Social Sciences students, but we have highlighted a few below:

- Interdisciplinary Minor in Social Justice and Inclusive Communities
- Interdisciplinary Minor in Community Engagement
- Interdisciplinary Minor in Globalization Studies

## Experience Makes a Difference | Careers & Experiential Education

Housed within the Faculty of Social Sciences, the Careers & Experiential Education team offers students many opportunities to connect their academic learning to work experience, career planning and the community around them. We offer the following services to students in any of our degree programs:

#### **Placements**

Through connections with employers and community partners, we offer a variety of paid Internships, Academic Placements in courses, and Career Placement job shadow experiences. Placements allow students to gain experience, explore careers, and work with community organizations while developing skills and building their resume.

#### Careers and Networking

Through career-focused events and activities students learn from current professionals and alumni about the many unique career paths that are open to Social Sciences students and build their network of professional contacts. One-on-one job search and career exploration support is also available, including resumé and cover letter critiques and networking advice.

#### Careers and Experiential Education Courses

In courses like Social Sciences 2ELO, you can learn how to plan your future career, refine your job search strategies, develop essential leadership skills, and apply classroom theory into practice.

#### Grants and Awards

Students can get paid to work on a research project through the Undergraduate Student Research Awards or can apply to the Student Experience Fund which helps support hands-on learning experiences, like volunteering abroad or presenting at conferences.

#### **Future Careers**

A Social Sciences degree provides a powerful academic foundation that fosters the development of a global perspective and the skills and qualities that employers value. McMaster Social Sciences students develop strengths in high demand, including communication, teamwork, cultural awareness, and critical thinking. They also gain valuable and transferable technical, analytical, organizational, and problem-solving skills.

Students who graduate with a degree in Social Sciences are well-prepared to pursue graduate studies and professional programs such as teaching, law, medicine, human resources, and business administration. Our grads also follow a myriad of career paths in community and social services, civil service, criminal justice, counselling, data analysis, education, financial industry, media and communications, policy analysis, public relations, and a variety of research careers.

#### McMaster Exchange Program & Independent Study Abroad

Now more than ever, our world is interconnected. To be successful personally and professionally, you must become a global citizen skilled at interacting between multiple cultures and capable of analysing issues on a global level. When you participate in an exchange you build your global competence and become a citizen of the world while you earn credits towards your degree.

We have more than seventy exchange agreements with universities in the United Kingdom, Europe, Asia, Oceania, and the Americas!

See page 21 for more information on the McMaster Exchange Program.



#### **Concurrent Certificate Options** Applied Social Sciences Research:

This certificate aims to provide opportunities for interested students to acquire broader exposure and competencies in applied research methods to meet the needs of the labour market and student interests

#### Social Innovation:

This certificate is designed for students to develop an academic focus in the development and implementation of solutions for effective, long-term social impact.



#### Anthropology

Understand human diversity across time and space. Anthropologists are not only found in far off and exotic locations. You can find anthropologists everywhere: government, business, journalism, human resources, law enforcement, non-profit organizations and more. Culture, technology, society, politics and history impact so much of our human experience. Anthropologists help us understand these complex relationships which shape our globalized world. Our anthropology faculty are experienced in the fields of cultural anthropology, archaeology, biological anthropology, and the anthropology of health.

#### What makes this program unique?

- Hands-on, experiential learning through our nine research centres and teaching labs.
- The ability to participate in a bioarchaeological or archeological practice-oriented field school in the summer months.

#### First-year courses

- Introduction to Anthropology: Sex, Food and Death (ANTHRO 1AA3)
- Introduction to Anthropology: Race, Religion, and Conflict (ANTHRO 1AB3)

#### Program/degree options

- Honours Anthropology
- Combined Honours Anthropology and another subject
- BA. in Anthropology
- Minor in Anthropology
- Interdisciplinary Minor in Archaeology

#### Possible careers

- Archaeological Field Technician
- Human Resources Specialist
- Cultural Resource Manager
- Market Researcher
- Rural Development Officer
- Foreign Aid Worker
- Heritage Planner
- Museum Technician



#### **Economics**

Economics is the science of choice. Economics is the study of how individuals, businesses and governments make decisions and how they might make better decisions. Our current faculty members are leading researchers in all major areas of economics. We offer a wide variety of courses that examine issues such as taxation policies and public expenditure, labour markets, and environmental regulation. More advanced courses cover such policy areas as healthcare, natural resources, finance, industrial organization, the aging society, and international trade.

#### What makes this program unique?

- Multiple data labs affiliated with faculty research such as the Secure Empirical Analysis Lab (SEAL), the McMaster Decision Science Laboratory (McDSL) and the Statistics Canada Research Data Centre at McMaster (RDC) offer unique opportunities for students to be involved in applied, policy-oriented economic analysis.
- The Department of Economics offers an Honours BA Specialist Option, a unique, limited enrolment program designed for highly motivated, high-achieving students who are considering pursuing graduate studies in economics

#### First-year courses

- Introductory Microeconomics (ECON 1B03)
- Introductory Macroeconomics (ECON 1BB3)

#### Program/degree options

- Honours Economics
- Honours BA Specialist Option
- Combined Honours Economics and another subject
- Combined Honours Economics and Computer Science
- Combined Honours Economics and Mathematics
- BA in Economics
- Minor in Economics

#### Possible careers

- Economic Analyst
- Policy Researcher
- Financial Planner
- Economic Forecaster
- Business Developer
- Business Manager
- Banking/Financial Services
- Budget Analyst



#### **Environment and Society**

Environment and Society is concerned with the social and spatial organization of human activity. We study people's relationships with their natural, built and social environments, using knowledge from multiple disciplines including Geography, Environmental Studies, Urban Studies, and Geographic Information Science or GIS. Our professors include both award-winning teachers and internationally renowned researchers. Our programs are designed to provide students with the knowledge and skills to understand and engage many of the world's most pressing challenges such as climate change, globalization, social inequality, urbanization, and sustainable development.

#### What makes this program unique?

- We are McMaster's home for research and teaching on environment and sustainability.
- Our undergraduate programs feature a range of experiential education and field work opportunities.
- No other program has a similar focus on urban planning, policy, and development
- You can earn concurrent certificates in Geographic Information Science (GIS) and/or Urban Studies and Planning while completing your degree.

#### First-year courses

- Society, Culture & Environment (ENVSOCTY 1HA3)
- Populations, Cities & Development (ENVSOCTY 1HB3)

#### Program/degree options

- Honours Environment & Society
- Combined Honours Environment & Society and another subject
- BA in Environment & Society
- Minor in Environment & Society
- Concurrent Certificate in Geographic Information Science (GIS)
- Concurrent Certificate in Urban Studies & Planning

- Environmental Analyst
- Urban Planner
- Community Developer
- Conservation Officer
- Educator
- Policy Analyst
- GIS Analyst
- Tourism Development Specialist



#### Health, Aging and Society

Understand the social impacts of health from an interdisciplinary perspective. Engaging with communities and sharing perspectives lead to real-world solutions to improve well-being. Our programs equip students to approach these issues through the critical and constructive social sciences lens.

Students will discuss questions, such as:

- How do changing technologies impact the way we understand and respond to health and illness?
- How do people's social circumstances, ranging from their income to the neighbourhood they live in, impact their health?
- How do components of a person's identity (including ethnicity, gender, sexuality, and others) shape a person's health outcomes?

#### What makes this program unique?

- Our innovative specialization and minor options in Mental Health & Addiction allows students the opportunity to explore these themes within their social contexts
- Students are provided with experiential learning opportunities to put theory and knowledge into practice by working with community organizations
- Our department is affiliated with several research centres: the Gilbrea Centre for Studies in Aging; CRUNCH (Collaboratory for Research on Urban Neighbourhoods, Community Health and Housing) and CHRN (Critical Health Research Network)

#### First-year courses

- Introduction to Health and Society (HLTHAGE 1AA3)
- Introduction to Aging and Society (HLTHAGE 1BB3)
- Introduction to Mental Health and Illness (HLTHAGE 1CC3)

#### Program/degree options

- Honours Aging & Society
- Honours Health & Society
- Honours Aging & Society, Specialization in Mental Health and Addiction
- Honours Health & Society, Specialization in Mental Health and Addiction
- Combined Honours Aging & Society and Health & Society
- Combined Honours Aging & Society and another subject
- Combined Honours Health & Society and another subject
- BA in Health, Aging and Society
- Minor in Health, Aging and Society
- Minor in Mental Health and Addiction

#### Possible careers

- Health Policy Analyst/Consultant
- Social Policy Research
- Education, Volunteer or Care Coordinators
- Recreation/Activation staff
- Public Health Administrator
- Market Research
- Mental Health Researcher
- Addictions Researcher



#### Indigenous Studies

Understand the intellectual and cultural traditions of Indigenous peoples from the lenses of traditional knowledge and rigorous scholarship. Indigenous Studies focuses upon the intellectual and cultural traditions of Indigenous peoples in the areas of history, language, medicine, health and wellness, creative arts, literature, economy, activism, community and political dynamics, peace building, spirituality, and traditional ecological knowledge. Our instructors range from Elders to Indigenous academics, honouring the knowledge that exists both in the academy and within Indigenous communities. Students in this program gain a deeper understanding of the unique and sophisticated knowledge systems of Indigenous peoples while developing the professional skills and historical/contemporary context for working with Indigenous communities.

#### What makes this program unique?

- The only program in Canada with a focus on Haudenosaunee/Six Nations history and culture while at the same time emphasizing the significant contributions of global Indigenous knowledge.
- Indigenous Studies Community Space, which includes offices and ceremonial areas dedicated to McMaster University's Indigenous Studies Program and Indigenous students across campus.
- The program has a close academic relationship with the Six Nations and New Credit communities, as well as the Hamilton urban Indigenous community.

#### First-year courses

- Introduction to Indigenous Studies (INDIGST 1A03)
- Introduction to Contemporary Indigenous Studies (INDIGST 1AA3)
- Reconciling What? Indigenous Relations in Canada (RECONCIL 1A03)
- Introduction to Cayuga Language and Culture (CAYUGA 1Z03)
- Introduction to Inuit Language and Culture (INUKTUT 1Z03)
- Introduction to Mohawk Language and Culture (MOHAWK 1Z03)
- Introduction to Ojibwe Language and Culture (OJIBWE 1Z03)

#### Program/degree options

- Honours Indigenous Studies
- Combined Honours Indigenous Studies and another subject
- Combined BA in Indigenous Studies and another subject
- Minor in Indigenous Studies

#### Possible careers

- Community Development
- Indigenous Advocacy and Social Services
- Policy Analyst/Consultant
- International Development/Affairs
- Law



#### **Labour Studies**

In the School of Labour Studies, we explore how work is changing in Canada and across the globe. We teach students to ask critical questions such as: How are new technologies

– like robots – impacting our jobs? How can we achieve gender and racial equity at work? Why are so many new jobs temporary or precarious? What is the role of workers' organizations, particularly trade unions, in promoting and safeguarding our rights at work and democracy in society?

Our faculty conduct cutting-edge research on domestic and international labour issues. We are leaders in community-engaged research scholarship, collaborating with unions, community organizations and policy-makers on research that will help make work better for everyone. We are an intimate program, where professors get to know our students, which allows for a more individualized approach to undergraduate studies.

#### What makes this program unique?

- We study the worlds of work from alternative perspectives, including culture, politics, organization, economics, gender, racialization, and history.
- Students develop their own critical perspectives using a diverse mix of practical knowledge and theoretical understanding.
- Students have the opportunity to get involved in faculty research projects.

#### First-year courses

- Will Robots Take All of Our Jobs (LABRST 1D03)
- Navigating the World of Work (LABRST 1E03)

#### Program/degree options

- Honours Labour Studies
- Combined Honours Labour Studies and another subject
- BA in Labour Studies
- Minor in Labour Studies

- Human Resources Manager
- Labour Relations Manager
- Union Research Officer
- Union Representative
- Public Policy Analyst
- Occupational Health & Safety Coordinator
- Arbitrator
- Labour and Human Rights Lawyer



#### **Political Science**

Understand the impact of power: Who has it, how it's used and to what end. Political Science is crucial for solving the world's most complex social problems faced by citizens, firms and governments. Effective solutions require analyzing: legal systems, political power and personal motivations, both domestically and globally. Our program considers the key issues that will impact the future of Canada and other countries around the world - including issues of war and peace, health policy, economic development, the machinery of government and elections, citizenship, and democracy. We cover all the major fields of political science: Canadian politics, comparative politics, international politics, political theory and public policy.

#### What makes this program unique?

- Intimate, small group seminars and other courses that provide extensive opportunities for specialized, structured, self-directed learning.
- Our specialization in Public Law and Judicial Studies, where students examine the role that constitutional, administrative, criminal, and international laws play in limiting or balancing the use of power by governments.
- NEW specialization in Global Citizenship where you will examine what it means to be a citizen in a world where the flows of people, ideas, money, products, pollution, culture, violence and disease cross national boundaries. You can also study abroad as part of this program.
- Courses that bridge theory and practice such as the Practice of Politics, Constitutional and Public Law in Canada, and Case Studies in Public.
- Distinguished visiting professors with extensive experience working in politics or public service.

#### First-year courses

- Government, Politics, and Power (POLSCI 1AA3)
- Politics and Power in a Globalizing World (POLSCI 1AB3)

#### Program/degree options

- Honours Political Science
- Honours Political Science, Specialization in Global Citizenship
- Honours Political Science, Specialization in Public Law and Judicial Studies
- Combined Honours Political Science and another subject
- BA in Political Science
- Minor in Political Science
- Minor in Justice, Law and Order
- Minor in Public Leadership

#### Possible careers

- Policy Analyst
- Political Consultant
- Data Analyst Political Leader Human Rights Advocate

Public Servant

Public Relations Officer



#### Psychology, Neuroscience & Behaviour (PNB)

Understand the interaction between the brain and behaviour. Psychology, Neuroscience & Behaviour is a science and a practice. As scientists, experimental psychologists conduct research to help understand why people think, feel, and behave the way they do. As clinicians, counsellors, or other practitioners, psychologists apply scientific understanding toward helping individuals, institutions, and society deal with issues relating to human behaviour and happiness.

#### What makes this program unique?

- We provide a strong focus on undergraduate hands-on research training in real research labs.
- We also offer innovative specializations in Music Cognition & Mental Health.
- Areas of research within PNB include Animal Behaviour, Cognition & Perception, Developmental Psychology, Applied Cognition in Education, Music Cognition, Evolution & Social Behaviour, Systems & Behavioural Neuroscience, and Mental Health.

#### First-year courses

- Survey of Psychology (PSYCH 1F03)
- Survey of Biological Basis of Psychology (PSYCH 1FF3)
- Introduction to Psychology, Neuroscience and Behaviour (PSYCH 1X03)
- Foundations of Psychology, Neuroscience and Behaviour (PSYCH 1XX3)

#### Program/degree options

- Honours Psychology, Neuroscience and Behaviour
- Honours Psychology, Neuroscience and Behaviour, Specialization in Mental Health
- Honours Psychology, Neuroscience and Behaviour. Specialization in Music Cognition
- Combined Honours in Psychology, Neuroscience and Behaviour and another subject
- BA in Psychology
- Minor in Psychology

#### Possible careers

- Behaviour Analyst
- Clinical Psychologist
- Speech Language Pathologist
- Counsellor
- **Experimental Psychologist**



#### Social Psychology

Examine how individuals are influenced by their relationships and social groups. Our students study the relationship between social interaction, mental health, and well-being from an interdisciplinary perspective. Courses allow students to understand how people develop over time and behave in different situations. Social Psychology provides an understanding of how individuals think, feel, and behave; how relationships are formed, maintained, and dissolved; how social groups influence our identities and behaviour; and how societies form practices and priorities. Students learn how to situate themselves in their cultures, geographies and in relation to others.

#### What makes this program unique?

- We are the only Social Psychology undergraduate program in Canada.
- Our program provides a multidisciplinary perspective, combining courses in sociology and psychology with courses in a range of other social sciences disciplines.
- Fourth-year students are given the opportunity to work on an original research project, learning research techniques such as interviewing and statistical analysis.

#### First-year courses

- An Introduction to Social Psychology (SOCPSY 1Z03)
- Survey of Psychology (PSYCH 1F03)
- Introduction to Psychology, Neuroscience and Behaviour (PSYCH 1X03)
- An Introduction to Sociology (SOCIOL 1Z03)

#### Program/degree options

Honours Social Psychology

- Counselling/Psychotherapy
- Education & teaching
- Law
- Research/academic
- Occupational Therapy
- Advocacy & community organizing
- **Human Resources**
- Marketing
- Business
- Public Health



#### Social Work

Educating for social justice. We provide you with a way to turn your concern for people into ethical practice approaches with individuals, families and communities. Our program prepares graduates for the general practice of social work by developing two essential aspects: the capacity to analyze personal, community, family and societal problems; and practical skills such as interviewing, counselling, community development, social action and advocacy. Our areas of focus include struggles for social justice, critical practice and leadership, advocacy and support, and political and institutional change.

#### What makes this program unique?

- Our Bachelor of Social Work program is accredited by the Canadian Association for Social Work Education
- Our program has an emphasis on both academic and experiential education.
- Students complete two field placements as part of their degree studies.
- Students can enrol in full-time or part-time studies.
- Students graduate with a degree to practice as a professional social worker, earning their Bachelor of Social Work (B.S.W.).

#### First-year courses

- So You Think You Can Help? Introduction to Social Work I (SOCWORK 1AA3)
- Re-Imagining Help: Introduction to Social Work II (SOCWORK 1BB3)

#### Program/degree options

- Honours Bachelor of Social Work
- Bachelor of Social Work (as a Second Degree)

#### Possible careers

- Counsellor
- Advocate
- Social Services
- Social Planner
- Policy Analyst
- Medical Social Workers
- Community Development Worker
- Child, Family and School Social Workers

Note: Students interested in applying to the Social Work program for Level II must complete the Social Work Admissions Test (SWAT) in February of Level I. The SWAT is an essay-style written test to gauge an applicant's interest and preparation for becoming a social worker, as well as their cultural, political, economic and social awareness, values and self-awareness relating to social issues.



#### Society, Culture and Religion

Understand how human beings create and sustain meaning. Religion is an integral part of human cultures and civilizations. The Society, Culture and Religion programs examine how religion influences and shapes the world. They use an interdisciplinary focus to study how ancient and contemporary human cultures ask and answer the "big questions." Studying cultures and religions help inform the root causes of what's going on in our world, locally and internationally. The programs allow students to meet challenges in fields such as law, politics, teaching, healthcare, business, journalism and social services.

#### What makes this program unique?

- Thanks to the breadth of our department, we now offer degree programs tailored to individual students' interests.
- Faculty expertise in a broad range of scholarly disciplines including anthropology, ethics, history, and political philosophy. This diversity contributes to our focus on cultivating critical thinkers, engaged citizens and effective communicators.
- A minor in Religion and Diversity allows students to develop an awareness of local and global neighbours and to understand religious diversity in contemporary Canada and beyond.

#### First-year courses

- What on Earth Is Religion? (SCAR 1B03)
- Introduction to Anthropology: Race, Religion & Conflict (SCAR 1R03)
- The Big Questions: Introduction to Society, Culture and Religion (SCAR 1SC3)

#### Program/degree options

- Honours Society, Culture and Religion
- Combined Society, Culture and Religion and another subject
- BA in Society, Culture and Religion
- Minor in Health, Wellbeing and Religion
- Minor in Society, Culture and Religion
- Minor in Religion and Diversity
- Minor in Asian Studies
- Interdisciplinary Minor in Jewish Studies
- Interdisciplinary Minor in Muslim Studies

#### Possible careers

- Civil Service
- Human Rights
- Mediation/Conflict ResolutionHuman Resource Management
- Social Services
- Public Relations Officer



#### Sociology

Understand how social relationships, social processes and social institutions function. Sociology is the study of society. It is a discipline that examines social relationships, social processes, social institutions, and other social issues. Sociologists do research on relations between individuals (e.g., in friendships or marriages), relations between groups (e.g., tensions between racial/ethnic groups), processes such as socialization (i.e., how children learn the ways of a culture), and the role of institutions in society (e.g., education, the family, the mass media, and religion).

#### What makes this program unique?

- Our program boasts strengths in qualitative and quantitative research methods, especially through a Specialist Option degree that prepares students for graduate studies.
- Our program gives students an opportunity to work with internationally recognized faculty on a oneto-one basis through Directed Research courses.
- Our curriculum emphasizes experiential, inquirybased and problem-based learning.

#### First-year courses

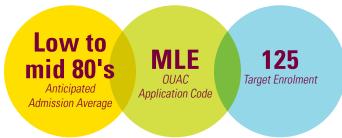
- An Introduction to Sociology (SOCIOL 1Z03)
- Canadian Society: Social Problems, Social Policy, and the Law (SOCIOL 1CO3)

#### Program/degree options

- Honours Sociology
- Honours Sociology, Specialist Option
- Combined Honours Sociology and another subject
- Combined Honours Sociology, Specialist Option and another subject
- BA in Sociology
- Minor in Sociology
- Minor in Diversity and Equity
- Minor in Gender, Sexualities and Families
- Minor in Immigration, Race Relations and Indigenous-Settler Relations
- Minor in Social Problems, Social Policy and the Law

- Counselling
- Market Research
- Public Opinion Research
- Data Analyst
- Policy Analyst
- Social Services
- Human Resources





See the story behind the numbers.

How will new international trade agreements affect jobs and wealth? Does cutting business taxes help spur growth? What is the optimal price to charge for a specific product? How are professional athletes' salaries determined? Why do individuals make poor health choices, even when they know better? Examining those important questions are part of studying Economics at McMaster. Specific areas of focus include international trade, healthcare, international finance, taxation and public expenditure.

#### **Degree Options**

- Honours Bachelor of Arts
- Combined Bachelor of Arts
- Bachelor of Arts

#### Requirements for Admission (Ontario)

- English
- Two of Advanced Functions, Calculus & Vectors, Data Management

#### Why Choose McMaster?

- Interact with internationally and nationally recognized faculty.
- Specialist track provides preparation for the top MA Economics programs worldwide.
- Benefit from the unique opportunities and expertise at McMaster's prestigious Economics research centres: Secure Empirical Analysis Lab (SEAL), McMaster Decision Science Laboratory (McDSL) and Statistics Canada Research Data Centre at McMaster (RDC).
- Develop in-depth quantitative analysis skills—key for career success now and in the future.
- Incoming Ontario students who completed an approved Specialist High Skills Major (SHSM) program in high school can apply to receive 3 units of advanced credit in Level I.

#### **Potential Employers**

- Bank of Canada
- Government of Ontario
- Canada Revenue Agency
- TD Canada Trust
- Royal Bank of Canada
- Loblaw Companies Ltd.
- The Ontario Cabinet Office
- Canadian Centre for Economic Analysis
- Ontario Treasury Board

#### First Year at a Glance

Total: 30 units\* Required: 18 units\*

#### First-year courses:

- Introductory Microeconomics (ECON 1B03)
- Introductory Macroeconomics (ECON 1BA3)
- Introduction to Calculus and Analytic Geometry (MATH 1F03) (Only required if MCV4U has not been completed.)
- Introduction to Probability and Statistics (STATS 1LL3) (Only required if MDM4U has not been completed)

#### One of the following courses:

- Calculus For Science I (MATH 1A03)
- Calculus for the Life Sciences I (MATH 1LS3)
- Applied Calculus (MATH 1MM3)

Students are also required to take at least 6-9 units\* from the Social Sciences Course List.

Electives: 12 units\*

 The remaining courses may be selected from the list on page 85 or from other Faculties.

#### **Program Options**

After successful completion of Level I, students will declare their major to enter one of the following degree programs:

- Honours Economics
- Honours Economics (Specialist Option)
- Combined Honours Economics and another subject
- Combined Honours Economics and Computer Science
- Combined Honours Economics and Mathematics
- BA Economics

For more information on other programs available for the Combined Honours or to explore minor options, please see information on the Faculty of Social Sciences on pages 84-87.

#### **Beyond First Year**

Economics elective courses include:

- International Trade
- Financial Economics
- Health Economics
- Economics of Professional Sports
- Environmental Economics
- Monetary Economics
- Statistics

- Economics of Trade Unionism and Labour
- Economics of Aging
- Economic Growth and Development
- Public Sector Economics
- Industrial Organization
- **Graduate School Opportunities**

McMaster Economics students have gone on to graduate programs in economics, business administration, public policy, environmental studies, urban planning, industrial relations and financial mathematics.



#### McMaster Social Sciences + Mohawk Affiliated Certificates

Exclusive to all Social Sciences students, earn one of the following certificates from Mohawk College while completing your degree:

- Business Studies
- Leadership and Management in the Not-for-Profit Sector

Concurrent Certificates in Applied Social Sciences Research and Social Innovation.

For more information, see page 87.

## Experience Makes a Difference | Careers & Experiential Education

Housed within the Faculty of Social Sciences, the Careers and Experiential Education team offers students many opportunities to connect their academic learning to work experience, career planning and the community around them. We offer the following services to students in any of our degree programs, including Economics:

- Placements and Internships
- Careers and Networking
- Careers and Experiential Education Courses
- Grants and Awards

For more information, see page 86.

<sup>\*</sup>Not sure what units are? Flip to page 25 for an explanation.

## Health and Society I





Health and healthcare are evolving globally at a rapid pace. Finding solutions and maximizing opportunities requires an interdisciplinary approach. This program prepares you to examine health and illness through the lens of the Social Sciences. Faculty are from a variety of disciplines, like geography, sociology, economics, political science, social work, and more. You'll experience small classes with an emphasis on experiential education and community-partnered research.

#### **Degree Options**

- Honours Bachelor of Arts
- Combined Bachelor of Arts
- Bachelor of Arts

#### Requirement for Admission (Ontario)

English

#### Why Choose McMaster?

- Learn about the social causes and impacts of health from different perspectives such as sociology, geography, social work, political science, economics, and more.
- Make a difference with community-partnered research.
- Specialize in mental health and addiction.
- Required fieldwork provides real-world applications.
- Pathway to a variety of professional and graduate school programs.
- Incoming Ontario students who completed an approved Specialist High Skills Major (SHSM) program in high school can apply to receive 3 units of advanced credit in Level I.

#### **Potential Career Options**

- Health Planner
- Healthcare Administrator
- Community Health Educator
- Public Health Analyst
- Policy Analyst
- Corporate Wellness Specialist
- Health Information Specialist

#### First Year at a Glance

Total: 30 units\* Required: 18 units\*

#### First-year courses:

- Introduction to Aging and Society (HLTHAGE 1BB3)
- Introduction to Mental Health and Society (HLTHAGE 1CC3
- Inquiry: Introduction to Health and Society (HLTHAGE 1ZZ3)

Students are also required to take at least 6-9 units\* from the Social Sciences Course List. Please see page 85 for a complete list of courses.

Electives: 12 units\*

 The remaining courses may be selected from the list on page 85 or from other faculties.

#### **Beyond First Year**

After successful completion of Health & Society I, students will declare their major to enter one of the following degree programs:

- · Honours Health & Society
- Honours Aging & Society
- Honours Health & Society, Specialization in Mental Health and Addiction
- Honours Aging & Society, Specialization in Mental Health and Addiction
- Combined Honours Aging & Society and Health & Society
- · Combined Honours Health & Society and another subject
- Combined Honours Aging & Society and another subject
- BA in Health, Aging and Society

For more information on other programs available for the Combined Honours or to explore Minor options, please see information on the Faculty of Social Sciences on pages 84-87.

#### Specialization in Mental Health and Addiction

This option provides students with the opportunity to develop an in-depth understanding of the relationship between mental health, addiction, and society. It involves examining the links between mental health and wider social processes, including marginalization, the construction of deviance, and the social determinants of health. Students will also gain a solid understanding of mental illness and some of the ways in which social change and other non-biomedical interventions can be harnessed to address issues related to mental health and addiction and promote well-being.

#### Field Experience

In the study of Health & Society, experience in the field is necessary to help our students put theory and methods into practice. Students have the opportunity to take either HLTHAGE 3BB3: Field Experience or HLTHAGE 3EE3: The Practice of Everyday Life: Observations and Inquiry. Both of these courses offer students the opportunity to observe, gain experience, and interact in a community agency or institution and to augment their knowledge and understanding of health programs and policies. Alongside those opportunities, there is a focus on active learning throughout our programs via invited speakers and discussion groups with older adult volunteers.

#### McMaster Social Sciences + Mohawk Affiliated Certificates

Exclusive to all Social Sciences students, earn one of the following certificates from Mohawk College while completing your degree:

- Business Studies
- Leadership and Management in the Not-for-Profit Sector

Concurrent Certificates in Applied Social Sciences Research and Social Innovation.

For more information, see page 87.

## Experience Makes a Difference | Careers & Experiential Education

Housed within the Faculty of Social Sciences, the Careers & Experiential Education team offers students many opportunities to connect their academic learning to work experience, career planning and the community around them. We offer the following services to students in any of our degree programs, including Health & Society:

- Placements and Internships
- Careers and Networking
- · Careers and Experiential Education Courses
- Grants and awards



<sup>\*</sup>Not sure what units are? Flip to page 25 for an explanation.

## How to Apply



Submit an application on the Ontario Universities Application Centre (OUAC). Please refer to the Admissions Requirements chart to learn about prerequisites and any mandatory deadlines for the programs that require supplementary applications.

105 applicants, please visit ouac.on.ca for program application deadlines.

You will need to set up your student account to view your application status. Details are included in the application acknowledgment letter that you will receive via email after your application is received by McMaster.

Review your application checklist. If there is something we require from you, like English Language Proficiency documentation, or a supplementary application, it will be listed here.

Deadline to submit required documentation: April 1, 2022

Deadline to submit supplementary applications: Refer to the last column of the "Admissions Requirements" chart

#### Timing of Offers

#### First Round: Late February - Early March

- Based on available 4U/M grades available as of end of first semester (or Quads 1 and 2)
- Minimum of 3 courses with final grades and registration in any remaining required courses (for a minimum of 6 enrolled courses).
- Grade 11 grades will not be used in either round\*
- Some by-selection programs (Bachelor of Health Sciences, Integrated Science, Arts & Science, Nursing and Midwifery will not make offers during this wave)
- \* Midwifery will replace any missing required courses with equivalent Grade 11 grades during this round in order to calculate an average that will be used for determining invitation to interview.

#### Second Round: Late April – Early May

- Based on six 4U/M courses, including all required courses available as of the second semester mid-terms (or Quad 3 finals).
   Where students are unable to present grades for 6 4U/M courses at this time, they will be assessed on the available grades provided they are registered in any outstanding courses in Quad 4 with a completion date of June 30, 2022.
- By-selection programs noted above will make their offers of admission at this time based on combination of grades and supplementary application review.

#### FIRST NATION, MÉTIS AND INUIT (FNMI) APPLICANTS

Indigenous students who are applying to McMaster are encouraged to connect with the Indigenous Student Services (ISS) office, indigenous.counsellor@mcmaster.ca, for assistance in navigating the application process. Programming and resources, such as cultural and social events, Elders-in-Residence and academic supports, are available to FNMIstudents. Please contact ISS for more information.





## Additional Admissions INFORMATION

#### Summer School / Night School / Correspondence

McMaster accepts coursework taken through regular day school, night school, summer school, online studies or correspondence. All grades are accepted as reported through the OUAC. Courses must be completed at Ministry-inspected schools and grades submitted no later than May 15. Summer school marks, from the summer after Grade 12. cannot be used to meet the conditions of a conditional offer.

#### Alternate Offers / Multiple Applications

McMaster does not automatically make alternate offers of admission. Since you can apply to up to three programs at each university, we encourage you to apply to all programs that interest you.

101 applicants will be considered for each program choice.

105 applicants will be reviewed for their first choice only. Subsequent choices will only be reviewed should you not be admissible to your first choice of program. 105 applicants to Arts & Science, Engineering, Bachelor of Health Sciences (Hons.), Integrated Business and Humanities, Integrated Biomedical Engineering and Health Sciences (iBioMed), Integrated Science, Midwifery, and Nursing will be considered for admission to their next highest program choice to which they have applied.

#### **Repeated Courses**

If you have repeated up to two courses, the highest mark reported will be used to calculate your admission average. If you repeat more than two courses, or an individual course three or more times, you may be asked to provide a letter explaining the need for the repeats. This information may be considered when determining admission.

Courses completed after June 30 will not be included in your admission average calculation.



#### Advanced Placement (AP)

Applicants who have completed AP courses will be considered for admission to a Level I program if the course/grade is part of your Ontario High School academic record as recorded at the OUAC. Applicants who have completed AP exams in acceptable courses, with a minimum grade of four, may be recommended for up to 18 units of advanced credit. An official copy of the final AP Exam Results Report is required as part of the advanced credit evaluation process.

#### International Baccalaureate (IB)

Applicants who have completed, or will be completing, the IB Diploma will be considered for admission to Level I, provided the completed diploma program includes the subject requirements of the desired program. Advanced credit, of up to 18 units of study, will be considered for Higher Level (HL) courses based on the achievement of final IB Diploma grades of five or greater. For more information, please refer to the "Admissions Requirements" section on future.mcmaster.ca.

## English Language PROFICIENCY REQUIREMENTS

You will be required to submit an English Language Test if you have not:

- Resided in an English-speaking country for at least four years immediately prior to September 2022; OR
- Attended an English-medium educational institution in a full-time academic (non-ESL) program for at least four years immediately prior to September 2022. Official documentation from the school is required for this exemption. The admission committee reserves the right to still require a test of English at its discretion.

#### **English Language Proficiency Test Requirements**

 For test requirement information, please visit: future.mcmaster.ca/english-proficiency



## MCMASTER ENGLISH LANGUAGE DEVELOPMENT DIPLOMA (MELD)

#### meld.mcmaster.ca

MELD is a two-term, full-time intensive bridging program in English language development and acculturation. Students accepted into MELD will have qualified for admission to undergraduate studies in a specific program, but do not meet the English language proficiency (ELP) requirements. Applicants are given an offer of admission to their program of choice, conditional upon successful completion of the MELD diploma.

## **National Requirements by Province**

Province: General Requirements	English (ENG4U)	Biology (SBI4U)	Calculus (MCV4U)	Chemistry (SCH4U)	Physics (SPH4U)	Pre-Calculus Math (MHFU)
ALBERTA						
Five academic courses numbered 30 or 31, including all required courses.	English Language Arts 30-1. The blended mark for ELA 30-1 is used for admission.	Biology 30	Math 31*	Chemistry 30	Physics 30	Math 30-1
BRITISH COLUMBIA						
Four Grade 12 courses, including all required courses.	English Studies 12,	Anatomy &	Calculus 12*	Chemistry 12	Physics 12	Pre-Calculus 12
Five Grade 12 academic courses, including all required courses, are used for programs with five requirements.	English 12 or English 12 First Peoples	Physiology 12 or Biology 12				
MANITOBA						
Five academic courses numbered 40S, including all required courses.	English 40S	Biology 40S	Calculus 45S or 42U. Pre-Calculus 40S must also be completed.	Chemistry 40S	Physics 40S	Pre-Calculus 40S
NEW BRUNSWICK						
Five academic courses numbered 120, 121 or 122, including all required courses.	English 121 or 122	Biology 121 or 122	Calculus 120*	Chemistry 121 or 122	Physics 121 or 122	Pre-Calculus A120 and B120
NEWFOUNDLAND AND LABRADOR						
Eleven acceptable academic Grade 12 credits at 3000 level, including all required courses.	English 3201	Biology 3201	Math 3208*	Chemistry 3202	Physics 3204	Mathematics 3200
NORTHWEST TERRITORIES						
Five academic courses numbered 30 or 31, including all required courses.	English Language Arts 30-1. The blended mark for ELA 30-1 is used for admission.	Biology 30	Math 31*	Chemistry 30	Physics 30	Math 30-1
NOVA SCOTIA						
Five Grade 12 academic courses, including all required courses.	English 12	Biology 12	Calculus 12*	Chemistry 12	Physics 12	Pre-Calc 12
NUNAVUT						
Five academic courses numbered 30 or 31, including all required courses.	English Language Arts 30-1. The blended mark for ELA 30-1 is used for admission.	Biology 30	Math 31*	Chemistry 30	Physics 30	Math 30-1
PRINCE EDWARD ISLAND						
Five Grade 12 academic courses numbered 611 or 621, including all required courses.	English 611 or 621	Biology 621	Math 611B*	Chemistry 621	Physics 621	Math 621A, 621B
QUEBEC						
Completion of six Grade 12 high school academic courses equivalent to Ontario curriculum requirements. CEGEP (DEC) 12 academic semester credits (R score used for admission consideration).	Two English 603 or 604 courses	Biology I (101)	Calculus I (201)*	Chemistry I & II (202)	Physics I & II (203)	Linear Algebra I (201)
SASKATCHEWAN						
Five grade 12 academic courses numbered 30, including all required courses.	English A30 & B30	Biology 30	Calculus 30*	Chemistry 30	Physics 30	Pre-Calculus 30
YUKON						
Four Grade 12 academic courses, including all required courses.  Five Grade 12 academic courses, including all required	English Studies 12, English 12 or English 12 First Peoples	Anatomy & Physiology 12 or Biology 12	Calculus 12*	Chemistry 12	Physics 12	Pre-Calculus 12
courses, are used for programs with five requirements.						

Refer to the Ontario Admissions Requirements chart. AP Statistics and CEGEP Statistics I (201) are acceptable as Additional Math (MDM4U).

\*AP Calculus is also acceptable

## **Ontario Admissions Requirements**

Level I Program (OUAC Code)	Grade 12 U/M Requirements 6 Courses Including*	Anticipated Admission Range**	Target Enrol.	Notes and Additional Requirements	Page
ARTS & SCIENCE		·			
Arts & Science (MX)	ENG4U     One of: MHF4U, MCV4U     Two of the four remaining credits must be at the U level	Admission is by selection. A minimum of <b>88%</b> is required for consideration.	70	OUAC application deadline: January 13, 2022     Mandatory supplementary application deadline: February 1, 2022           Details: artsci.mcmaster.ca     MCV4U is highly recommended	28
DEGROOTE SCHOOL OF BUSINES	S				
Business (MB)	• ENG4U, MHF4U, MCV4U	High 80's to low 90's	800	<ul> <li>Internship opportunities available</li> <li>Optional supplemental application deadline: February 1, 2022</li> </ul>	30
INTEGRATED BUSINESS AND HU	MANITIES				
Integrated Business and Humanities (MBH)	• ENG4U, MCV4U, MDM4U	Admission is by selection. A minimum of 88–92% is required for consideration.	60	<ul> <li>Application deadline: January 13, 2022</li> <li>Mandatory supplementary application deadline: February 1, 2022         <ul> <li>Details: ug.degroote.mcmaster.ca/ibh</li> </ul> </li> <li>Internship opportunities available</li> </ul>	34
ENGINEERING					
Bachelor of Technology: (3 Streams)  • Automation Engineering Technology (MPT)  • Automotive and Vehicle Engineering Technology (MAT)  • Biotechnology (MTT)	ENG4U, MCV4U, SCH4U, SPH4U	Admissions is by selection. 80%* Minimum Anticipated Admission Average	240	<ul> <li>Mandatory co-op</li> <li>Each stream is a separate program choice on the OUAC application</li> <li>OUAC Application Deadline: January 13, 2022</li> <li>Mandatory Supplementary Application Deadline: January 28, 2022 at noon ET</li> </ul>	36
Computer Science I (MCC or MC) (Co-op and non co-op)	ENG4U, MCV4U     Two of: SBI4U, SCH4U, SPH4U, SES4U, ICS4U, TEJ4M	Admissions is by selection. 90%* Minimum Anticipated Admission Average	160	<ul> <li>Co-op available</li> <li>OUAC Application Deadline: January 13, 2022</li> <li>Mandatory Supplementary Application Deadline: January 28, 2022 at noon ET</li> </ul>	41
Engineering I (MEC or ME) (Co-op and non co-op)	• ENG4U, MCV4U, SCH4U, SPH4U	Admission is by selection. A minimum of <b>87%</b> is required for consideration.	900	<ul> <li>Co-op available</li> <li>Application deadline: January 13, 2022</li> <li>Mandatory supplementary application deadline: January 28, 2022 at noon ET</li> <li>Applicants with a strong admission average may qualify for free choice of discipline in Level II</li> </ul>	42
INTEGRATED BIOMEDICAL ENGIN	NEERING AND HEALTH SCIENCES (iBIO	MED)			
Integrated Biomedical Engineering and Health Sciences (MEI or MEH) (Co-op and non co-op)	• ENG4U, MCV4U, SCH4U, SPH4U, SBI4U	Admission is by selection. A minimum of +90% is required for consideration.	140	<ul> <li>Application deadline: January 13, 2022</li> <li>Mandatory supplementary application deadline: January 28, 2022 at noon ET</li> <li>Co-op available</li> </ul>	48
HEALTH SCIENCES					
Health Sciences (MNS)	ENG4U, SBI4U, SCH4U     One of: MHF4U, MCV4U, MDM4U     One non-math, non-science, non-technology 4U or 4M credit	Admission is by selection. A minimum of <b>90%</b> is required for consideration.	240	Application deadline: January 13, 2022     Mandatory supplementary application deadline: early to mid-February, 2022     Details: bhsc.mcmaster.ca     Search acceptable courses for fifth requirement: future.mcmaster.ca/programs/health-sciences/	50
Midwifery (MY)	• ENG4U, SBI4U, SCH4U	Admission is by selection. A minimum of <b>75%</b> is required for consideration.	30	<ul> <li>Application deadline: February 1, 2022</li> <li>Interviews are by invitation</li> <li>Students must obtain a minimum grade of 75% in each of the required courses as well as their overall average</li> <li>Applicants must be Canadian citizens or have permanent resident status</li> </ul>	55
Nursing MN (McMaster University) MNC (Conestoga College) MNM (Mohawk College)	• ENG4U, SBI4U, SCH4U • One of: MHF4U, MCV4U, MDM4U	Admission is by selection. A minimum of <b>85%</b> is required for consideration.	120 (per site)	Application deadline: January 13, 2022     Students must complete a CASPer assessment: nursing.mcmaster.ca/prospective-students/admission	56

#### Ontario Admissions Requirements (continued)

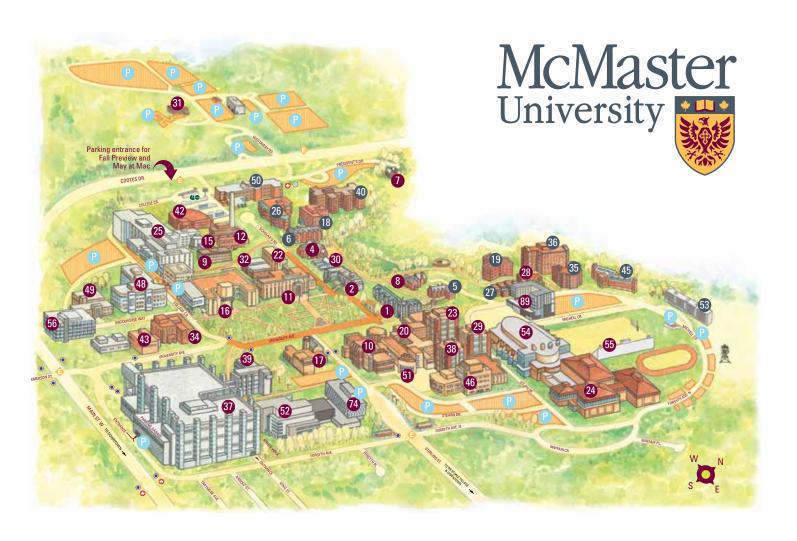
Level I Program (OUAC Code)	Grade 12 U/M Requirements 6 Courses Including*	Anticipated Admission Range**	Target Enrol.	Notes and Additional Requirements	Page
HUMANITIES			•		
Humanities (MH)	• ENG4U	High 70's	480	SBI4U is recommended for students planning to enter the Cognitive Science of Language Program     Internships available	58
Music (MM)	• ENG4U	78% plus successful audition	20	Music auditions take place between February and April, 2022     Contact sota@mcmaster.ca to schedule     an appointment     SBI4U is recommended for students planning to     enter the Music Cognition Program     Internships available	66
iArts (Integrated Arts) (MHI)	• ENG4U	78% plus successful electronic creative submission	40	<ul> <li>Initial round of creative submissions due February 1, 2022</li> </ul>	68
SCIENCE					
Chemical and Physical Sciences (MPS)	ENG4U, MHF4U, MCV4U, SCH4U, SPH4U	Low to mid 80's	100	Co-op available in some degree programs	70
Environmental and Earth Sciences (MEE)	<ul> <li>ENG4U</li> <li>One of: MHF4U, MCV4U</li> <li>One of: SBI4U, SCH4U</li> <li>One of: MHF4U, MCV4U, SBI4U, SCH4U, SPH4U</li> </ul>	Low to mid 80's	85	Co-op available in some degree programs     Applicants without MCV4U will be required to take an equivalent calculus course in Level I	70
Integrated Science - iSci (MIS)	ENG4U, MHF4U, MCV4U     Two of: SBI4U, SCH4U, SPH4U	Admission is by selection. A minimum of <b>high 80s</b> is required for consideration.	60	<ul> <li>Application deadline: January 13, 2022</li> <li>Mandatory supplementary application deadline: February 1, 2022</li> <li>Details: science.mcmaster.ca/isci</li> </ul>	78
Kinesiology (MV)	• ENG4U, SBI4U, MCV4U	High 80's to low 90's	230	PSK4U is recommended	80
Life Sciences (MLS)	<ul><li>ENG4U, SBI4U</li><li>One of: MHF4U, MCV4U</li><li>One of: MHF4U, MCV4U, SCH4U, SPH4U</li></ul>	High 80's to low 90's	1000	Co-op available in some degree programs     Applicants without MCV4U will be required to take an equivalent calculus course in Level I	70
Mathematics and Statistics (MZ)	• ENG4U, MHF4U, MCV4U	Mid to high 80's	315	Co-op available in some degree programs	70
Medical Radiation Sciences (MRS)	• ENG4U, MHF4U, MCV4U, SBI4U, SCH4U	Mid to high 80's	110	Clinical Practice	82
SOCIAL SCIENCES					
Economics I (MLE)	ENG4U     Two of: MHF4U, MCV4U, MDM4U	Low to mid 80's	125	Applicants without MCV4U will be required to take an equivalent calculus course in Level I in addition to the required calculus course     Applicants without MDM4U will be required to take STATS 1L03 in Level I     Internships available	84
Health & Society I (MLH)	• ENG4U	Low to mid 80's	60	Internships available	86
Social Sciences (ML)	• ENG4U	High 70's to low 80's	855	<ul> <li>MHF4U, MCV4U and SBI4U are strongly recommended for students planning to enter Psychology, Neuroscience &amp; Behaviour (PNB)</li> <li>Internships available</li> </ul>	88
• • •				<ul> <li>Internships available</li> <li>Internships available</li> <li>MHF4U, MCV4U and SBI4U are strongly recommended for students planning to enter Psychology, Neuroscience &amp; Behaviour (PNB)</li> </ul>	

Information related to admission policies is as of August 2021 and subject to change without notice. All programs have enrolment limits and may become full prior to published deadlines. The University reserves the right, as its sole discretion, not to accept, process or adjudicate applications or amendments to applications to any program at any time. McMaster does not make offers of admission to students with an average of less than 75%.

ENG4U: English ICS4U: Computer Science MCV4U: Calculus and Vectors MDM4U: Mathematics of Data Management MHF4U: Advanced Functions PSK4U: Introductory Kinesiology SBI4U: Biology SCH4U: Chemistry SES4U: Earth and Space Science SPH4U: Physics TEJ4M: Computer Engineering Technology

<sup>\*</sup>A course can only be used to meet one specific admission requirement per program.

<sup>\*\*</sup>Estimates are provided as a guide only (based on information available as of summer 2021) and are subject to change.



Alumni Memorial Hall (AMH)	7
A.N. Bourns Science Building (ABB)	25
Bates Residence	40
Biology Greenhouse	30
Brandon Hall	36
Burke Science Building (BSB)	11
Campus Services Building (CSB)	31
Chester New Hall (CNH)	23
Commons Building (C)	28
Communications Research Lab (CRL)	43
David Braley Athletic Centre (DBAC)	54
DeGroote School of Business	46
Divinity College (DC)	17
Edwards Hall	5
Engineering Technology Building (ETB)	56
E.T. Clarke Centre (CUC)	12
General Sciences Building (GSB)	22
Gilmour Hall (GH)	20

Hamilton Hall (HH)	2
Health Sciences Centre (HSC)	37
Hedden Hall	45
H.G. Thode Library of Science & Engineering (TL)	42
Information Technology Building (ITB)	49
Institute for Applied Health Sciences (IAHS)	48
Ivor Wynne Centre (IWC)	24
John Hodgins Engineering Building (JHE)	16
Kenneth Taylor Hall (KTH)	38
Les Prince Hall	53
Life Sciences Building (LSB)	39
L.R. Wilson Hall (LRW)	74
Mary E. Keyes Residence	50
Matthews Hall	26
McKay Hall	27
McMaster University Student Centre (MUSC)	51
Michael G. DeGroote Centre for Learning	
& Discovery and Atrium (MDCL)	52

Mills Memorial Library (MML), McMaster Museum of the Art and	
Alvin A. Lee Building (AAL)	10
Moulton Hall	18
Nuclear Reactor (REAC)	15
Nuclear Reactor Building	9
Psychology Building (PC)	34
Refectory (Bridges / The Phoenix)	4
Ronald Joyce Stadium	55
Tandem Accelerator Building (TA)	32
Togo Salmon Hall (TSH)	29
University Club	8
University Hall (UH)	1
Wallingford Hall	6
Whidden Hall	19
Woodstock Hall	35

















## BRIGHTER WORLD







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