Science Careers & Experience Guidebook

Science Careers & Experience Guidebook

MICHAEL ADEBO; GIULIA COLALILLO; BRI DENICOLA; LAURA MACKINNON; YUAN (DORA) XU; AND SHEEMA YOUSEFZAI

MCMASTER UNIVERSITY, SCIENCE CAREERS & EXPERIENCE CENTRE

Contents

Introduction and FAQs

Welcome to the Science Careers & Experience Guidebook! This resource is designed to help you build your Science career toolkit, find meaningful experience, and gather information for success during and after Mac!

You can navigate the Parts and Chapters of this Pressbook by clicking on the “Contents” drop-down menu found on the top left of your screen. You can also go back or advance to the next Part or Chapter of the Pressbook by clicking on the arrows at the bottom of your screen.

Frequently Asked Questions:

Getting support

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=4#h5p-11

Career Exploration

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=4#h5p-83

SCIENCE PROFESSIONAL COMPETENCIES FRAMEWORK

Introduction to Science Professional Competencies

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-38

In this section, you will be introduced to the **Science Professional Competencies Framework**. The framework identifies eight competencies science students need to find success throughout their professional journey.

Watch: Introduction to the Science Professional Competency Framework

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1564#oembed-1

Remember: A Competency is more than just a 'skill'.

A competency is a combination of skills, knowledge, and abilities that help you succeed in the workplace and in your studies. Each competency in the framework has "components" to help you identify areas of strengths and development. Unlike individual skills, competencies are broader and apply across many roles, industries, and career paths.

- **Competencies prepare you for real-world challenges** — Think of them as tools you can adapt to navigate your career journey.
- **Competencies help you bridge the gap between your academics and the workplace** — Competencies help you talk about your experiences in ways employers understand.
- **Competencies stay relevant beyond graduation** — Whether you're working, studying, or exploring, you'll keep building these throughout your life.

Definitions, Components and Examples

Explore the eight competencies below, by reading about their definitions, components and applications in your studies and the workplace.

Communication

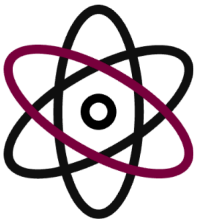
An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-84

Problem Solving

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-85

Building Brighter Lives

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-86



Discovery

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-87

Collaboration, Teamwork & Interpersonal Relationships

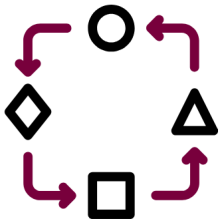
An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-88

Critical thinking

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-89

Motivation, Perseverance & Resilience

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-90



Adaptability & Flexibility

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1564#h5p-91

Reflect on your competencies

The Science Professional Competencies are not just for the workplace, they're also a key part of your academic journey. Whether you are in your first year or approaching graduation, you're likely using and developing the competencies already through your coursework. Take a moment to reflect on how you've encountered or practiced these competencies through your academics:

- Can you think of a time where you practice each in class or through your assignments?
- Which competencies do you think you excel at?
- Are their competencies you'd like to strengthen?
- Is there a specific component of the competency you'd like to work on?

Proceed to the next chapter for guidance on reflecting, developing or articulating your competencies.

Did You Know?

The **Science Professional Competencies Framework** was informed by research and conversations with **science employers, McMaster faculty, students, and alumni**. Their input shaped these eight key competencies to reflect the real skills and knowledge employers want — so you're developing what actually matters for your future career.

Need more support with leveraging the Science Professional Competencies in your career journey?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Explore these additional chapters:

- Reflecting, Developing and Articulating Your Competencies
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC

Discover real stories of how your peers are applying their competencies in academic, workplace, and community settings.

Reflecting, Developing and Articulating Your Competencies

Applying Your Competencies

In the previous chapter, you were introduced to the **eight Science Professional Competencies** needed to thrive throughout your career. This chapter will provide guidance on how to **apply** these competencies in meaningful ways during your studies and beyond.

You'll explore how to:

1. **Reflect** on your current strengths and areas of growth
2. **Develop** your competencies through SMART goals
3. **Articulate** your skills confidently to others — whether in resumes, interviews, or networking conversations

Remember: The competencies can be applied across many areas of your career development.

Knowing your competencies and areas of development can inform your job or graduate school application materials, preparation for an interview, search for experience, and more! Use the drop-down menu below to explore how each competency connects to topics covered throughout this Pressbook.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1612#h5p-67

1. Reflect

Regularly reflecting on your competencies is critical. Reflection can be used before, during and after an experience to support various goals and aspects of your career development. Reflection can help you identify areas of strengths and development, acknowledge your progress, and inform your next steps. Below are some reflection prompts to help you get started:

- Which competency or components are my strengths?
- Which competency or components have I seen the most growth?
- Is there a specific moment or opportunity where I have demonstrated a competency or component? Why

was it meaningful to me?
- Which competency or components would I like to improve in?
- How might I improve in a competency or component?
- Are there opportunities or resources available to help me develop a competency or component?

Writing down your reflections provides a focal point for personal reflection as you track your competency development. You may even choose to share these reflections with a supervisor, mentor, career advisor, or someone else who can help guide your competency development.

In any case, **reflection is a simple, but powerful tool** to return to throughout your academic journey and your future professional career.

2. Develop

Throughout your academic journey, you'll take part in many activities that help build your competencies. After you reflect on your competencies, create a S.M.A.R.T. goal on how you'd plan to develop a specific component of a competency.

Setting S.M.A.R.T. Goals

S.M.A.R.T. goals are any goal that is **specific**, **measurable**, **attainable**, **relevant**, and **timely**. For each step, there are actions you can take to build clear and specific goals. For more support, read this Goal Setting guide.

S.M.A.R.T.	Guidance	Example Action
Specific	Clearly describe your goal.	I want to improve my problem-solving skills by independently troubleshooting at least three laboratory experiments or data analysis challenges during my co-op term.
Measurable	Answer: How will you track your progress? If possible, define your goal in numerical terms (e.g., how much/how many?). Specify how will you know you've accomplished your goal.	I will track the number of troubleshooting cases I encounter and document at least three examples where I successfully identified a problem, generated possible solutions, and chose one to implement.
Attainable	Answer: What steps will you take? Is this a goal you can realistically accomplish with the time available? Why or why not? Are there any potential roadblocks to your goal?	This goal is achievable because I will ask my supervisor for opportunities to troubleshoot lab experiments and seek guidance when needed to ensure I'm approaching problems effectively.
Relevant	Answer: Why is this goal important to you? Is it relevant to your long-term goals?	Strengthening my problem-solving skills will boost my confidence in lab work, support independent thinking, and prepare me for a career in biotechnology research.
Timely	Answer: What is the timeline for reaching this goal? Determine when/how you will evaluate your progress. Are you setting smaller goals along the way?	By the end of my co-op term, I will have completed and documented at least three troubleshooting cases.

Exercise: Identify the action for each component of S.M.A.R.T

An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://ecampusontario.pressbooks.pub/scec/?p=1612#h5p-56

3. Articulating Your Competencies

Being able to clearly and confidently describe your competencies is a key part of career readiness. One powerful way to articulate your competencies is by crafting **accomplishment statements or stories.** An accomplishment

statement will help you describe your skills to employers and can be used in a **resume**, **cover letter**, **job interview**, or to **market yourself on LinkedIn**. Accomplishment statements highlight your competencies by:

- **Showcasing your unique contributions** — Think of them as your personal "highlight reel."
- **Helping you stand out** — In today's competitive job market, it's not enough to just list your degree. Accomplishment statements show how you've applied your skills in real-world situations.
- **Quantifying your impact** — Whenever possible, use numbers or measurable results. For example, instead of saying *"assisted customers,"* you could say *"resolved customer inquiries 20% faster by streamlining the intake process."*

Writing accomplishment statements:

Identify an experience when you've demonstrated a specific competency. Once you have a specific experience in mind, answer the following questions:

- **What did you do?** State the specific task or responsibility from your professional experience where you applied this competency. Begin your statement with a strong **action verb**.
- **How did you do it?** Specify the skills or methods you used to accomplish the task.
- **Why was it important?** Identify the result or impact of your actions to highlight their significance.

Examples of competency accomplishment statements

- **Communication:** Tutored high school student using plain language to communicate complex physics concepts, resulted in improved course grade from 68% to 81%.
- **Problem solving:** Developed a data-cleaning script to automate the detection and correction of inconsistencies in user analytics reports, reducing manual processing time by 40%.
- **Collaboration, Teamwork, and Interpersonal Relationships:** Collaborated efficiently with kitchen staff during peak hours, adhering to order protocols, to ensure accurate and timely order delivery and high customer satisfaction.
- **Motivation, Perseverance and Resilience:** Incorporated supervisor feedback to refine patient communication techniques, resulting in more empathetic interactions and improved patient satisfaction scores.

For more guidance, visit the following chapters:

- Creating your résumé and CV,
- Writing a cover letter and
- Interviewing with confidence.

Need more support with communicating your Science Professional Competencies?

Meet with a Science Career Advisor

Book a 30-minute appointment the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC

Discover real stories of how your peers are articulating their competencies to gain professional experience.

CAREER EXPLORATION: WHAT CAN I DO WITH A BACHELOR'S DEGREE IN SCIENCE?

Start here: Your Career Path

Your Career Journey Is Not a Straight Line

Welcome to your career exploration journey! It's common to feel a mix of excitement and uncertainty when thinking about what comes after your degree. A critical first step is understanding that the idea of a linear career path—university, first job, promotion, retirement—is largely a myth for most people today. Instead, career journeys are often non-linear, with multiple jobs, further education, changing fields and unexpected opportunities.

Think of career planning and exploration as a series of small, intentional steps rather than seeking a single "Eureka!" moment. This approach allows you to adapt and pivot as your interests and the job market evolve in order to build a life that feels meaningful to you.

Key Ideas to Embrace:

- **Start with "Who are you?":** Before exploring "what's out there," you need to understand your own strengths, values, and interests.
- **Embrace the Process:** Career development is a journey that requires time, patience, and self-compassion.
- **Small Steps Forward:** Your career will unfold through a series of small, deliberate actions.

By first reflecting on your personal values and what brings you fulfillment, you can begin to explore professions not just as jobs, but as pathways to creating a life that is meaningful and authentically yours. This chapter is designed to help you connect the dots between who you are, the life you want to lead, and the career that will help you build it.

Career Myths vs. Realities

Many of us hold beliefs about careers that can sometimes be misleading, make us feel anxious or unsure or actually hold us back. These 'dysfunctional beliefs' can make us feel stuck, overwhelmed or limited in our careers and life.

Here are some examples:

Dysfunctional Belief (The Myth)	Reframe (Reality)
"What's your passion?" (The belief that you must find your one true passion to have a fulfilling career.)	**"Follow your curiosity."** (Passion is often the result of trying new things, not a prerequisite for starting.)
"Your degree determines your career."	**"The majority of university graduates do not end up in a career directly related to their major."** (Your degree provides skills, not a predetermined path.)
"To be happy, I have to make the right choice."	**"There is no 'right' choice—only good choosing."** (Focus on making the best choice with the information you have and then move forward.)
"It's too late for me to make a change."	**"It's never too late to design a life you love."** (Prototyping and small steps can lead to significant changes at any stage of life.)

Activity: Sorting 'myth' from 'reality'

This activity will help you separate the common myths from the realities of career development. Read each statement below and drag it to the column where you think it belongs: 'Myth' or 'Reality'."

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1202#h5p-47

Reminders:

- **Be Flexible:** Your career path will likely have twists and turns.
- **Focus on Skills & Experience:** Your skills are more transferable than you think.
- **Define Your Own Success:** Decide what a fulfilling career looks like for you.

What does career exploration look like?

Planning for your career doesn't start with resumes, interviews, and job markets, but rather a bigger, more important question: **What kind of life do you want?**

This isn't just about what you want to *do* for a living, but how you want to *live*. Do you envision a life filled with adventure and travel, or one rooted in community and stability? Do you crave continuous intellectual challenges s, or do you seek a career that supports your passions and hobbies outside of work? Your career is not separate from your life; it is the engine that can power the life you want.

Career exploration is a cyclical, iterative process – this means that career exploration isn't a decision you make once, but is an ongoing process you will revisit and refine repeatedly throughout your life as you gain new experiences and evolve and as a person and as a professional.

Career exploration is a cyclical, iterative process.

Linear vs. Non-Linear Career Paths

As a science student, you might picture your future career as a straight, predictable line. You go from your degree to a lab or professional school, get promotions, work for 30 years and then retire. This is known as a **linear career path**.

However, for most science graduates today, the journey is rarely a straight line. Instead, it's more common to have a **non-linear career**, a path that includes changing jobs or industries, upskilling, volunteering, taking a break, and unexpected opportunities. Over the course of your career, that could look like starting out in academic research, then moving to a role in government policy, starting your own company, applying your scientific skills in fields marketing or data science or choosing something totally different that better aligns with your life stage, values, goals and strengths.

Non-linear career paths are the new norm and a significant advantage. Each unique experience you gain, whether in a different industry or a new role, builds a diverse toolkit of skills. You'll learn to be more adaptable, a better problem-solver, and see challenges from multiple perspectives—all qualities highly valued in any scientific field.

The most important quality you can cultivate is curiosity about multiple career paths ('multiple plan As').

Learn to identify the transferable skills in every job or volunteer position (like communication, project management, and critical thinking), and build a network of contacts in various fields. Think of your career less like a rigid ladder and more like a web you are building; every connection and experience adds strength and creates new opportunities.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1202#h5p-92

Watch: Loosely vs. Tightly Linked Majors & Careers

Let's explore the relationship between what you're studying (your specialization/major) and your future career possibilities.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1202

Bonus Video: Sarah Ellis and Helen Tupper: The best career path isn't always a straight line | TED

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1202#oembed-1

Quick Chapter Recap

- Be curious about *multiple Plan As*—there's no single "right" path.
- Know yourself first: *"Who am I?"* comes before *"What's out there?"*
- Your degree opens many doors—skills matter more than titles.
- Career paths are rarely linear—small steps and pivots are typical.

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Self-Assessment for Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem Solving Approach to Career Planning

Follow us on Instagram @McMasterSCEC

Stay informed about workshops, information sessions, and networking opportunities.

The Importance of Self-Assessment in Career Planning

Building Your Career from the Inside Out

Ask yourself 'who am I?' before 'what careers are out there?'

Effective career planning starts with self-awareness. By understanding your unique combination of skills, values, and interests, you can identify career opportunities that utilize your strengths, align with your values, and activate your particular experience, skills and knowledge.

Watch: Fundamental Career Ideas

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1205

The Role of Self-Assessments

Self-assessment is the foundation you'll use to build your career research on. Before you can explore your career possibilities, you have to do your 'me-search' – research on your self to learn about your own strengths, interests and values.

Understanding who you are in the context of your career takes time and effort. You can gather information about yourself in lots of different ways. Some sources of information can include:

- hands on experiences,
- reading,
- career quizzes and assessments,
- reflective activities,
- career conversations with supervisors, mentors, colleagues, friends or family,
- career advising appointments,
- working jobs you do (and don't!) like
- and other life experiences

Self-assessment will help you:

- Distinguish the difference between what you 'should' want and what work would actually be meaningful for you

- Uncover your professional strengths and workplace values
- Discover unexpected and new career paths to research and experiences to seek

Remember: self-assessment is an iterative process (meaning, something you repeat). You will change and evolve, so it's important you continue reflecting and don't think about this as a one-time activity.

Reflective Questions

As you start your self-assessment process, ask yourself:

- Why are you beginning this process?
- What's your goal for this process of self-exploration?

Identifying Your Knowledge, Skills & Experience

What might it look like if the following statement were true?

> *"My career is one where I can utilize my strengths, in an environment or organization that aligns with my values, in a field I am genuinely interested in."*

1. Your Academic Experiences

You are building essential knowledge, skills and experience for your future career through your academic experiences. **Ask yourself, 'what do I know and what can I do as a result of my experiences in class or in the lab?'** Employers won't hire you simply based on your program (for example, life science, biology, chemistry, etc.), but rather on the specific expertise you've developed through your education.

Here's are some examples:

- **Experiences:** *i.e. field research, group projects, community engagement, work in a laboratory setting, etc.*
- **Skills:** *i.e. survey design, presentation skills, data analysis, specific wet lab skills, specific software etc.*
- **Knowledge:** *i.e. science communication, molecular biology, anatomy, etc.*

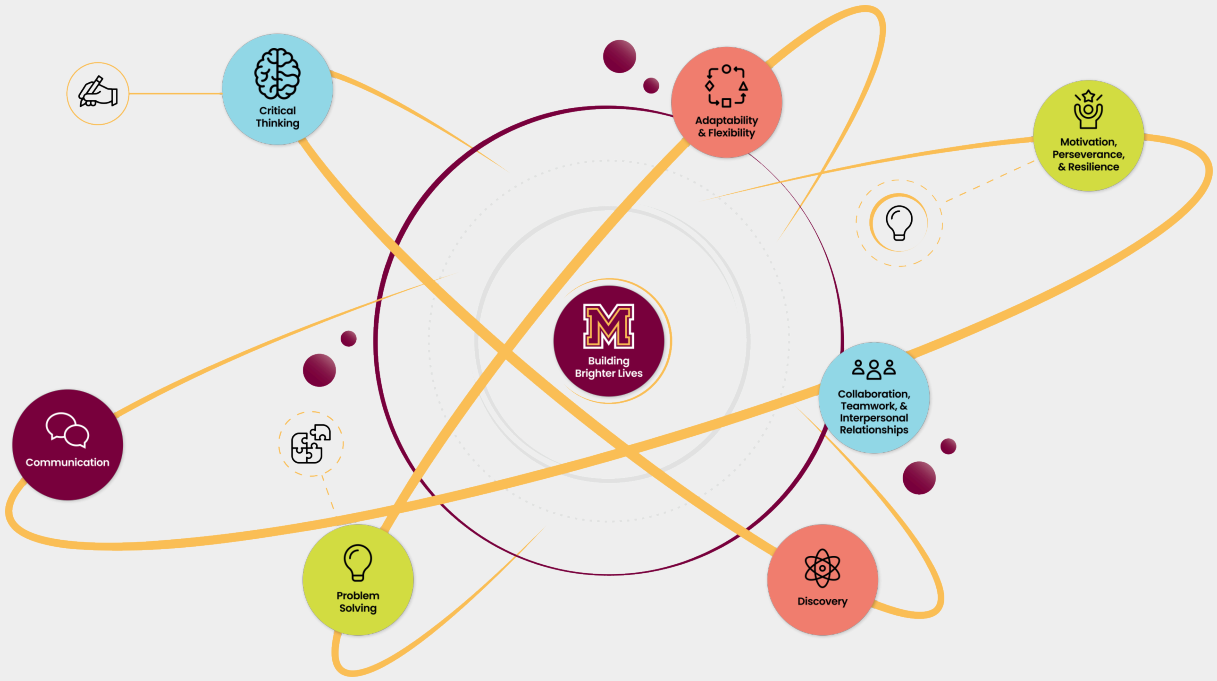
2. Your Non-Academic Experiences

All of your non-academic experiences are also relevant to your future career. Reflect on the skills you've built through experiences like part-time work. volunteering, intensive hobbies, extracurriculars or personal projects.

3. Know Your Strengths

Strengths are your natural talents—the things you are inherently good at and enjoy doing. The strengths philosophy asserts that you can gain more by building on your talents than by trying to overcome your weaknesses. Focusing on roles where you can use your strengths daily leads to greater satisfaction and productivity.

Take time to reflect on the eight essential Science Professional Competencies — they're designed to support your success no matter what industry or role you pursue. As you explore career options, consider which competencies you'd like to strengthen and how your current experiences already demonstrate them. Being able to recognize and describe these competencies in relation to your career interests is a key part of building your professional story.



4. Understand Your Values

Your values are the principles that are most important to you in a work environment. Aligning your career with your core values, such as work-life balance, creativity, or helping others, is crucial for long-term fulfillment and satisfaction. It's also important to remember that your values may change over time, so revisiting them is a good practice.

5. Explore Your Interests

Your interests can provide valuable clues about fulfilling career paths. Thinking about the content you consume, the subjects you talk about, the problems you want to solve and what you do in your spare time can help you brainstorm industries to explore further.

Explore These Tools to Discover What's Right For You!

Try out these resources to help you identify your skills, interests, values, and career possibilities:

- Online Skills and Values Self-Assessment – UTSC Career Centre
- Career Quizzes and Tests – Canada Job Bank
- See Where Your Skills Can Take You – OpportuNext
- Career Counselling – McMaster Student Success Centre

Quick Chapter Recap

- Know your **values, interests, and strengths**—they're the foundation of good career decisions.
- Explore the **8 Science Professional Competencies** to guide your growth and career readiness.
- Self-assessment is **ongoing**—you'll evolve, so revisit it regularly.

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- How to Research Career Paths
- Finding Your Impact: A Problem Solving Approach to Career Planning

Follow us on Instagram @McMasterSCEC

Stay informed about workshops, information sessions, and networking opportunities.

How to Research Career Paths

Before you can explore career opportunities and do career research, you need to understand yourself – your values, skills, interests and strengths. To learn how to reflect on these essential attributes, please read our chapter on Self-Assessment for Career Planning.

Exploring Career Opportunities

Most people can only name four or five jobs. You don't want to make career decisions without enough information! Before considering which career paths might be right for you, you need to do career research, commonly referred to as labour market research.

What is labour market research?

Labour market research involves gathering information about the job landscape to support informed career decisions. It helps you explore current job trends, identify in-demand skills, and understand which industries are actively hiring.

This research can reveal:

- Which sectors are growing
- What qualifications or skills employers want
- Whether additional education or training may be needed

To make your research effective, begin with broad sources to get a general overview of a field. Then, narrow your focus to specific organizations, job postings, and professionals working in those roles. This step-by-step approach provides the most detailed and actionable insights.

What kinds of questions can labour market research answer?

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1210#h5p-65

How can labour market research inform the decisions you are making now?

- **Explore career paths** linked to your program or specialization to make confident academic choices.
- **Identify valuable skills** you can build through courses, volunteering, or work experiences.
- **Write stronger resumes and cover letters** by using keywords that match employer expectations.
- **Prepare for interviews with confidence** by understanding industry trends and salary expectations.
- **Connect with professionals** for informational interviews and grow your network.
- **Discover exciting career options** you may not have considered or know existed.

If you need more ideas on what kind of career paths your degree can lead to, we have chapters dedicated to specific areas of science:

- Careers in Biochemistry
- Careers in Biology
- Careers in Chemistry and Chemical Biology
- Careers in Environmental Earth Sciences
- Careers in Kinesiology
- Careers in Life Sciences
- Careers in Mathematics and Statistics
- Careers in Medical and Health Physics
- Careers in Physics and Astronomy
- Careers in Psychology, Neurosciences and Behaviour

Recommended Career Research Process

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1210#h5p-63

Watch: How to do Labour Market Research

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1210

Try it: Career Research Simulation

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1210#h5p-64

Reflect: How to Make Sense of Your Career Research

Once you've completed some career research, it's important to reflect on what you've discovered in order to determine your next steps. Answer the following questions.

1. What roles and fields are emerging that are interesting to me?
2. How relevant are my transferable skills, knowledge and experience to the field(s) I have been researching?
3. Do jobs in this field align with my values? Can I create the kind of lifestyle I want?
4. What kind of skills and experience are essential to roles in this field?
5. What kind of experience or further education might I need to build to enter this field
6. Are there relevant entry level roles I can apply to right now?
7. What kind of role am I qualified for now that will help me get 1 step closer to the job I want in the future?

Quick Chapter Recap

- **Labour market research** helps you explore multiple career paths with real-world data.
- Use **diverse resources**—from job boards to professional networks—to gather both general and specific info.
- **Reflect on your findings** to decide which paths align with your skills, values, and goals.

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Finding Your Impact: A Problem Solving Approach to Career Planning
- Conducting Information Interviews
- Searching And Applying For Experience
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC

Stay informed about workshops, information sessions, and networking opportunities.

Finding Your Impact: A Problem-Solving Approach to Career Planning

Are You a Problem-Solver?

When thinking about your future career, it's common to focus on landing a specific job title. But that mindset is shifting. As Jules Schroeder, founder of the *Unconventional Life* podcast, suggests, job titles aren't as central to career exploration as they used to be.[1]

So what should you focus on instead?

Rather than aiming for a particular job title, consider the kind of impact you want to make. This approach can help you build a meaningful career that reflects your values and strengths—regardless of the title on your business card.

Occupation-focused question	Impact question
What job can I get with my major?	What problems do I want to solve?

Example of the impact approach

A problem a student is concerned with: A community is facing rising respiratory illnesses due to air pollution and a lack of green spaces.

A problem like this can be tackled by professionals from many different backgrounds:

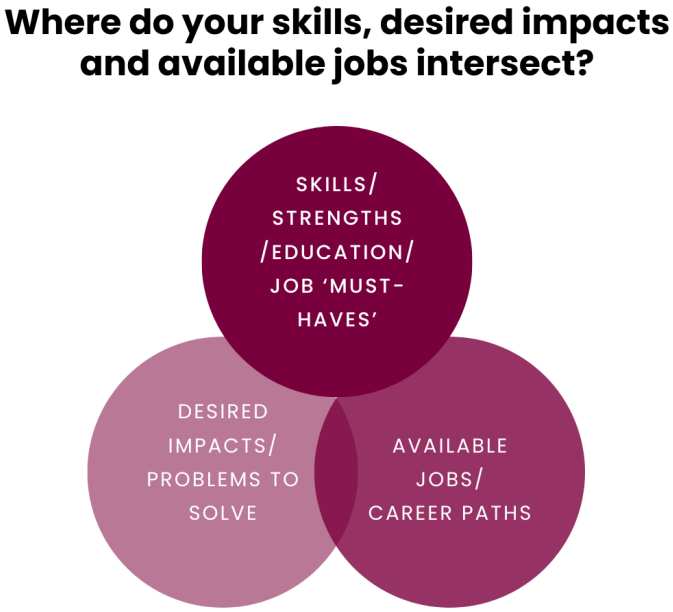
- public health analysts
- environmental scientists
- urban planners
- policy advisors
- science communicators

Your career "sweet spot" can be found at the intersection of three key areas:

1. your unique skills and education,
2. the impact you want to have on the world, and
3. the jobs that are actually available.

1. McMaster University, Student Success Center. The Digital Challenge Cards.

Finding where these three areas overlap is a powerful way to identify a career path that is not only viable but also deeply meaningful to you.



Watch: Finding Your Career Intersection Points

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1208

Examples

Click through these three examples of problems and examples of scientific career paths and key skills that address them as a way of having a positive impact.

An interactive H5P element has been excluded from this version of the text. You can view it

online here:
https://ecampusontario.pressbooks.pub/scec/?p=1208#h5p-68

Further Career Resources for Impact-Oriented People:

- Digital Challenge Cards – McMaster Student Success Centre
- UN Sustainable Development Goals
- 80,000 hours | Careers that make a positive impact
- BCorporation
- Canada's Non Profit Job Board & Resource – Charity Village
- The Philosophy of Ikigai – Finding Purpose
- Finding Your 'North Star' – Practical Guide to Finding Your Social Impact
- Reflect on Your Work Values – Government of Canada

Quick Chapter Recap

- You career exploration can start with problems you want to solve, or the impact you want to have – not just job titles
- Your 'career sweet spot' might be at the intersection of your desired impact, available jobs and relevant skills/education
- There is no 'perfect' career path – you decide what you want to prioritize and what you can compromise on

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Introduction to Science Professional Competencies

Follow us on Instagram @McMasterSCEC

Stay informed about workshops, information sessions, and networking opportunities.

Take Action: Test Out Your Career Ideas

When we face a big, ambiguous challenge like "planning a career," our brains can freeze. We ask dead-end questions like, "What's the perfect job for me?" or make limiting statements like, "I don't have the right experience for that." To break out of this 'freeze', we want to **turn our ideas into action**.

Career exploration isn't just about thinking and gathering information, it's about doing and taking action. After you've done some research on different career paths, you need to test out these career ideas. This means getting some **actual hands on experiences in those fields**. We call these 'felt experiences' – meaning you actually do something related to that field, not just read about it. You can generate 'felt experiences' through low-commitment activities called, prototypes.

Prototype Your Career Ideas

Prototypes are quick, easy and low commitment ways to try out a career idea. The goal is to gather data about what you like and dislike, form professional relationships and get advice to inform your next steps. Examples of prototype experiences:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1212#h5p-31

Remember, your career journey is a series of experiments. Stay curious and stay open to change!

Start by asking better questions

A **"How Might I"** statement is a simple trick to turn a problem or a "stuck" feeling into an open-ended question that encourages ideas. Instead of saying "I can't," you ask "How might I?".

This little phrase works because:

- **How** assumes it's possible.
- **Might** takes the pressure off; there's no single right answer.
- **I** puts you in control of your actions.

Here's how it works in practice. Notice how each "How Might I" question naturally leads to ideas for prototypes.

Example 1: The "I Don't Know Where to Start" Problem

- **Your "Stuck" Feeling:** "I'm interested in sustainability and the environment, but it feels so big. I don't know what jobs even exist or where to start."
- **Ask a "How Might I" Question:** "How might I learn what 'working in sustainability' in Hamilton actually looks like?"

This leads to Prototype Ideas:

- Have a coffee chat with someone from a local environmental group like **Green Venture** or **Environment Hamilton**.
- Volunteer for a weekend shoreline cleanup at **Cootes Paradise**.
- Sit in on a free public webinar about the city's Climate Action Plan.

Example 2: The "I Don't Want To..." Problem

- **Your "Stuck" Feeling:** "I'm fascinated by the science of fighting 'superbugs' (antimicrobial resistance or AMR), but I'm pretty sure I don't want to be stuck in a lab all day."
- **Ask a "How Might I" Question:** "How might I find roles that fight antimicrobial resistance but are more focused on people, communication, or policy?"

This leads to Prototype Ideas:

- Find a hospital's Infection Control Practitioner on LinkedIn and ask them about the human side of their job.
- Try to rewrite a dense scientific article about AMR into a simple, one-page summary for a friend. (Do you enjoy translating complex science?)
- Watch a documentary on the global threat of AMR and take notes on the different experts featured (scientists, doctors, policymakers, journalists).

Try It: Planning a Career Prototype Experience

An interactive H5P element has been excluded from this version of the text. You can view it

online here:
https://ecampusontario.pressbooks.pub/scec/?p=1212#h5p-30

Further resources:

- Design Your Science Career – Career planning course for credit
- Applying the Principals of Design Thinking to Career Development – Harvard Extension School
- 5 steps to designing the life you want – Bill Burnett | TEDxStanford

Quick Chapter Recap

- Test out your career ideas with 'prototype' experiences – quick, fast and easy ways to get information about a career of interest
- After your prototype, reflect on what you did and didn't like about the experience to inform your decision making
- Cultivate your curiosity – ask yourself "How might I…"

Need more support with your career planning?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Conducting Information Interviews
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC

Discover real stories of how your peers are prototyping their career ideas.

What Can I Do With A 3-Year Bachelors Degree?

Are you thinking about pursing a 3-year Bachelors degree —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

3-Year Programs At McMaster

Interested in learning more about 3-Year programs at McMaster? Visit the consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**

Some differences between a Bachelor degree and an Honours Bachelor Degree

Degree	Bachelor Degree	Honours Bachelor Degree
Duration	Full-time studies takes approximately 3 years to complete.	Full-time studies takes approximately 4 years to complete; some specialized programs may take longer to complete, such as co-op programs typically take 5 years to complete.
Further Education	May not be qualified for some Master's, professional school or post-grad programs. If you are interested in pursuing further education, we encourage you to research the admission requirements for each program on each school's website.	Likely to be eligible for Master's, professional school and post-grad programs. However, each program may have preferences or require you to have studied in a specific area.
Employment	Depending on the job you apply for, employers may not differentiate between a 3-year bachelor with a Honour's Bachelor degree; they may prioritize how you highlight your competencies.	Increase opportunities for variety of post-graduation jobs if the employer is prioritizing someone with a Honour's Bachelor degree; however, you still need to be able to effectively articulate your competencies.

Interested in what alumni have done with their degree? Join MacConnect.

Employment with Further Education

It is very common for students to complete further education after their bachelor degree. Many college programs and post-graduate diplomas or certificates are designed to provide specialized training for a specific occupations that may be preferred or required by an employer. McMaster offers a variety of continuing education courses which will allow you to gain further academic experience in fields such as: Business and Management, Communication and Design, Health and Social Services, and Metallurgy.

- **Interested in explore further education options?** Use the Government of Canada Can Learn Program Search tool to discover further education programs across Canada, including certificates and diplomas.
- **Want information on a specific occupation?** Use the Government of Canada Job Bank "Job Profiles" tool.

Examples of occupations that can be explored with further education

Click on the occupation to learn about it's labour market trends, job availability and occupational requirements.

- Biotechnology Technologist – Forensics
- Cardiovascular Technologist
- Educational Assistant (EA)
- Dental Assistant
- Dental Hygienist
- Financial Planning/Services
- GIS Technician
- Hearing Instrumentation Specialist
- Human Resources Management IT Technician
- Marketing Management
- Orthotics/Prosthetics Technician Paramedic
- Pharmacy Technician
- Paralegal
- Personal Support Worker
- Physiotherapist Assistant
- Public Health Inspector
- Respiratory Therapy
- Registered Massage Therapist
- Radiation Technologist (X-ray, Ultrasound)

Employment and the value of articulating your skills!

Depending on what job you apply for, employers may not differentiate between a 3-year Bachelor degree and a Honours Bachelor degree. Instead, hiring managers may be more influenced by how you demonstrate interest and highlight your accomplishments and relevant skills gained through your studies and experiences. Skill-based hiring is on the rise, where employers may prefer to hire someone with the right skills and competencies rather than the degree or minimum number of direct experience. For these reasons, it is critical you understand the value of your Science degree and the transferable skills gained through your studies and activities (such as work, volunteering, research, clubs, conferences, experiential/co-operative education, a global exchange, and more)!

Read about the Science Professional Competencies Framework to learn about the skills employer's in science are seeking and help you identify transferable skills you've developed during your 3-year degree.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=276#h5p-38

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Finding Your Impact: A Problem Solving Approach to Career Planning
- Conducting Information Interviews
- Searching And Applying For Experience
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC

Discover real stories of what your peers are doing with their career.

Considerations For Level II Program Selection

Choosing your Level II program is an important step in your undergraduate journey. At the end of Level I, you will have have the chance to rank and apply to up to four Level II programs. This page is designed to help guide your decision-making process during Level II program selection.

> The Level I Gateway programs provide an opportunity to take a variety of courses in science to explore your interests and build foundational knowledge before deciding on a program in Level II. To learn more about the Level I gateway programs offered at McMaster, visit the McMaster Academic Planner (MAP) – Faculty of Science.

1. Research Your Options

Before making any decisions, it is a good idea to review what programs are available, as well as their specific admission and program requirements. Resources designed to help you make an informed decision are:

- **McMaster Academic Planner (MAP):** Explore Level II program options and details to support decision-making.
- **Course Calculator on MAP:** Input Level I courses to check if they meet requirements for specific Level II programs.
- **Undergraduate Academic Calendar:** Review admission requirements, required courses, and program types to align with your goals.
- **What To Do In Level II:** An event facilitated by the Faculty of Science in March.
- **Academic Advising (BSB 136)**: Get help with admissions, course planning, and degree requirements.
- **McMaster Science Society (MSS) Mentors and Program Societies:** Opportunities for Level I students to chat with upper-year students.

2. Reflect on your options, interests, and career goals

After researching your options, take some time to think about what courses you enjoyed in Level I, your strengths, and your career goals. Learn more below about common careers in the chapters below:

- Careers in Biochemistry
- Careers in Biology
- Careers in Chemistry and Chemical Biology
- Careers in Earth, Environment and Society

- Careers in Kinesiology
- Careers in Life Sciences
- Careers in Mathematics and Statistics
- Careers in Medical and Health Physics
- Careers in Physics and Astronomy
- Careers in Psychology, Neurosciences and Behaviour

3. Apply For Your Top Program Choices

In April, you will have the chance to indicate your preferred choice of Level II programs in Mosaic (Student Centre > My Academics > Program/Plan Application). Visit this page from the Office of the Registrar for more information.

Need more support with your Level II program selection?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Biochemistry

Are you thinking about studying biochemistry—or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

Studying Biochemistry at McMaster

Interested in learning more about biochemistry programs at McMaster? Visit the Department of Biochemistry and Biomedical Sciences website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with a Health Sciences Academic Advisor.

What Skills Do Biochemistry Graduates Develop?

Graduates of McMaster's Biochemistry programs build a wide range of employability skills, including:

- Investigating the molecular foundations of life
- Analyzing biochemical pathways and cellular processes
- Designing and executing laboratory experiments
- Collecting, interpreting, and presenting scientific data
- Applying statistical and computational tools to biological questions
- Exploring the biochemical basis of health, disease, and therapeutics
- Translating scientific discoveries into real-world applications
- Communicating complex scientific concepts with clarity and precision

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=72#h5p-38

Entering the Workforce

Biochemistry graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=72#h5p-96

Spotlight of potential careers for biochemistry graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=72#h5p-97

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for biochemistry graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Clinical Research Trials Coordinator
- Clinical Chemist
- Chief Operating Officer
- Communications Assistant
- DNA Analyst
- Entomologist
- Environmental Biologist
- Environmental Consultant
- Food Scientist
- Forensic Laboratory Technician
- Health Policy Analyst
- Histologist
- Immunologist
- Medical Communications Specialist
- Medical Laboratory Technologist
- Nutrition Consultant
- Pharmacologist
- Pharmaceutical Marketing
- Professional Agrologist (P.Ag.)
- Public Health Inspector
- Recruiting Consultant
- Recreation Therapist
- Scientific Consultant
- Toxicologist
- Technical Writer
- Brew Master

The occupations shared above is **not** an exhaustive list of careers you can pursue!

Connect with McMaster Alumni

Curious about what McMaster Biochemistry graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Biochemistry-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Association for Clinical Biochemistry
- Biochemical Society
- BIOTECanada
- Canadian Association of Pathologists
- Canadian Institutes of Health Research
- Canadian Society for Molecular Biosciences
- ExPASy
- Institute of Biomedical Science

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Career Advisor

Faculty of Health Sciences students can visit the **Student Success Centre (GH 110)** during drop-in hours or book an appointment in advance through OSCARplus.

Consider Co-op

Learn more about applying to McMaster's Biochemistry Co-op program in the Academic Calendar and on our website.

Careers in Biology

Are you thinking about studying biology—or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Biology at McMaster

Interested in learning more about Biology programs at McMaster? Visit the Department of Biology website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Biology Graduates Develop?

Graduates of McMaster's Biology programs build a wide range of employability skills, including:

- Charting the development of complex organisms
- Exploring how organisms interact with their environments
- Collecting, analyzing, and interpreting biological data
- Observing and measuring organisms
- Designing and conducting experiments
- Investigating biological questions through research
- Identifying trends and projections from data
- Applying statistical tests to predict outcomes

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=126#h5p-38

Entering the Workforce

Biology graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=126#h5p-106

Spotlight of potential careers for biology graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=126#h5p-95

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for biology graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Audiologist

- Aquaculture Technician
- Clinical Dietitian
- Cytogenetic Technologist
- Fish and Wildlife Officer
- Health Policy Analyst
- Immunologist
- Midwife
- Microbiology Technologist
- Naturopath
- Nurse
- Orthopedic Technician
- Occupational Therapist
- Pharmaceutical Sales Rep
- Physiotherapist
- Pollution Control Inspector
- Surgical Assistant
- Primary Teacher
- Secondary Teacher
- University Professor
- Scientific Consultant
- Speech Pathologist
- Regional Planning Biologist
- Respiratory Therapist
- Bio Analyst
- Biomaterial Scientist

The occupations shared above is **not** an exhaustive list of careers you can pursue!

Connect with McMaster Alumni

Curious about what McMaster Biology graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Biology-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Association of Professional Biology
- Biophysical Society of Canada
- Canadian Society of Microbiologists
- Canadian Society of Environmental Biologists
- Canadian Association of Genetic Counsellors
- Canadian Bioethics Society
- Canadian Society of Zoologists
- Society for Integrative and Comparative Biology

Biology-Specific Job Search Resources

Looking for job opportunities in biology-related fields? These platforms offer targeted listings and resources:

- Adzuna – Aggregated job listings with salary insights
- BioTalent Canada – Sciences job board and labour market info
- Canadian Association of Community Health Centres – Opportunities in community health
- HealthCareCAN – Jobs in healthcare institutions across Canada

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Chemistry and Chemical Biology

Are you thinking about studying chemistry and chemical biology —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Chemistry and Chemical Biology at McMaster

Interested in learning more about chemistry and chemical biology programs at McMaster? Visit the Department of Chemistry and Chemical Biology website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Chemistry and Chemical Biology Graduates Develop?

Graduates of McMaster's Chemistry and Chemical Biology programs build a wide range of employability skills, including:

- Designing and conducting chemical experiments
- Applying chemical principles to solve real-world problems
- Operating laboratory equipment and using spectroscopic techniques

- Synthesizing organic and inorganic compounds
- Observing chemical reactions with accuracy and care
- Analyzing and interpreting scientific data
- Communicating findings through writing and presentations
- Writing for both technical and general audiences
- Searching and evaluating scientific literature
- Formulating and refining research questions
- Exploring chemical issues with societal relevance
- Presenting scientific information clearly and confidently

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=129#h5p-38

Entering the Workforce

Chemistry and Chemical Biology graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=129#h5p-99

Spotlight of potential careers for chemistry and chemical biology graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=129#h5p-98

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for chemistry and chemical biology graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Biological Technician
- Chemical Analyst
- Environmental Cleanup Consultant
- Food and Drug Inspector
- Forensic Specialist
- Geochemist
- Medical Communicator
- Nuclear Medicine Technologist
- Public Relations Specialist
- Pharmaceutical Sales Rep
- Policy Advisor
- Project Manager
- Pollution Control Inspector
- Public Health Educator
- Toxicologist

The occupations shared above is **not** an exhaustive list of careers you can pursue!

Connect with McMaster Alumni

Curious about what McMaster Biology graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals

- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Chemistry-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Society of Clinical Chemists
- Canada's Research Based Pharmaceutical Companies
- Canadian Pharmacist Association
- Chemistry Industry Association of Canada
- Chemical Institute of Canada
- Ontario Association of Medical Laboratories

Chemistry-Specific Job Search Resources

Looking for job opportunities in chemistry-related fields? These platforms offer targeted listings and resources:

- Chemical Institute of Canada Job Board
- Chemistry Jobs
- BioSpace

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Earth, Environment and Society

Are you thinking about studying in Earth, Environment and Society —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Earth, Environment and Society at McMaster

Interested in learning more about Earth, Environment and Society programs at McMaster? Visit the School of Earth, Environment and Society website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Earth, Environment and Society Graduates Develop?

Graduates of McMaster's Earth, Environment and Society programs build a wide range of employability skills, including:

- Collected, observed, analyzed, and evaluated data
- Writing clear accurate technical reports
- Applying computer skills and statistical techniques
- Following laboratory procedures and processes

- Assessing and solving complex problems
- Organizing and reporting data orally and in writing
- Conducting field or lab research
- Designing experiments and projects

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=132#h5p-38

Entering the Workforce

Earth, Environment and Society graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=132#h5p-107

Spotlight of potential careers for Earth, Environment and Society graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=132#h5p-100

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Earth, Environment and Society graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Associate GIS Analyst
- Community Liaison Specialist
- Compliance Specialist
- Digital Cartographer Technician
- Environmental Economists
- Environment Planner
- Environmental Assessment Specialist
- Environmental Officer
- Environmental Inspector
- Environmental Policy Advisor
- Ecologist
- Environmental Engineering Technician
- Forest Firefighter
- Greenhouse Manager
- Client Service Representative
- Geographer
- Geomatics Analyst
- Horticulture Technician
- Hydrologist / Geochemist
- Lab Chemist
- Logistics Analyst
- Photonic Technician
- Recycling Coordinator
- Quality Control Analyst
- Water Resource Specialist
- Climate Change Coordinator
- Environmental Affairs
- Energy Auditor/ Consultant
- Environment Field Technician
- Environment Remediation Specialist
- Green Marketer
- Hydroelectric Technician
- Meteorologist Liaison
- Project Leader
- Pipeline Technologist
- Program Standards & Development Officer
- Public Engagement Specialist
- Systems Technician
- Redevelopment Specialists
- Water Quality Engineer

Connect with McMaster Alumni

Curious about what McMaster graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Earth-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Association of Geographers
- Canadian Federation of Earth Sciences
- Canadian Water Resources Association
- Eco Canada
- Esri Canada
- Environmental Careers Organization
- Environmental Studies Association of Canada
- Geoscientists Canada

Earth-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- BackdoorJobs.com
- BioTalent.ca
- Canadian Geospatial Jobs
- ECO Canada
- Geography Jobs
- GIS Ambassador Program

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Kinesiology

Are you thinking about studying Kinesiology —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Kinesiology at McMaster

Interested in learning more about Kinesiology programs at McMaster? Visit the Department of Kinesiology website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Kinesiology Graduates Develop?

Graduates of McMaster's Kinesiology programs build a wide range of employability skills, including:

- Applying knowledge of health and wellness theories
- Understanding individual and community needs
- Assessing risk, injury prevention, and rehabilitation strategies
- Applying knowledge of human anatomy and biomechanics
- Evaluating the safety and effectiveness of physical environments and equipment
- Gathering and interpreting environmental and health-related data
- Communicating findings clearly through writing and presentations
- Using deductive reasoning to support decision-making

- Understanding individual differences in environmental and health contexts
- Investigating human and environmental interactions

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=135#h5p-38

Entering the Workforce

Kinesiology graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=135#h5p-108

Spotlight of potential careers for Kinesiology graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=135#h5p-101

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Kinesiology graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Athletic Coach
- Athletic Therapist

- Chiropractor
- Claims Advisor
- Clinical Research Coordinator
- Community Centre Director
- Conditioning Coach
- Clinical Specialist
- Educational Coordinator
- Health & Wellness Consultant
- Paramedic
- Personal Trainer
- Prosthetists
- Physical Education Teacher
- Physiotherapist Assistant
- Manual Osteopath
- Nurse
- Sports Writer
- Recruiting and Promotion Coordinator
- Accident Befits Adjustor
- Consulting
- Functional Capacity Evaluator
- Fitness Club Administrator
- Healthcare Manager
- Sports Equipment Designer
- Residence Life Coordinator
- Work Capacity Evaluator

Connect with McMaster Alumni

Curious about what McMaster Kinesiology graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Kinesiology-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Academy of Sport Medicine
- Canadian Fitness and Lifestyle Research Institute
- Canadian Kinesiology Alliance
- Canadian Physiotherapy Association
- Canadian Society for Exercise Physiology
- College of Kinesiologists of Ontario
- Ontario Kinesiology Association

Kinesiology-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- Workopolis Kinesiology Jobs
- ISEK Kinesiology Jobs
- NAKHE Kinesiology Job Board

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Life Sciences

Are you thinking about studying Life Sciences —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Life Sciences at McMaster

Interested in learning more about Life Sciences programs at McMaster? Visit the School of Interdisciplinary Sciences and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Life Sciences Graduates Develop?

Graduates of McMaster's Life Science programs build a wide range of employability skills, including:

- Organizing and maintaining accurate scientific records
- Identifying patterns and relationships among data and variables
- Designing and conducting experiments to explore scientific questions
- Collecting, analyzing, and interpreting biological data
- Applying statistical tests to predict outcomes
- Writing literature reviews and scientific reports
- Communicating findings clearly through writing and presentations
- Using deductive reasoning to support decision-making

- Researching and analyzing complex scientific topics

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=138#h5p-38

Entering the Workforce

Life Sciences graduates from McMaster pursue careers across a wide range of industry sectors. Read about the diverse career paths and graduate journeys of McMaster Life Sciences alumni here. The program's flexibility, interdisciplinary curriculum, and strong faculty mentorship prepare students for:

- **Graduate studies** in fields like neuroscience, pathology, psychology, and education
- **Professional programs** such as medicine, naturopathy, and clinical psychology
- **Research roles** in academic and community settings
- **Community engagement** through outreach initiatives and health education
- **Careers in science communication, teaching, and healthcare**

Spotlight of potential careers for Life Science graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=138#h5p-102

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Life Science graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Assessment Officer
- Academic Experience Advisor
- Animal Care Attendant
- Communications and Resource Assistant
- Clinical Research Trials Coordinator
- Consumer Insights & Analytics
- Copywriter
- Ergonomist
- Epidemiologist
- Environmental Management
- Formulation Scientist
- Forensic Specialist
- Health Policy Analyst
- Health and Safety Inspector
- Medical Illustrators:
- Microbiology Technologist
- Operations Manager
- Paramedic
- Public Health Director
- Pharmacy Technician
- Project Manager
- Quality Assurance
- Territory Manager
- Anesthesiology Technician
- Bioethicist
- Community Life Coordinator
- Drug Developer
- Food Labelling Specialist
- Online Programs Specialist
- Underwriting Consultant

Connect with McMaster Alumni

Curious about what McMaster Life Sciences graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Life Science-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Association for Interdisciplinary Studies
- Agriculture Institute of Canada
- Biotech Canada
- Canadian Institute of Food Science and Technology
- Canadian Society for Immunology
- Genetics Society for Molecular Biosciences
- Interdisciplinary Association for Population Health Science
- Ottawa Health Innovation Hub
- Society for Natural Sciences
- Society of Natural Sciences

Life Science-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- BioTalent Canada
- OBIO Talent Network
- Science Jobs
- Biopharmguy.com

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Mathematics and Statistics

Are you thinking about studying Mathematics and Statistics —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Mathematics and Statistics at McMaster

Interested in learning more about Mathematics and Statistics programs at McMaster? Visit the Department of Mathematics and Statistics and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Mathematics and Statistics Graduates Develop?

Graduates of McMaster's Mathematics and Statistics programs build a wide range of employability skills, including:

- Applying quantitative reasoning to solve complex problems
- Gathering, analyzing, and interpreting numerical data
- Defining and investigating research questions
- Identifying patterns and relationships among variables
- Designing and using computer simulations
- Developing mathematical models and theories
- Conducting statistical analyses to support decision-making

- Establishing hypotheses and testing them with data
- Preparing clear and accurate technical reports

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=141#h5p-38

Entering the Workforce

Mathematics and Statistics graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

- Insurance agencies,
- Banks
- Academic institutions
- Private corporations

Spotlight of potential careers for Mathematics and Statistics graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=141#h5p-103

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Mathematics and Statistics graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Credit & Fraud Detection Analyst
- Data Miner
- E-Commerce Manager
- Industrial Designer
- Internal Auditor
- MRI Technologist
- Operations Research Analyst
- Pension Administrator
- Research Mathematician
- Scientific Programmer
- Security Specialist
- Software/ Web Developer
- Treasurer
- Technical Writer
- Business Administration and Management
- Insurance
- Group Reinsurance Consultant
- Mathematical Technician

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Connect with McMaster Alumni

Curious about what McMaster graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Mathematics and Statistics-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Mathematical Society
- Canadian Operational Research Society
- Mathematical Association of America
- Statistical Society of Canada
- Insurance Institute of Canada

Mathematics and Statistics-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- Adzuna
- StartupNorth
- Angel Company
- eTalent Canada

Spotlight: Actuarial Science

Actuarial Science is a field that uses math, statistics, and financial theory to assess and manage risk in uncertain future events. Actuaries apply predictive modeling and quantitative analysis to help organizations make informed decisions about risk. They work in areas like insurance (life, property, casualty), pensions, consulting, and government programs. Common questions actuaries help answer are:

- How much should insurance cost based on risk factors?
- What retirement plans are financially sustainable?
- How do different investment scenarios affect future outcomes?

Professional associations and resources:

- Society of Actuaries (SOA)
- Canadian Institute of Actuaries (CIA)
- Casualty Actuarial Society (CAS)
- Actuarial Students' National Association (ASNA)
- Ontario Conference of Casualty Actuaries (OCCA)

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Medical and Biological Physics

Are you thinking about studying Medical and Biological Physics —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Medical and Biological Physics at McMaster

Interested in learning more about Medical and Biological Physics programs at McMaster? Visit the Department of Physics and Astronomy and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Medical and Biological Physics Graduates Develop?

Graduates of McMaster's Medical and Biological Physics programs build a wide range of employability skills, including:

- Organizing and maintaining accurate scientific records
- Identifying patterns and relationships in complex data
- Designing and conducting experiments in medical and physical sciences
- Researching and analyzing scientific questions
- Reading technical reports and interpreting diagnostic data
- Using diagnostic imaging equipment in clinical and research settings
- Applying statistical tests to predict outcomes

- Writing literature reviews and scientific reports
- Developing hypotheses and testing them through experimentation
- Recognizing structures and patterns in physical systems

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=144#h5p-38

Entering the Workforce

Medical and Biological Physics graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

- Health care centers
- Government agencies
- Academic institutions

Spotlight of potential careers for Medical and Biological Physics graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=144#h5p-104

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Medical and Biological Physics graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Accelerator Physicist
- Cosmic Ray Physicist
- Electricity and Magnetism Physicist
- Hospital Technology Repair Technician
- Healthcare Scientist
- Health Physicist
- Medical Biophysicist
- Microwave Physicist
- Molecular Biophysicist
- Nuclear Physicist
- Nuclear Reactor Operator
- Occupational Health Physicist
- Quality Assurance Personnel
- Radiation Oncologist
- Radiation Safety Officer
- Research Scientist
- Radiation Technologist
- Theoretical Nuclear Physicist
- Primary Teacher
- Secondary Teacher
- University Professor
- X-Ray Physicist

Connect with McMaster Alumni

Curious about what McMaster Medical and Biological Physics graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries
- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Medical and Biological Physics-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian College of Physicists in Medicine
- Canadian Society of Nuclear Medicine
- Health Physics Society
- International Society for Magnetic Resonance in Medicine

Medical and Biological Physics-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Physics and Astronomy

Are you thinking about studying Physics and Astronomy —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: **what kind of life do I want?**

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Physics and Astronomy at McMaster

Interested in learning more about Physics and Astronomy programs at McMaster? Visit the Department of Physics and Astronomy and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

What Skills Do Physics and Astronomy Graduates Develop?

Graduates of McMaster's Physics and Astronomy programs build a wide range of employability skills, including:

- Analyzing and interpreting scientific data
- Using complex computational software and simulations
- Applying computer skills and statistical techniques to solve problems
- Writing for both technical and general audiences
- Designing and controlling experimental setups
- Thinking analytically and critically to evaluate theories
- Exploring and testing physical models and concepts
- Understanding and applying technological innovations

- Organizing and interpreting results with precision
- Solving problems and troubleshooting in scientific contexts

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=147#h5p-38

Entering the Workforce

Physics and Astronomy graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=147#h5p-109

Spotlight of potential careers for Physics and Astronomy graduates

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=147#h5p-105

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Physics and Astronomy graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Accountant
- Actuary
- Animation
- Architect
- Biomedical Engineer
- Computational Physicist
- Computer Engineer
- Biophysicist
- Financial Quantitative Modeler
- Hydrographer
- Materials Scientist
- MRI Technologist
- Prosthetics Designer
- Quantum Cryptographer
- Quantitative Analyst
- Robotics Technologist
- Photonics Scientist
- Radar Project Manager
- Radiation Protection Specialist
- Risk-Manager
- Satellite Engineer
- Science Journalist
- Laser Technician
- Optical Sensors Researcher
- Remote Sensing
- Renewable Energy Manager
- Statistical Mechanics Expert
- TV Science Advisor

The occupations shared above is **not** an exhaustive list of careers you can pursue!

Connect with McMaster Alumni

Curious about what McMaster Physics and Astronomy graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries

- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Physics-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Space Society
- Canadian Association of Physicists
- Canadian Astronomical Society
- Global Council for Science and the Environment
- Institute of Physics
- Perimeter Institute for Theoretical Physics
- National Space Society
- SNOLAB
- TRIUMF

Physics-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- Canadian Association of Physicists Careers
- Physics Jobs Today

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Careers in Psychology, Neurosciences and Behaviour

Are you thinking about studying Psychology, Neurosciences and Behaviour —or already working toward your degree and wondering what comes next? Whether you're just beginning your academic journey or preparing to graduate, this chapter is here to support your career exploration and help you discover the possibilities ahead.

Getting Started

Career exploration takes time and is an iterative process that begins with reflection. Ask yourself: what kind of life do I want?

If you're unsure where to begin, we recommend starting with the following chapters:

- Start here: Your Career Path
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Take Action: Test Out Your Career Ideas

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Studying Psychology, Neurosciences and Behaviour at McMaster

Interested in learning more about Psychology, Neurosciences and Behaviour programs at McMaster? Visit the Department of Psychology, Neurosciences and Behaviour website and consult the Academic Calendar for detailed program information. For guidance on program eligibility and requirements, connect with an Academic Advisor in **BSB 136**.

Which PNB program is right for you?

Visit the Department of Psychology, Neurosciences and Behaviour website for the complete table.

Programs	Applied Psychology in Human Behaviour	Psychology, Neuroscience & Behaviour (PNB)	BioPNB	Neuroscience
What is the program's focus?	Applying psychological theories, principles and methods to real life	Experimental research and integrating psychology, neuroscience, and animal behaviour	Research in psychology, neuroscience, animal behaviour, and biology	Building foundational skills in biology, chemistry, computer, science, math and physics, and relating these topics to molecular, cellular, and systems neuroscience
What are some potential careers?	Autism behavioural therapy, counselling, organizational psychology, early childhood education, psychotherapy, teaching, human resources	Research, clinical psychology, medicine, rehabilitation science (e.g., speech language pathology), teaching, data analytics/ data science, marketing	Research, medicine, rehabilitation science (e.g., physiotherapy), teaching, pharmacy, dentistry	Research, medicine, rehabilitation science (e.g., physiotherapy), teaching, pharmacy, dentistry
What degree options are available?	Bachelor of Applied Science	Bachelor of Science Bachelor of Arts	Bachelor of Science	Bachelor of Science

What Skills Do Psychology, Neurosciences and Behaviour Graduates Develop?

Graduates of McMaster's Psychology, Neurosciences and Behaviour programs build a wide range of employability skills, including:

- Investigating psychological and neuroscientific questions using experimental and theoretical approaches
- Analyzing behavioural and biological data using statistical tools
- Designing and conducting lab and field experiments in psychology and neuroscience
- Exploring cognitive, emotional, and social development across the lifespan
- Communicating complex scientific ideas to both technical and general audiences
- Applying ethical reasoning and psychological principles to real-world contexts
- Understanding the biophysical and electrochemical properties of nerve cells
- Using evolutionary and psychophysical approaches to study human and animal behaviour
- Identifying patterns and relationships between environmental stimuli and perception
- Collaborating across disciplines to support research and community initiatives

Science Professional Competencies

In addition to discipline-specific skills, McMaster Science students develop **eight Science Professional Competencies** that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=150#h5p-38

Entering the Workforce

Psychology, Neurosciences and Behaviour graduates from McMaster pursue careers across a wide range of industry sectors. Most commonly, they work in:

Spotlight of careers in counselling and therapy

Job Title	Description	Organizational/Training Requirements
Psychologist	Apply scientific understanding to help individuals, institutions, and society with issues related to mental health, behaviour, and happiness.	Advanced degrees (Ph.D. or Psy. D.) state licensure
Psychiatrist	Medical doctors who diagnose and treat mental illness, often using medication.	Medical degree (M.D. or D.O.), residency in psychiatry, board certification
Psychotherapist	Provide talk therapy to help clients manage and overcome mental health issues.	Training in psychotherapy, often requires state licensure
Counsellor	Often guidance and support for personal, mental, and emotional issues.	Degree in counselling or related field, state licensure

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Other common occupations for Psychology, Neurosciences and Behaviour graduates:

Click on a job title to learn more about the role, qualifications, and employment outlook in Canada:

- Academic Program Assistant
- Autism Behavioural Therapist
- Autism Therapist
- Behaviour Consultant
- Behaviour Therapist
- Communication Manager
- Digital Communications Coordinator
- Data Scientist
- Early Childhood Educator
- Employee Assistant Program (EAP) Coordinator
- Equity, Diversity, and Inclusion Specialist
- Family Support Worker
- Human Resources
- Licensed Clinical Social Worker
- Licensed Professional Counsellor
- Organizational Psychologist
- Pharmacist
- Pharmacy Assistant
- Medical Rehabilitation Science/Physiotherapist
- Research Coordinator
- School counsellor
- Substance Abuse Counsellor
- Support services Professionals
- Therapy Counsellor
- Primary Teacher
- Secondary Teacher
- University Professor
- Mental Health Research Director

The occupations shared above is **not** an exhaustive list of careers you can pursue!

Connect with McMaster Alumni

Curious about what McMaster Psychology, Neurosciences and Behaviour graduates have done with their degree? Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services.

MacConnect gives you access to a global community of Marauders and is your key to connecting with alumni who are eager to support your career journey. It's quick and easy to sign up—and you'll find a wealth of experience, insights, and career advice from a generous and diverse alumni network.

Use MacConnect to:

- **Explore career paths** by connecting with alumni in your field of interest
- **Learn what it's like to work abroad** and gain international perspectives
- **Get job search tips** from experienced professionals
- **Discover how others have used their McMaster degree** across industries

- **Build meaningful relationships** with alumni mentors and expand your network

For more guidance on how to network with alumni, visit Conducting Information Interviews.

Further Education

It is very common for undergraduate students to **pursue additional education or training**. Use the Government of Canada Can Learn Program Search tool to explore further education programs across Canada, including certificates and diplomas.

Psychology-Specific Professional Associations

Professional associations are excellent sources of industry-specific information, networking opportunities, and often feature dedicated job boards. Consider joining one aligned with your discipline or career interests:

- Canadian Psychology Association
- Canadian Association for Neuroscience
- Canadian Counselling and Psychotherapy Association
- College of Registered Psychotherapists of Ontario
- Human Resources Professionals Association
- Society for the study of Behavioural Science
- American Psychological Association

Psycology-Specific Job Search Resources

Looking for job opportunities in related fields? These platforms offer targeted listings and resources:

- Canadian Psychology Association Careers
- Ontario Psychology Association Careers
- Psychology Careers
- Psychology Jobs on Indeed

For additional job search support, visit the following chapters:

- Searching And Applying For Experience
- Where Can I Find Experience?

Need more support with your career planning?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

PROFESSIONAL IDENTITY: HOW DO I REPRESENT MYSELF?

What is your Professional Identity?

Your Professional Identity

Your professional identity encompasses your unique blend of skills, values, interests, and the distinct way you present yourself to the world.

Your professional identity is not just your education or the experiences on your resume – it is the story you tell yourself and others about who you are as an early career professional.

Another term for this concept is **personal brand –** it is essentially the impression you leave on people when they interact with you. Another way of thinking about it is that your professional identity or personal brand is what people think of or say about you when you're not in the room.

Examples of positive impressions you can leave on others:

- Recognized for a specific skill
- Known as an expert in your field
- Knowledgeable about a particular topic
- Identified as an excellent communicator of science (or other topics)
- Known as an innovator for a particular method or technique
- A leader of an organization, a lab, a start-up, etc.
- Known as someone great to work with

Try and Reflect: The 'Ideal Candidate' Lens

Think of a role you might want, like a 'Summer Research Assistant'. What elements would be part of the professional identity (or personal brand) of an ***ideal candidate***.

Drag and drop the following list of attributes under the correct heading. This will help you see which of your own qualities to emphasize when building your personal brand.

An interactive H5P element has been excluded from this version of the text. You can view it

online here:
https://ecampusontario.pressbooks.pub/scec/?p=1274#h5p-45

Reflect: Based on the above activity, what are 2-3 qualities of an 'Ideal Candidate' that you possess?

Watch: What is Personal Brand?

For a science student, a strong, authentic personal brand is critical. In a competitive landscape, it helps you stand out. It builds trust and establishes you as a credible, knowledgeable person in your field. Think of well-known public scientists like Dr. Theresa Tam, Neil DeGrasse Tyson or Bill Nye the Science Guy; their strong personal brands of being knowledgeable and trustworthy give them a platform to share their expertise and have an impact by connecting to audiences through various forms of media.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1274

Defining Your Professional Identity

A strong personal brand or professional identity is an authentic one, built from the inside out. Before you can communicate who you are to others, you need to be clear on it yourself.

This process starts with understanding **three core pillars**:

Pillar	Guiding Question	Note
1. Your Skills and Strengths	What are you good at?	This includes both technical skills learned in your courses and labs (e.g., Python, PCR, or statistical analysis) and professional competencies (e.g., problem-solving, communication).
2. Your Passion and Interests	What do you genuinely enjoy? What topics do you find yourself reading about in your spare time? What are your career interests or problems you'd like to solve?	Your interests fuel your work and make your brand compelling.
3. Your Values	What principles are most important to you in a work or academic setting? Do you value collaboration, innovation, stability, or community impact?	Aligning your path with your values is key to long-term fulfillment.

Try It: Personal Brand Brainstorm

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1274#h5p-43

Quick Chapter Recap

- Your personal brand is 'what people think about you when you're not in the room'
- Be intentional about the impression you create in the minds of other people in person and online
- Reflect on your interests, skills, passions, goals and values to define your professional identity

Need more support with building your professional identity?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- The Importance of Self-Assessment in Career Planning
- How to Create a LinkedIn Profile
- Introduction to Science Professional Competencies

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

How to Create a LinkedIn Profile

What is LinkedIn?

LinkedIn is the world's largest professional network—a massive online space where companies find talent, colleagues share opportunities, and careers are built every single day. It's the go-to site for anyone serious about their professional growth. **Your LinkedIn profile is your personal online landing page and acts as a professional first impression.**

This chapter will explain how to build an effective profile, whether you are creating a profile for the first time or editing an existing profile. We'll explain, step-by-step, how to craft a sharp headline that gets you noticed, write a compelling "About" section that showcases your ambition, and select an appropriate, professional photo.

If you follow the recommended best practices, you'll have a dynamic tool that clearly communicates your value and actively helps you achieve your career goals.

Watch: Introduction to LinkedIn

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1286

Why create a LinkedIn Profile?

In today's job market, your online presence is just as crucial as your resume. For current students and recent grads, a well-crafted LinkedIn profile is part of your essential toolkit for building a successful career.

Think of LinkedIn as your professional landing page, available 24/7 for recruiters, mentors and industry professionals to discover you. If you're not on LinkedIn, you may risk being invisible to a wide array of opportunities.

It's not just a job search tool, though – it's a research platform, a networking tool, a place to share your professional thoughts and experiences and an online space to get relevant, essential industry information.

Here are 7 reasons why current students and recent grads should use LinkedIn:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-41

How to Create Your LinkedIn Profile: Quick Start Guide

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-42

Watch: In-Depth LinkedIn Profile Creation Guide

The "Getting Started on LinkedIn" online module provided by LinkedIn includes a holistic guide to setting-up your profile and using the platform. We recommend watching "**Part 1 : Create a New Profile"** and **"Part 2: Strengthen Your Profile".**

Sample LinkedIn Profile and Writing Tips!

Click the green dot on each image to get tips on how to create each section of your LinkedIn profile.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-46

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-69

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-70

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-73

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-74

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-75

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1286#h5p-76

Further resources:

- Top 10 LinkedIn Tips (McMaster Student Success Centre)

- 20+ LinkedIn Summary Examples to Boost Your Professional Networking Profile
- How to create the perfect linkedIn profile in 2025: 25 easy steps
- Building a Great Student LinkedIn Profile

Quick Chapter Recap

- Recruiters and hiring managers will look for you online – it's to your advantage to have a professional and up-to-date LinkedIn profile
- Your LinkedIn profile showcases your past experience and your future career goals and aspirations
- LinkedIn is an essential tool for career research, building professional relationships and community and looking for job

Need more support with building your professional identity?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- What is your Professional Identity?
- How to Pitch Your Skills and Experience
- The Importance of Self-Assessment in Career Planning

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

How to Pitch Your Skills and Experience

Getting Started

To make the most of the content in this chapter, we recommend you do the foundational work of exploring what a personal brand is and learning how to build a LinkedIn profile before this chapter.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

"So, Tell Me About Yourself" — How to Pitch Your Skills and Experience

You might feel comfortable writing about your professional identity, creating a resume or building a LinkedIn, but what happens when those conversations move offline?

Some common scenarios you might find yourself in as a student:

- **You're at a career fair**, and you want to visit the booth of a biotech company that really interests you.
- **You're in a lab meeting**, and the Principal Investigator asks about your career goals.
- **You attend a career panel** hosted by your student society and you have the chance to talk with one of the professionals after the moderated conversation
- **You're at a virtual networking event**, and a senior professional asks the most common, and sometimes most dreaded, question in the professional world

Any of those people are likely to ask you this: **"So, tell me about yourself."**

Answering this question is a chance to take the professional identity you've built on paper or online and bring it to life through in person interactions. Once you have a sense of you who you are, you'll want to be able to express that to other people in conversation or job interviews.

This chapter will guide you through a simple, but effective framework to talk about your skills and experiences confidently and concisely in any professional setting.

How to Create a Great Elevator Pitch

An "elevator pitch" is a short, persuasive introduction to who you are, what you do, and what you're looking for.

The name comes from the idea that you should be able to deliver it in the time it takes for a short elevator ride. It as a structured and confident answer to "Tell me about yourself."

For a science student, a great pitch isn't about bragging; it's about presenting evidence. Just like in a lab report, you state your objective, show your methods, and present your results.

Your elevator pitch should have four essential ingredients:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1278#h5p-72

Watch: How to Create Your 30 Second Elevator Pitch

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1278#oembed-1

Try it: Create your elevator pitch!

An interactive H5P element has been excluded from this version of the text. You can view it

online here:
https://ecampusontario.pressbooks.pub/scec/?p=1278#h5p-71

Practice Your Elevator Pitch: Big Interview

Big Interview is a online platform where you can hands-on practice with mock interviews and elevators pitches tailored to your experience and interests

Create your Big Interview Account for Free with your McMaster Email

Putting It All Together: Where to Practice Your Elevator Pitch

A pitch that lives only on paper is not helpful for your career development. You need to practice speaking it out loud to other people to build your confidence and learn how to integrate it into conversations.

Here are some environments where you can practice your elevator pitch:

- **Career Fairs and Employer Events:** This is the perfect venue. Recruiters expect you to have a pitch ready.
- **Informational Interviews:** When you reach out to someone on LinkedIn for a "coffee chat" (virtual or in-person), this is how you'll start the conversation.
- **Talking to Professors and TAs:** Use your pitch when introducing yourself during office hours. It's a great way to build rapport and show you're serious about your studies.
- **In the Mirror:** Practicing your delivery, timing, and body language by yourself is the best first step. You can also record yourself on your phone or over Zoom and watch it back.

Remember, your pitch is not a static script. It's a living document. You will adapt it for every situation and every audience, and it will evolve as you gain new skills and experiences.

Further resources

- Career Fair: Practice Your Pitch | McMaster University Student Success Centre

- Developing Your Elevator Pitch | Princeton University
- 15 creative elevator pitch examples for every scenario
- How to Create an Elevator Pitch (for a presentation)

Quick Chapter Recap

- **An elevator pitch is a structured, confident answer to "Tell me about yourself."**
  - It is a crucial tool for bringing your professional brand to life during in-person and virtual interactions at events like career fairs, networking events, and meetings with professors.
- **A strong pitch for a science student is evidence-based.**
  - Present your skills and experience by covering four essential elements: who you are, what you offer, a relevant accomplishment as proof, and a clear goal or "ask."
- **A pitch requires practice and adaptation to be effective.**
  - It is not a static script to be memorized but a dynamic tool that should be practiced aloud and tailored for each specific audience and situation you encounter.

Need more support with building your professional identity?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- What is your Professional Identity?
- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths
- Finding Your Impact: A Problem-Solving Approach to Career Planning
- Introduction to Science Professional Competencies

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

APPLICATION MATERIALS AND INTERVIEWS: HOW DO I EFFECTIVELY ARTICULATE MY COMPETENCIES?

Creating Your Résumé And CV

Your résumé and curriculum vitae (CV) act as self-marketing documents summarizing your skills, experiences and education. These documents are commonly submitted for applications for jobs, volunteer positions, professional development opportunities or graduate and professional schools.

This chapter outlines recommended practices in résumé and curriculum vitae writing to help you create a document that is professional and easy to read.

What Is The Difference Between Résumés And CVs?

	Résumés	Curriculum Vitae
Common uses	Applying for opportunities in general.	Applying for opportunities in **academia/research**, and for **graduate** and **professional school**.
Goal	To provide a summary of any skills, experience and education **relevant to a specific opportunity**.	To provide a summary of **academic accomplishments** and **credentials**.
Length	2 page maximum.	Typically more than 2 pages, but it can vary if application requirements are provided.
References	Do not include.	You may include.
Possible Contents	• Education • Experience (E.g., Work Experience, Volunteer Experience) • Skills & Certifications	• Education • Research Experiences • Publications • Research Grants, Scholarships and Awards • Conference Presentations • Teaching Experiences • Guest Lectures • Industry Experiences • University Commitments • Professional Affiliations • Professional Licenses • References

Formatting and Contents

Hiring managers spend an average of 6-seconds scanning your application materials. Including relevant information and applying accessible formatting is critical!

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=39#h5p-16

Watch: How to Format Your Resume to Pass the 6-Second Scan

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=39

Note: Canada has employment laws that prohibit discrimination in the workplace. You do not need to volunteer information on ethnicity, national origin, sexual orientation, religion, age, marital status, disabilities on your résumé. Including a photo of yourself is also not appropriate on a résumé.

Writing Effective Accomplishment Statements

2-5 accomplishment statements are included under each entry of a résumé or CV. These past-tense, single-sentence statements highlight your unique contributions and successes in a specific role or experience. These statements should not simply list all the tasks you were assigned or describe your research project. Instead, these statements are intended to communicate to the hiring manager that you can achieve results, by providing evidence of your technical and transferable skills, traits, and knowledge.

To write an effective accomplishment statement, answer the following three questions in one sentence:

Question	1. What did I do?	2. How did I do it?	3. Why was it important?
Direction	Briefly state the task.	Specify the methods, strategies, techniques, tools, or skills you used to complete the task.	Identify the result or impact of your actions to highlight its' significance or benefit to the team.
Tip	Begin with a strong, past-tense action word, such as, "Facilitated", "Coordinated", or "Collaborated". Avoid starting your statements with "Worked" or "Responsible for". Find strong action words you can use in the next section.	Identify transferable or technical skills, tools, resources or techniques utilized to complete this accomplishment.	Quantify your impact when possible. For example, you can include percentages of how you improved impact, or include the number of people impacted. If you are stuck, ask yourself "what would happen if didn't do this task?"
Example	"Tutored high school student"	"using plain language to communicate complex physics concepts"	"resulted in improved course grade from 68% to 81%"

Complete example: Tutored high school student using plain language to communicate complex physics concepts, resulted in improved course grade from 68% to 81%.

Practice identifying the "What", "How" and "Why"

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=39#h5p-29

Examples of strong action words and accomplishment statements by competency

Your accomplishment statements should reflect desirable skills and qualities hiring managers are seeking. Click on the eight Science Professional Competences listed in the accordion below for examples of strong action words and accomplishment statements.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=39#h5p-2

Watch: Tailoring Your Resume For A Specific Job

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=39

Examples of skills by department or school

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=39#h5p-18

Download: Résumé And CV Formatted Templates

Click the links below to download a sample résumé or CV formatted document with guidelines to help you get started!

- Sample résumé format with guidelines
- Sample CV format with guidelines

Self-evaluate your résumé!

Download this Resume Rubric to help you assess the accessibility, completeness and professionalism of your résumé!

Frequently Asked Questions

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=39#h5p-1

Additional resources:

- **Use Jobscan resume scanner** to help you optimize your resume keywords for a specific occupation or job positing.
- **Use LinkedIn Learning** to gain skills and training related to business, media, technology and more! Check your local library for LinkedIn Learning access.

Quick Chapter Recap

- Always tailor your résumé or CV for the opportunity you are applying for. Some job/volunteer, awards or graduate and professional school applications may specify certain skills, traits, experience, or document headings and page limits they require for your materials.
- Unless specified otherwise, submit your résumé or CV as a PDF document to maintain the format. Remember to create a professional document name, such as "Resume, Last Name, Job ID number".

Need more support with building your application materials?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00
Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- Writing A Cover Letter
- Searching And Applying For Experience

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Writing A Cover Letter

A cover letter is a **1-page document** addressed to a hiring manager, sharing what you can bring to a specific organization or opportunity you are applying to. It is an opportunity to **demonstrate your understanding of the role** and provide the hiring manager with **tangible examples of the relevant skills and aligned values you possess**. Cover letters are commonly submitted as part of applications for jobs, volunteer positions, or professional development opportunities.

This chapter outlines recommended practices in cover letter writing to help you create a document that is effectively tailored to specific opportunity you are applying for.

If I Already Provided My Resume, Why Do I Need To Submit A Cover Letter, Too?

Cover letters are commonly expected to be submitted as part of applications to complement, not repeat, the information on your resume. **Many students make the mistake of not submitting a cover letter as part of their application materials.** Crafting a tailored, well-written cover letter will increase your chances of making a good impression on the hiring manager, and getting an interview invite.

The objective of a cover letter is to articulate your match. Communicate how you will use your knowledge, skills and qualities to help the organization achieve their specific goals. Typically, job seekers spend many hours perfecting their résumé only to write a quick and generic cover letter. Yet this letter is your opportunity to tailor your message and demonstrate your unique style and abilities.

Resumes focus on **you and your past experience**, whereas **cover letters** focus on **the organization and the future with them**!

Watch: How To Write A Cover Letter That Sounds Like YOU (And Gets Noticed)

Effective cover letters balance professionalism with a personal touch. This video offers an overview of how to write a cover letter that reflects your authentic voice and highlights your individual strengths. It touches on key concepts that will be explored in greater detail throughout this chapter.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=697#oembed-1

Preparing A Cover Letter

Step 1: Do your research. Before you begin crafting your cover letter, its important to gather information about the organization. This could include learning about their mission, values, recent achievements, staff, or details related to the department/project you may be working on. Start with visiting their website, social media accounts and locating news articles about the organization.

Step 2: Analyze the job posting. Save a copy of the job posting and analyze it. In a table, first identify the required qualifications, skills and responsibilities, and then, answer, "how have I met this criterion?". This exercise will help you compile prompts on what stories and experiences to include in your letter.

Template table with example:

#	Criteria: Required Qualifications, Skills and Responsibilities	Evidence: How I meet that criteria?
1	*Interpreting lab data*	*Projects from Lab and Statistic coursework at McMaster.*
2		
3		
4		
5		

Reading Between The Lines Of A Job Posting

When reviewing job postings, it is common to feel that some requirements are outside your current skill set or background. However, many experiences you have had, whether in school, volunteering, or other activities, may actually have prepared you well for that role.

Job postings often list technical tools, work conditions, or qualifications that may seem unfamiliar or intimidating at first glance. If you look closely, many of these statements are clues about the skills, qualities, and adaptability the organization is truly looking for.

The key is to look beyond exact matches and identify transferable skills and qualities that demonstrate your potential. "Reading between the lines" helps you go beyond the literal and identify how your existing experience, even if indirect, can be a strong match.

Example of reading between the lines of a job posting

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-82

Practice Reading between the Lines

Read each job description, then review each students experience. Select the student who's experience better matches the role.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-36

Writing Tips

- Your cover letter typically should not exceed 1 page.
- Do not focus on why you want the job.
- Do not state the qualifications you do not have.
- Cover letters are tailored to the job you are applying to, requiring you to write and personalize a new letter for every job posting or opportunity you are responding to!
- Cover letters are a sample of your written communication skills, so make sure to proofread your work for spelling, punctuation and grammar!
- Maintain a formal business tone, and avoid using slang.
- Illustrate your interest and enthusiasm in the position and company.

Format Of A Cover Letter

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-19

Watch: Writing The Introduction Of Your Cover Letter

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=697

Writing Effective Accomplishment Stories With STAR

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-20

Practice Writing STAR Accomplishment Stories

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-37

Frequently Asked Questions:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=697#h5p-34

Quick Chapter Recap

- Always tailor your cover letter for the opportunity you are applying for.
- Proofread your cover letter for spelling and grammar errors.
- Unless specified otherwise, submit your cover letter as a PDF document to maintain the format.

Remember to create a professional document name, such as “Cover Letter, Last Name, Job ID number”

Need more support with building your application materials?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00

Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- Creating Your Résumé And CV

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Interviewing With Confidence

An interview is a formal conversation between you (as the applicant) and a representative of the opportunity. The goal of the meeting is to determine if you are likely to succeed in the role or opportunity by assessing your alignment of skills, experiences and personality. Often, the meeting allows you to:

- **Strategically present your skills, experiences, knowledge, and ambitions** with evidence to highlight why you're a strong candidate.
- **Ask questions** about the opportunity, the organization, and the workplace environment.

This chapter will guide you on what to expect in an interview, how to pre pare for an interview, and what to do after an interview.

Interview Formats

Interviews may take different forms and a hiring team may utilize more than one to help them find the best candidate. Some common interview formats include:

- **One-on-One:** Common interview style with one interviewer and one candidate.
- **Panel:** More than one interviewer with one candidate.
- **Telephone:** Used as a pre-screening tool or when distance is a factor.
- **Group:** Several candidates interviewed at the same time, in the same location.
- **Audition:** Candidate required to perform a task to demonstrate their knowledge and competencies.
- **Dinner or Lunch:** Candidate demonstrates their ability to function in a social setting.
- **Virtual Interview:** This has become very common. One candidate and one or more interviewers, over a platform like Zoom.
- **Sequential:** Candidate rotates to different interviewers, often time limits are imposed.

What To Expect During An Interview?

Depending on the format of the interview, your experience may vary. Generally, you may expect:

1. **Greetings and Introductions:** The interviewer(s) and interviewee greet each other. Depending on how

formal the interview is, there may be some small talk.

2. **Overview of the role and interview:** The interviewer(s) may provide an overview of the opportunity you are applying to and outline what kind of questions to expect for the interview.
3. **Questions from interviewer(s):** The interviewer(s) will ask you a set of interview questions or activities to complete.
4. **Questions for the interviewer(s):** Typically, you will have an opportunity to ask the interviewer(s) 2-3 questions at the end of the interview. Make sure to come prepared with questions to ask!
5. **Wrap-up:** Typically the interviewer(s) will conclude the interview and may include details on expected next steps in the recruitment process. At this time, you can express your gratitude again to the hiring team before exiting the interview.

How Do I Prepare For An Interview?

Preparing for the interview will help ease anxiety, make you appear more confident and professional, as well as show your initiative. These guidelines will assist you in preparing for your upcoming interview.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=710#h5p-22

Types Of Interview Questions And Examples

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=710#h5p-21

Watch: How To Strategically Answer Interview Questions

- 'Tell me about yourself.'
- 'What are your strengths and weaknesses?'
- 'Tell me about a time when….' (behavioural interview questions)

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=710

Illegal Interview Questions: The Canadian Human Rights Act prohibits employers from discriminating against any person based on sex, age, race, national or ethnic origin, religion, colour, sexual orientation, marital status, family status, disability or conviction for an offense for which a pardon has been granted. Some examples of illegal interview questions include: What is your age? Are you married? What is your religion?

If you're asked an illegal question at a job interview, keep in mind that the employer may not be aware the question is illegal. One strategy is to try to discover the concerns behind the question and then address them.

Preparing Accomplishment Stories With STAR

To ensure your answers include an appropriate amount of context and relevant details, use the STAR method to help you share stories of your experiences. STAR stands for Situation, Task, Action, Result and Relevance.

Below is an example of how you can use the STAR method to answer: Tell us about a time you had a conflict with a supervisor and how you resolved it?"

STAR	Question	Example of an accomplishment story broken down
Situation	What was the context?	While working at a tutoring centre, I believed the work a student was doing was too easy for her and she should be placed in a higher level whereas my supervisor felt that the student should stay at her current level.
Task	What was the goal?	In order to resolve the conflict, both my supervisor and I shared our points of view. I carefully listened to my supervisor as she explained to me that the parents had concerns about moving their child to the next level. I then shared with my supervisor the students work to show her that the student had achieved perfect on everything.
Action	What did you do?	With consultation with the parents, both my supervisor and I decided that we would regularly give the student enrichment questions from the level above while keeping the student in the same level.
Result and Relevance	What was the result? How does this relate to the job?	This compromise was an effective way to resolve the problem as it satisfied all parties involved. It also benefited the student as it provided her with challenges that enhanced her learning.

What To Do After An Interview?

1. Send a thank you note to the interviewer(s) within 24 hours.

It is important to take the time to thank the interviewer for the time they have taken to meet with you. Today it is a part of interview etiquette. Thank you letters are commonly sent over email and should be a brief, personalized message. In your letter, you may consider:

- Expressing your appreciation for the opportunity to interview
- Articulate your continued interest and enthusiasm for the position
- Recap your strengths
- Mention something interesting from interaction with the interviewer's from your interview

Example of a thank you email

Dear Mr. Markson,

I wish to express sincere thanks for taking the time to meet with me yesterday at your office to discuss my suitability as your new Research Associate. After meeting with you and learning more about the organization and the position, I feel even more confident that I can make a positive addition to the Analytical team at ABC Pharma Research.

I was impressed with the innovation of the products and methods used in your area, and the total market concept your organization employs to promote them. I was particularly pleased to learn of how closely your organizational goals, and the goals of the Analytical team specifically, relate to my professional goals. I enjoyed the tour of the laboratory facilities and the opportunity to speak with your head research scientist, Dr. Taylor.

Thank you again for considering me for the Research Associate position at ABC Pharma Research. I will look forward to hearing from you concerning your hiring decision.

Yours sincerely,

Taylor Park

2. Reflect on the interview.

Make personal notes in a journal or document after the interview about your experience. Take the time to reflect on what you did well and what you may want to do differently for your next interview.

3. Respond to requests from the hiring team in a timely manner.

Check your email inbox frequently or keep your notification's on so you can respond to any requests or inquiries from the hiring team in a timely manner. Inquiries may include invites to a second interview, requests for your references, additional activities such a competency or personality quiz, or a response to an offer letter.

Frequently Asked Questions:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=710#h5p-25

Additional resource: Use Big Interview to practice with mock interviews tailored to your specific major or area of interest. Log-in using your McMaster email.

Quick Chapter Recap

- Interviewers are often assessing your skills-match for the role so it's important you clearly address and provide evidence of your abilities.
- You are also interviewing the employer during the interview. Its an opportunity to learn more about the role, organization and its people, and assess if you want to work there!

Need more support with building your application materials?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00
Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- How to Create a LinkedIn Profile

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Requesting Letters of References

Letters of reference (sometimes referred to as a letters of recommendation) are commonly used when applying for graduate or professional schools. Sometimes other opportunities like internships or scholarships may seek a letter of reference. These letters are written by people who are able to speak highly of your relevant professional, interpersonal, and academic abilities.

Steps For Requesting A Letter Of Reference

Click on the steps listed in the accordion below for more guidance and tips on how to request a letter of reference.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=513#h5p-4

Example of a letter of reference Request

Hello Dr. John Doe,

I hope your semester is going well. I enjoyed my time as a research assistant in your lab last semester. I am reaching out you to ask if you would be willing to provide a letter or reference in support of my graduate school applications. I am applying to the Master of Biotechnology program with a focus on digital health technologies at the University of Toronto.

I am hoping that you can specifically speak to my time in your lab and courses. I appreciated the interdisciplinary approach you take in your research and teaching and I believe this would be an appealing factor to stress in my application as the Master's program combines science and business courses to focus on real-world solutions. I've attached my unofficial transcript and CV to provide you with additional details about my credentials as well as a separate page that highlights my most important accomplishments relating to this application. If you require any additional information, please let me know. I am also available to meet at your convenience to further discuss any aspects of the application process or my qualifications and interests.

If you can provide a reference, I will input your contact information into the application system, and you will receive an email with instructions on how to submit the reference. The deadline for submitting the letters is November 1st.

Please let me know if you are able to support my applications.

Thank you,

Taylor Park

Reminders:

- When deciding who to ask, consider professionals who you have a strong relationship with and have meaningfully interacted with.
- When requesting a letter of reference, remember that this is a favour you are asking and not a demand.
- Aim to ask your contacts no later than 2 months in advance.
- Try to make the process as easy as possible for the contact by providing them with all the details they need to write an impactful letter tailored to the opportunity.

Need more support with building your application materials?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00

Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- Creating Your Résumé And CV
- Writing A Cover Letter

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Crafting Personal Statements And Letters Of Intent

Providing a statement is commonly requested as part of your application package for graduate and professional school or post-graduate programs. The statement helps the admissions committee learn more about you beyond your academic transcript and resume or CV. More specifically, its an opportunity to provide them with a sense of who you are and what your motivations are.

However, writing an impactful statement can be a daunting task. You may be asking yourself:

- Where do I begin?
- What type of information should I include?
- What exactly is the admissions committee looking for?
- How do I format it?

The goal of this chapter is to provide you with some guidance on the essential components of writing an effective statement.

Disclaimer: Every program and school has their own unique set of admissions requirements and instructions. The expectations for a statement and how to write a statement will differ for each program and school you are applying to. Make sure to research the specific program(s) admission requirements listed on the program and school websites before proceeding.

- Programs may call the statement a Statement of Intent, Letter of Intent, or other names.
- Some schools may set rules for the statement, such as word or page count and formatting requirements.
- Most schools now list the questions they specifically would like you to answer or address in your statement.

Understanding The Difference: Personal Statement vs. Statement Of Intent

Graduate and professional programs may ask for a **personal statement**, **statement of intent**, or **letter of intent**—sometimes using these terms interchangeably. While all aim to explain your interest in the program, your background, and your goals, some programs may specifically request one type over the other.

In general, your statement should address:

- What motivates you to apply.
- How your academic and professional experiences have prepared you.
- Your research interests or areas of specialization.
- How the program supports your future career goals.

Understanding the difference between a personal statement and a statement of intent will help you tailor your writing effectively.

Statement of intent	Focuses on your **academic and research interests** and how they align with the program. **Purpose**: To explain *what* you plan to study and *how* your background supports your success in the program. **Include:** • Why the subject area interests you. • What you intend to research or explore during the program. • Names of professors you'd like to work with (if requested). • Academic and/or research experiences that demonstrate your preparedness and relevant skills. **Tone**: Focused, academic, and goal-oriented.
Personal Statement	Focuses on your **personal journey** and how your experiences have shaped your interest in the field. **Purpose**: To explain *why* you're pursuing this area of study and *how* your background has prepared you. **Include:** • Your motivation to pursue the career the program leads to. • Key experiences that influenced your decision (e.g., education, employment, volunteering, exchanges, personal life). • Your career goals and the attributes you bring to the program. **Tone**: Reflective, narrative, and personal—while remaining professional.

Steps For Writing A Statement

Click on the steps listed in the accordion below for more information and tips on how to write your statement.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=521#h5p-26

Highlight Relevant Skills

Highlighting discipline-specific skills in your statement to show how your experiences have prepared you for the program and demonstrate your potential to succeed. This helps admissions committees see the connection between your background, your goals, and the competencies needed for graduate study.

In addition to these suggested skills, you may want to explore the **eight Science Professional Competencies** McMaster Science students develop that prepare them for diverse career paths. Learn more about these competencies here.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=521#h5p-38

Elements Of A Strong Written Statement

- **Be specific**: Describe your experiences and accomplishments with detail.
- **Write clearly**: Avoid run-on sentences and technical jargon.
- **Show program knowledge**: Demonstrate that you've researched the program.
- **Outline career goals**: Explain how the program fits into your future.
- **Highlight relevant skills**: Connect your competencies to your career path and grad studies.
- **Use a professional tone**: Keep your writing formal and focused.
- **Avoid clichés and generalities**: Phrases like "I've always wanted to be a doctor" or "I want to help people" are too vague.

Example of a strong statement excerpt

As an undergraduate, I volunteered with the Community Health Access Network (CHAN), a non-profit offering free health screenings and educational resources to low-income immigrant and refugee populations in the downtown core. I coordinated outreach efforts, set up mobile clinics, and assisted with screenings for hypertension, diabetes, and cholesterol. Working closely with families facing language barriers and limited access to care, I witnessed the critical role of early detection and preventive health services. This experience deepened my understanding of the social determinants of health and sparked a commitment to addressing healthcare inequities. It also strengthened my communication, organizational, and cross-cultural collaboration skills. Motivated by these insights, I am pursuing a Master of Public Health to gain the analytical and policy development tools needed to design evidence-based interventions that improve health outcomes for underserved communities.

Frequently Asked Questions (FAQs)

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=521#h5p-5

Additional resources and readings to explore:

- McMaster Student Success Centre – Writing Your Personal Statement
- Kisses of Death in the Application Process
- UOIT Career Centre – Personal Statement Tip
- Purdue Online Writing Lab

Need more support with building your application materials?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00

Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Introduction to Science Professional Competencies
- Creating Your Résumé And CV
- Writing A Cover Letter

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

GAINING EXPERIENCE: HOW DO I MAKE THE MOST OUT OF MY TIME AT MAC?

Searching And Applying For Experience

Searching for experience *is* work and there are a number of activities you can do to help you find meaningful experiences.

In this chapter you will explore five questions you need to consider when searching for experience. At the end of this chapter, you can put these pieces together to create you own experience search plan.

1. What types of experiences am I searching for and why?

Reframe your thinking: What counts as experience?

When you think about the word "experience," what comes to mind? A paid job? Maybe a role in an office or lab? While those are great examples, it's important to remember that experience isn't limited to formal or paid positions. There are many ways you can gain career-building experience.

Whether you've worked a summer job in retail, volunteered at a shelter, joined a student club, or started a personal project – you've gained valuable experience!

Below highlights different types of experiences you can gain:

Work and Employment	Part-time jobs or summer work	Paid internships or co-op placement	Working at a family or friend's business
Academic and Educational	Research projects or lab work	Class projects or course-based assignments	Certifications, workshops, or online self-directed training
Extracurricular and Volunteer	Volunteering in your community	Involvement in student clubs, competitions or hack-a-thons.	Job shadowing
Personal and Independent	Personal projects, hobbies, or creative work	Freelance work or side hustles	Self-directed learning or online courses

Regardless of what kind of experience you pursue, the opportunity may help you:

- Gain insight on how different workplaces function
- Build your professional network
- Explore different industries
- Develop transferable skills or competencies like communication, collaboration, and problem-solving

Taking the time to reflect on your "What" and "Why" can help you identify meaningful experiences tailored to your interests and professional development. For example, if you are interested in applying your communication skills, enjoy working with children, and want to explore teaching as a profession, you may be interested in shadowing an elementary school teacher, working at a summer camp or volunteering for children's programming at your local library.

If you are struggling to begin this process because you're not sure of your own career interests, visit these chapters first:

- The Importance of Self-Assessment in Career Planning
- How to Research Career Paths

2. When are my experiences of interest available?

Be aware of typical recruitment cycles.

There are times of the year, where certain types of student-focused opportunities tend to appear. If you missed a common recruitment period – don't sweat it. These are not an exact rule, and some programs or organizations have their own processes that may differentiate. Below are some typical recruitment cycles to be aware of:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1357#h5p-49

3. How do recruiters' find candidates?

In addition to understanding when recruiters are hiring, it's important to be aware of the candidate pools they typically select from. Thinking from the recruiter's point of view can help you position yourself within those pools and increase the likelihood of getting noticed.

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1357

4. Where do I find opportunities?

Many job seekers begin their search by applying for opportunities online through large job boards like Indeed or Monster. While this is a common and useful method for finding opportunities, relying solely on it can limit your chances.

Passive job searching means you are waiting for opportunities to appear and responding to them—usually by submitting applications online and waiting for a response. While this approach can work, relying on it alone can put you at a disadvantage.

To improve your chances, you need to be an **active job seeker**—someone who is proactive by taking initiative, building connections, and uncovering opportunities that aren't always advertised. Incorporating proactive search strategies can help you stand out. When you connect directly with people in your field, you become more than just a name on a résumé. You give employers a chance to see your personality, motivation, and potential—things that don't always come through in an online application.

The image below includes a variety of ways you can search for opportunities, starting with passive strategies and progressing into more active strategies. **For tips and details about these search strategies, visit the next chapter,** **Where can I find experience?**

5. How do I effectively apply for opportunities?

Now that you've explored active strategies for finding opportunities, it's time to focus on how to effectively apply for these opportunities. Applying with confidence and purpose involves preparing strong, tailored application materials and staying organized throughout your search.

Before you start applying, take time to prepare your materials and gather the support you need. Think of

this as building your job search toolkit. Then, make a plan for organizing and tracking your activities. Staying organized helps you stay motivated and avoid missed opportunities. Below are 7 steps to help guide you in your search:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1357#h5p-51

Remember to Search with Self-Compassion

Searching and applying for meaningful experiences—whether it's a job, internship, research role, or volunteer opportunity—can be exciting, but it can also be emotionally demanding. That's why self-care and self-compassion are essential parts of your search strategy. Remember to:

- **Take breaks:** Searching for opportunities takes time and energy. Build in regular breaks to rest and recharge.
- **Avoid the comparison trap:** Everyone's path looks different. Just because someone else found something quickly doesn't mean you're behind.
- **Talk about it:** Don't keep your search to yourself. Share your progress, frustrations, and wins with people you trust.

Focus on What You Can Control: There are many parts of the process you can't control—like how long it takes to hear back or how many others applied. But there's a lot you can control. Focus your energy on:

- The **quality** of your applications
- The **effort** you put into reaching out to potential contacts
- The **questions** you ask in informational interviews
- The **career research tools** you explore
- The **support** you seek when you need help
- The **goals** you set and reflect on

Focus on your actions and not just the outcomes to stay grounded, motivated, and more resilient throughout your search for experience.

Putting it all together: create your experience search plan

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1357#h5p-52

Quick Chapter Recap

- **Apply active search strategies:** Don't wait for opportunities to come to you, take initiative and use a mix of strategies.
- **Focus on creating high-quality applications:** Regularly revise and tailor your résumé, cover letter, and LinkedIn profile.
- **Stay organized**: Save all your applications, the job description/postings you've responded to and a tracker of when you applied, and should follow-up on your application.
- **Ask for support**: Talk about your search with friends, family, peers, and mentors—you're not in this alone.
- **Take care of yourself**: Build in time for rest, reflect on what you can control, and practice self-compassion throughout the process

Need more support with your search for experience?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00
Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Where Can I Find Experience?
- How to Create a LinkedIn Profile
- Introduction to Science Professional Competencies
- Creating Your Résumé And CV
- Writing A Cover Letter

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Where Can I Find Experience?

In the previous chapter, you were introduced to the need for implementing a variety of search strategies to stand out in today's job market. To recap:

- **Passive job searching** means you are waiting for opportunities to appear and responding to them—usually by submitting applications online and waiting for a response. While this approach can work, relying on it alone can put you at a disadvantage.
- To improve your chances, you need to be an **active job seeker**—someone who takes initiative, builds connections, and uncovers opportunities that aren't always advertised. When you connect directly with people in your field, you give employers a chance to see your personality, motivation, and potential—things that don't always come through in an online application.

This chapter will provide you with details and tips on how to apply these strategies to increase your chances of finding meaningful experiences aligned with your goals and interests.

Job Search Boards

Job search boards are the most commonly used search tool because they conveniently list available job opportunities across various industries and locations. Typically these boards let you search by experience type, location or keywords. Some may also let you upload your resume and apply directly on the platform. Some are general boards, listing all kinds of opportunities, where as others focus on specific industries or fields, allowing you to find more relevant and targeted postings.

Examples of Job Search Boards

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-58

Beware of employment scams.

Scammers may use job postings to trick job seekers, often with a position that seems just too good to be true (it might be!). Scam jobs may request money for training so that they get the account number to deposit wages, ask you to pay a vendor and reimburse you, and so on.

- Pay close attention to any unsolicited emails. Refer to the "from" field to make sure it is a legitimate business email.
- Keep your information private. Don't give out your passport, social insurance number, driver's license, health card, date of birth information or disclose your marital status.
- Never send cheques, gift cards or money during a job application, interview or recruiting process. In Canada, you don't have to pay a company to be trained for the job.

To learn more and receive support with employment scams visit, Mac's Money Centre.

Company Websites

Company websites are another great source of job postings – they're often one of the first places employers post new opportunities. If there's an organization you're interested in, visit their website and look for a webpage titled, **"Careers," "Work with Us," "Join Our Team,"** or **"News."** For example, opportunities that can be found at McMaster University are posted on their Careers webpage (that also can be accessed through your Mosaic account under "Career Opportunities").

If the company does not have their own job board, they may be posting their opportunities on their **Instagram or LinkedIn page**. Visiting company social media pages are not only create for finding job openings, but also hiring events they may be conducting, or behind-the-scenes content that gives you a feel for their workplace culture.

Professional Associations and Directories

Professional associations are a great source of industry specific information and often have job boards! Consider joining a professional association related to your discipline or industries of interest.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-60

On-Campus Opportunities (Jobs, volunteering and Clubs)

As a student at McMaster, you have access to various on-campus opportunities and initiatives. Review the drop-down below to learn about the various resources and programs you may be eligible to participate in on campus!

Examples of on-campus opportunities

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-59

Coursework Selection

Make your courses work for you. Take advantage of the **curricular experiences McMaster has to offer**. Your course choices can do more than fulfill degree requirements—they can be a launchpad for hands-on experience, networking, and career clarity. Below are some considerations:

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-62

Campus Career Services, Career Fairs and Networking Events

In addition to job boards, department initiatives, course selection, McMaster's career centres provide various services and events that can help you gain experience during your time at McMaster.

Spotlight of notable campus resources

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-93

Interested in gaining experience in research? The Office of Undergraduate Research is dedicated to supporting McMaster Science students enrich their education with hands-on experience in research. Visit their website to learn about their experiential courses, external and internal research opportunities, and advising services.

LinkedIn Networking

Follow companies, engage with posts, and message professionals in your field. A thoughtful comment or message can open doors. For more guidance on how to use LinkedIn, visit our chapter, How to Create a LinkedIn Profile.

Recruiter Outreach

Connect with recruiters who specialize in your field. They often have access to unlisted roles and can advocate for you with employers.

Information Interviews

Set up short, informal conversations with professionals to learn about their roles, companies, and career paths. These can lead to referrals or insider tips. Visit, Conducting Information Interviews, for more guidance.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1406#h5p-61

Cold Outreach to Employers

Email or message hiring managers or team leads at companies you admire—even if no job is posted. Express your interest and ask about potential opportunities.

Quick Chapter Recap

- **Apply various active search strategies:** Don't wait for opportunities to come to you, take initiative and use a mix of strategies.

Need more support with your search for experience?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00
Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- Searching And Applying For Experience
- How to Create a LinkedIn Profile
- Introduction to Science Professional Competencies
- Creating Your Résumé And CV
- Writing A Cover Letter

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

NETWORKING: HOW CAN I BUILD MY PROFESSIONAL COMMUNITY?

How Do I Network?

Networking is the essential, ongoing process of building the authentic relationships that will form the foundation of your career. **Your network** is a community of people who will support, guide, and champion you throughout your professional journey.

Developing a networking mindset is one of the most powerful and strategic things you can do for your future. This chapter will show you how to cultivate that mindset and build meaningful connections.

Networks consist of personal and professional contacts you can learn from about **potential job opportunities**, **industry knowledge**, **desired skills** or **education** from. You can build your professional network through:

- **Social media:** LinkedIn is a common tool people use to stay updated on employers and initiate connections with professionals working in your area of interest.
- **Events:** Attend networking events lead by the Science Careers & Experience Centre, communities of practice or professional associations.
- **Extracurricular activities:** Upper years in clubs or people you meet while volunteering in the space can be a great source of information and community.
- **Informational interviews:** Request an information interview with professionals working in the field or employer of interest to learn more about opportunities and desired qualifications.

Watch: Why Network? And What Is Networking?

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=980

Watch: The Secret To Great Opportunities? The Person You Haven't Met Yet | Tanya Menon (TED Talk)

This video covers the following concepts:

- Social Narrowing
- Strength of our Weak Ties vs. our Strong Ties
- How networking is Relational and Reciprocal

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=980#oembed-1

For more practical networking tips for early career professionals and future scientists, read the following 3-part series from Canadian Science Publishing:

- Practical Guide to Networking I: Getting Started
- Practical Guide to Networking II: Reaching Out
- Practical Guide to Networking III: Following-Up

Build Your Confidence to Network

For many people, the idea of "networking" can feel intimidating and forced. If the thought of reaching out to strangers makes you feel anxious, know that your feelings are completely valid and incredibly common.

The good news is that effective networking isn't about being the most outgoing person in the room or having perfectly smooth conversations. At its core, it's simply about being curious and building genuine connections, and it's a skill that anyone—introverts and extroverts alike—can develop with practice.

Read: Daunted by Networking? Try the Scientific Method

Try It: Networking Myths vs. Realities

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=980#h5p-78

Five Tips to Start Networking

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=980#h5p-77

Creating Your Elevator Pitch: An "elevator pitch" is a short, persuasive introduction to who you are, what you do, and what you're looking for. This is often used when networking. For more support with creating your elevator pitch and communicating your professional identity, visit the chapter, How to Pitch Your Skills and Experience.

Watch: Growing Your Professional Network – Initiating And Maintaining Connections

This video covers the following concepts:

- Who to network with
- Passive vs. active engagement

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=980

Further reading: How LinkedIn led to a successful co-op experience | Student Success Centre | McMaster University

Quick Chapter Recap

- Building professional relationships is essential for learning about new and interesting career paths, securing jobs and advancing in your career
- Networking is for everyone! You don't have to be an extrovert to build professional relationships.
- Set small achievable goals to start reaching out to professionals in fields of interest

Need more support with building your network?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00
Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Explore these additional chapters:

- How to Pitch Your Skills and Experience
- Conducting Information Interviews
- How to Create a LinkedIn Profile
- Where Can I Find Experience?

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

Conducting Information Interviews

What Is An Information Interview?

An informational interview is a short, informal conversation with someone working in a field, role, or organization you're curious about. It's a chance to learn directly from professionals about their career path, job responsibilities, and industry insights. **It's not a job interview**, but it can lead to valuable connections and future opportunities.

Why Conduct An Information Interview?

- Explore career paths and industries.
- Learn about day-to-day responsibilities and required skills.
- Get advice on education, training, and entry-level opportunities.
- Build your professional network.

Who Do I Ask For An Information Interview?

- McMaster alumni working in your field of interest.
- Professionals you meet at events, conferences, or workshops.
- People you find on LinkedIn, employer websites, or through referrals.
- Faculty members or researchers in your area of study.

Where Can I Find People To Meet With?

- **LinkedIn**: Use filters to search by industry, job title, or school.
- **Professional associations and networking events:** Check Sciences Careers & Experience Centre Event's page for upcoming networking events.
- **Referrals**: Ask professors, peers, or mentors if they know someone in your field of interest.
- **McMaster Alumni Directory:** Access the directory here.
- **McMaster Experts:** Use McMaster Experts webpage to identify researchers at McMaster University.
- **MacConnect:** Join MacConnect, McMaster's alumni networking platform, hosted by Alumni Career Services

Need help building or editing your LinkedIn profile? Visit How to Create a LinkedIn Profile and book an appointment with the Science Careers & Experience Centre (BSB 127) on OSCARplus for personalized support.

How To Ask For An Information Interview

Keep your request polite, brief, and specific. Mention:

- Who you are and what you're studying.
- Why you're reaching out to them.
- What you hope to learn.
- A suggested time frame (e.g., 20 minutes).

Example information interview email request:

Hello, my name is [Your Name], and I'm a Science student majoring in [Your Major] at McMaster University. I'm currently exploring career options and am very interested in learning more about [Occupation/Field]. I came across your profile on [LinkedIn/Referral Source] and was inspired by your work in [Area]. Would you be open to a brief 20-minute conversation where I could ask you a few questions about your career path and experiences?

Be Prepared With Questions To Ask

Coming prepared with questions shows that you've done your research and are genuinely interested in learning from the person you're meeting with. It helps you lead the conversation confidently, make the most of your time, and gather meaningful insights that can inform your career decisions.

Examples of questions to ask in an information interview

1. Can you share what you do in a typical workday/week?
2. Are there any times of the year when your industry is busy/slow and why?
3. What parts of your job do you find most challenging? What do find most enjoyable or rewarding?
4. How would you describe the work culture and values of your organization?
5. What skills, qualifications and experience would you recommend for securing entry level work in this field?
6. Do you have any recommendations for gaining entry level experience in this field?
7. Are there any professional associations, journals, grants or notable organizations I should be

aware of?

8. What professional development opportunities have you completed since starting your career?
9. What educational preparation would you recommend for someone who wants to work as a _?
10. What do you know now that you wished you had known when you started your career?
11. Is there anyone else that you recommend I speak with? May I use your name when I call?

Further reading: Networking: How to Prepare for Company Information Sessions | Student Success Centre | McMaster University

Quick Chapter Recap

- Informational interviews are for learning and relationship-building—not job hunting.
- Prepare your questions and lead the conversation.
- Have a short self-introduction ready. Visit, How to Pitch Your Skills and Experience for more support on this!

Need more support with building your network?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Build your Science Career Toolkit with SCIENCE 2C00

Enrol in **SCIENCE 2C00: Skills for Career Success in Science** — for guidance on developing essential career skills and become eligible for co-op and experiential education opportunities.

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.

FURTHER EDUCATION: HOW DO I PLAN FOR GRADUATE, PROFESSIONAL AND ADDITIONAL STUDIES?

Applying to Graduate and Professional School

Getting Started

Considering applying to graduate or professional school? This guide is to help you explore, plan, and navigate the process of applying.

For additional considerations and resources, consult McMaster's Student Success Centre's Guide to Grad School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Disclaimer: Each university and program has its own unique admissions requirements, deadlines, and procedures. Be sure to carefully review the official websites of the programs you're interested in to understand their specific criteria and ensure you submit all required documents on time.

1. What's Your Why?

Reflecting on *why* you want to apply to graduate or professional school can help clarify your goals, guide your career planning, and support a well-informed decision. Consider both **intrinsic motivations** (personal interest, intellectual curiosity, desire to contribute) and **extrinsic motivations** (career advancement, financial incentives, external expectations).

Intrinsic Motivations	Extrinsic Motivation
• Passion for a subject • Desire for knowledge • Personal fulfillment • Research interests • Intellectual challenge • Contribution to society	• Better career prospects • Professional recognition • Job requirements • Financial incentives • Pressure from others • Networking opportunities

Reminder: It's okay to take a gap year! There's no "right" timeline. A gap year can be a valuable opportunity to explore interests, gain experience, and reflect on your goals. Take time to research all post-graduation options to find the best fit for you.

2. Explore and research your options

Before applying to graduate or professional school, take time to explore your options thoroughly. Reflecting on your goals and gathering detailed information will help you make informed decisions and prepare strong applications.

Tips for staying organized:

- **Use a spreadsheet** to track program details, deadlines, and requirements. Download a sample template from the Student Success Centre.
- **List application requirements** for each program and create a plan to meet them.
- **Build a timeline** based on deadlines to stay on track.
- **Record questions** that come up during your research and follow up later.
- **Organize documents and account info** in clearly labeled folders for easy access.

What are the types of post-graduate programs?

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1001#h5p-24

Where can I find information about graduate school?

Type of Information	Source
Where to find information on post-secondary programs in Canada	Visit Universitystudy.ca and CanLearn.
Who you can talk to learn more about the program	Speak to faculty members and network with students/ alumni of the program. Attend info sessions by the university of interest.
Learn more about graduate programs offered at McMaster	Visit McMaster School of Graduate Studies.

What should I consider when researching programs?

When exploring programs, consider both the **structure** of the program and the **admissions process** to ensure they align with your academic, professional, and personal goals.

Program Structure

- **Specializations**: What focus areas or concentrations are offered?
- **Faculty Focus**: What are the faculty members' research interests or professional specialties?
- **Accreditation**: If it's a professional program, is it accredited by the relevant regulatory body?
- **Research Supervision**: If it's a research-based program, are there supervisors whose work aligns with your interests?
- **Experiential Learning**: Are there opportunities for co-op, internships, or hands-on projects?
- **Program Culture**: What is the learning environment like within the cohort or institution?
- **Student Supports**: What academic, career, and wellness resources are available?
- **Alumni Outcomes**: What career paths or further education have graduates pursued?

Admissions Process

- **Application Requirements**: What documents, fees, and steps are involved in applying?
- **Program Cost**: What is the total cost of the program? Are scholarships or funding options available?
- **GPA Requirements**: What is the minimum and competitive GPA? How is GPA calculated?
- **Prerequisite Courses**: Are there required courses, and do they have minimum grade requirements?
- **References**: Are academic and/or professional references required?
- **Resume/CV**: Is a resume or CV required? What types of experiences are valued?
- **Supplemental Materials**: Are you required to submit a personal statement, letter of intent, or answer supplemental questions?
- **Entrance Exams**: Are standardized test scores (e.g., GRE, MCAT) required? What scores are competitive, and when are they due?
- **Selection Process**: Will there be interviews or other evaluation steps?
- **Deadlines**: What are the deadlines for applications, fees, and reference submissions?
- **Fee Schedule**: When are program fees due, and what are the associated costs?

3. Preparing Your Application

This section provides a general overview of what to expect during the application process. Keep in mind that **each university and program has its own specific requirements, deadlines, and procedures**. Always review the official application guidelines and timelines for every program you plan to apply to.

Common Eligibility Requirements:

- **Undergraduate Degree**: Completion of a recognized bachelor's program.
- **Academic Achievement**: Competitive GPA and relevant coursework.
- **Relevant Experience**: Academic, research, volunteer, or professional experience.
- **Admission Exam**: Standardized test scores (e.g., GRE, MCAT, LSAT) if required.

Common Application Components:

- **Application Form**: Submitted through the institution's portal or centralized system.
- **Resume/CV**: Outlining academic, professional, and extracurricular experiences.
- **Personal Statement/Statement of Intent**: Explaining your goals and motivations.
- **Post-secondary Transcripts**: Official records from all institutions attended.
- **Reference Letters/Forms**: Academic or professional endorsements.
- **Admission Exam Scores**: Submitted directly from the testing agency, if applicable.

Need more support with graduate and professional school applications?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Career Implications of Adding, Dropping and Withdrawing From Courses

Getting Started

Deciding whether to add, drop, or withdraw from a course is a personal decision, and there's often no single "right" path. Your choice may depend on academic goals, personal circumstances, or future career plans.

The **Science Careers & Experience Centre** can provide guidance on the **career implications** of course changes. For support with the **process** of adding, dropping, or withdrawing from a course—and how these actions appear on your transcript—please speak with a Science Academic Advisor at the Office of the Associate Dean, Undergraduate Studies, BSB 136.

For personalized advice on how course selection and withdrawals may impact your career or graduate school applications, book an appointment with a **Science Career Advisor** at the Science Careers & Experience Centre (BSB 127) through OSCARplus.

What is the difference between dropped vs. withdrawn courses?

- **Dropped courses** are removed from your student record when dropped before the official deadline for course changes. While tuition is refunded, dropping a course may still affect financial aid like OSAP or entrance awards. Refer to the Session Dates in the Academic Calendar for Add/Drop deadlines.
- **Withdrawn courses** are removed after the course change deadline and remain on your transcript with a "W." They may involve cancellation fees and can also impact financial aid or awards.

Learn about the academic processes, deadlines and definitions of add/drop and withdrawals on the Office of the Registrar website.

For support on how course add/drop or withdrawals will impact your progress in your academic program, speak with a Science Academic Advisor at the Office of the Associate Dean, Undergraduate Studies, BSB 136.

Impact of course withdrawals on post-grad applications

You may be weighing the impact of a "W" on your postgraduate plans vs. the impact of staying in the course. If this is you, ask yourself the following 10 questions:

1. Do I have a pattern of 2 or more Ws?

2. How closely have I reviewed the admission requirements and policies of the post-grad programs I am interested in?
3. How competitive are the post-grad programs?
4. Will I still able to maintain a competitive GPA for the post-grad program?
5. Do the post-grad programs require the course I am considering withdrawing from?
6. Does the post-grad program have a minimum course grade requirement?
7. Have I talked to an Academic Advisor about the option of retaking the course?
8. How will withdrawing/retaking the course impact my studies at McMaster and any financial aid I am receiving?
9. Am I struggling in more than one course this semester?
10. Have I accessed academic skills support from the Student Success Centre?

Key Considerations When Withdrawing From A Course

Withdrawing from a course can feel like a difficult decision, especially when you're thinking about future career or graduate school plans. Postgraduate programs typically assess applicants holistically, so the impact of a withdrawal depends on your overall academic record, the reasons behind the withdrawal, and the policies of the institution you're applying to. Here are some important factors to consider:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=279#h5p-110

Key Considerations When Adding or Dropping Courses

Course selection decisions can have academic, career, and graduate school implications. While there's no one-size-fits-all answer, here are some important factors to consider when deciding whether to add or drop a course:

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=279#h5p-111

Accelerated Nursing

Getting Started

Considering Nursing? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Nursing Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=317#h5p-114

Types of nursing positions

Registered Practical Nurse (RPN)

- Must complete 4 semesters over 2 years in a college program leading to a diploma in Practical Nursing
- An RPN cares for patients with less complex needs, and patients with stable and predictable conditions

Registered Nurse (RN)

- Must complete a baccalaureate degree through a collaborative college-university nursing program or a four-year university nursing program, both leading to a Bachelor of Science in Nursing degree (BScN) or Bachelor of Nursing degree (BN)
- An RN's role is to autonomously care for patients regardless of the complexity of their conditions

Nurse Practitioner (NP)

- Must be a qualified RN and complete additional education and gain experience

- An NP's role is to autonomously diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals and perform specific procedures depending on the specialty certification they hold

For more information on nursing specializations visit this link.

Relevant websites

- Canadian Association of Schools of Nursing
- Ontario Nursing Association
- Canadian Federation of Nurses Unions
- Canadian Nurses Association
- Canadian Nursing Students Association
- College of Nurses of Ontario
- International Council of Nurses
- Registered Nurses' Association of Ontario
- Health Force Ontario
- Entry-to-Practice Competencies for Registered Nurses

General Admission Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. Below are some general admission pieces and requirements you may find.

- CASPer Test
- Undergraduate study and pre-requisite courses
- Minimum Grade Point Average (GPA)
- Interview

Need more support with deciding if Nursing is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Athletic Therapy

Getting Started

Considering becoming an Athletic Therapist? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

What do athletic therapists do?

Athletic therapists are responsible for the prevention, immediate attention and rehabilitation of physical injuries to the human body. Athletic therapists are often the first responders for determining and assessing any muscle, bone or joint injuries. With a wide range of treatment options an athletics therapist's main goal is to help clients remain or get back to their normal level of physical activity.

Where do athletic therapists Work?

- Sports medicine and therapy clinics
- Professional sports leagues
- Research at universities and colleges
- Insurance
- Sales and marketing
- Government

Canadian Athletic Therapy Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=320#h5p-121

Relevant websites

- CATA – Canadian Athletic Therapists Association
- OATA – Ontario Athletic Therapist Association
- MATA – Manitoba Athletic Therapist Association
- CTSQ – La corporation des thérapeutes du sport du Quebec
- AATA – Alberta Athletic Therapists Association

Need more support with deciding if becoming an Athletic Therapist is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Chiropractic School

Getting Started

Considering becoming a Chiropractor? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Chiropractic Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=326#h5p-120

Every school has their own admissions process and requirements. Refer to each school's website for more information.

Ontario license requirements

Completing Chiropractic College does not provide you with the license to practice. It is necessary to meet the requirements of each provincial regulatory body in order to receive your certificates of registration. Regulatory boards such as the College of Chiropractors of Ontario will generally require letters of reference, passing the CCO legislation and ethics examination, criminal screening, and an interview.

After successfully graduating from the CMCC, individuals wishing to seek licensing within Ontario must meet certain requirements within 2 years of graduation.

All chiropractors in Ontario must be members of the College of Chiropractors of Ontario (CCO).

To be considered for registration, you must apply to the CCO, as well as complete 3 examinations

Learn more at here.

Canadian Chiropractic Examining Board (CCEB) examinations consist of 3 different component exams:

1. Component A – Chiropractic Knowledge
2. Component B – Clinical Decision Making
3. Component C – Clinical Skill Demonstration

*Note that there is a limit of 4 attempts on each exam

Relevant websites

- Canadian Chiropractic Association
- College of Chiropractors of Ontario
- Ontario Chiropractic Association

Need more support with deciding if becoming a Chiropractor is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

Dental School

Getting Started

Considering Dentistry? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Dentistry Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=77#h5p-115

Relevant websites

- Canadian Dental Association
- Royal College of Dental Surgeons of Ontario
- Canadian Association of Orthodontists
- Ontario Association for Public Health Dentistry
- Ontario Association of Orthodontists
- Toronto Academy of Dentistry
- Commission on Dental Accreditation of Canada

General Admission Information

Every dental school has their own admissions process and requirements. Refer to each school's website for more information. Below are some general admission pieces and requirements you may find.

- Completion of Dental Aptitude Test (DAT) by the Canadian Dental Association)
- Completion of CASPer Test

- Completion of required courses
- Interview
- Autobiographical Sketch and/or Personal Statement
- Proof of required vaccinations
- Police Records check with vulnerable sector screening

Other considerations

- Dental school can take a minimum of 4-5 years depending on whether students pursue a dental specialty
- There are ten nationally recognized dental specialties in Canada:

1. Dental Public Health
2. Endodontics
3. Oral Maxillofacial Surgery
4. Oral Medicine and Pathology
5. Oral and Maxillofacial Radiology
6. Orthodontics and Dentofacial Orthopedics
7. Pediatric Dentistry
8. Periodontics
9. Dental Anesthesia
10. Prosthodontics

Need more support with deciding if Dentistry is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

Dietitian

Getting Started

Considering becoming a Dietitian? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Programs in Ontario

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=323#h5p-119

What is a dietitian and a nutritionist?

Dietitians and nutritionists plan, organize, conduct, and supervise programs in nutrition, diet and food service. They are employed in a variety of settings including hospitals, extended care facilities, public health centers, the food and beverage industry, educational institutions, sports organizations, and government, or they may be self-employed.

The titles “Registered Dietitian”, “Dietitian” are protected by law. These titles can only be used by those who have met national standards. The Law does not protect the term “Nutritionist” in all provinces, so people with different levels of training and knowledge can call themselves “Nutritionist.”

Dietitians and nutritionists perform some or all of the following duties

- Develop, administer, and supervise nutrition and food preparation and service programs in hospitals, nursing homes, schools, company cafeterias or similar settings
- Evaluate nutritional status of individuals and provide nutrition counselling and consulting to health professionals, dietetic interns, community groups, government, media, and individuals
- Aid in the prevention and/or treatment of inadequate nutrition
- Plan, evaluate and conduct nutrition education programs and develop educational materials for various

audiences
- Practice on an individual basis or as a member of an interdisciplinary team to determine nutritional needs of patients and to plan normal and therapeutic menus
- Study and analyze scientific nutritional studies and conduct research to improve the nutritional value, taste, appearance, and preparation of food.

* Information from the Dietitians of Canada

Example titles of dietitians and nutritionists

- Administrative Dietitian
- Clinical Dietitian
- Community Dietitian
- Consultant Dietitian
- Dietitian
- Nutrition and Dietetics Researcher
- Nutritionist
- Public Health Nutritionist
- Registered Dietitian (RD)
- Registered Nutritionist

Relevant websites

- College of Dietitians of Ontario
- Dietitians of Canada

Need more support with deciding if becoming a Dietitian is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV

- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Law School

Getting Started

Considering Law? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Law Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=329#h5p-124

General application information

Ontario law school applications are administered by the Ontario Universities Law School Application Service (OLSAS). Every school has their own admissions process and requirements. Refer to each school's website for more information. Some common requirements to expect:

- Minimum of three years completion of an undergraduate program; preference may be given to students who have completed their degree
- LSAT scores
- Autobiographical sketch
- Personal statement
- Supplemental Application Form
- Letters of Reference

OLSAS applications typically open mid-August with a deadline in the first week of November.

How long will law school take to complete?

The first level-law degree takes three years to complete.

Licensing to Practice in Ontario

- Articling – Work under the supervision of a licensed lawyer for ten months.
- Complete the Law Society of Upper Canada's Law Practice Program (alternative to articling) – A four-month training course and a four-month work placement.
- Complete Barrister and Solicitor examinations administered by the Law Society of Upper Canada offered three times per year.

Relevant websites

- Canadian Legal FAQ's
- Federation of Law Societies of Canada
- Law School Admissions Council
- Ontario Bar Association
- Ontario Universities Law School Application Centre

Need more support with deciding if Law is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

MBA Programs

Getting Started

Considering MBA programs? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

What is an MBA?

An MBA (Master of Business Administration) is a program which provides specialized education in areas such as accounting, finance, marketing and management. An MBA can be a beneficial degree choice for working professionals who need to obtain additional education to further their careers and climb the corporate ladder to executive and senior management positions. MBA programs are meant to deepen students' understanding of business management as well as further develop their critical thinking, analytical and problem-solving skills.

Canadian MBA Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=334#h5p-126

Which schools offer an MBA program with a co-op option?

- McMaster University
- Wilfred Laurier University
- University of Windsor
- Carleton University

General Admission Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. If you have specific questions you are encouraged to contact the school of interest directly. Below are some common admissions requirements to expect.

- Honours degree with minimum B (8 on the McMaster scale) average for the last 60 units.
- Past courses taken in quantitative studies.
- What are the non-academic admissions requirements?
- Minimum GMAT score
- Completion of an application form which consists of a resume (or C.V), transcripts, reference letters and short answer/essay questions.

Relevant websites

- Grad Source
- MBA.com

Need more support with deciding if pursing a MBA is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

Medical School

Getting Started

Considering studying Medicine? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Is Medicine Right For Me?

Why do I want to become a doctor?

Reflect on your motivations for pursuing a career in medicine. Are you driven by a genuine passion for science, a desire to help others through healthcare, or personal experiences that have inspired you? Are you aware of the day-to-day work-life of a doctor? If you're not sure, get some experience! Volunteer in a medical setting, shadow or talk doctors and get some hands-on exposure in a healthcare setting.

Am I prepared for the academic, personal and financial challenges of medical school?

Consider if you're ready to handle the rigorous coursework, long hours of study, and the emotional demands of medical training. Medical school is expensive, and it will be many years before you're earning a good salary – consider if that timeline and financial commitment aligns with other life milestones and goals.

How do I handle stress and high-pressure situations?

Evaluate your coping mechanisms and resilience. Medical training and practice often involve high-stress environments and critical decision-making under pressure.

Do I align with the attributes and skills needed to be a physician?

Assess how well you resonate with the CanMEDS framework, which includes being a Communicator, Collaborator, Leader, Health Advocate, Scholar, and Professional. These roles are integral to the practice of medicine and your alignment with them is crucial for a successful career.

What are alternative career pathways to medicine?

Acceptance to medical school is extremely competitive, so it's important to consider alternative Plan A's. There are many career possibilities for everyone! Your studies at McMaster is a time of change and exploration – keep an open mind to other career possibilities. With new academic experiences, you will experience growth as a person, changing relationships with family and friends, new career interests and evolving values. If you learn something new and choose a path other than medicine, it's normal and common! Changing your mind can be a sign of maturity and open mindedness, trust your own values and interests!

If you need more ideas on what kind of career paths your degree can lead to, we have chapters dedicated to every department of study:

- Careers in Biochemistry
- Careers in Biology
- Careers in Chemistry and Chemical Biology
- Careers in Environmental Earth Sciences
- Careers in Kinesiology
- Careers in Life Sciences
- Careers in Mathematics and Statistics
- Careers in Medical and Health Physics
- Careers in Physics and Astronomy
- Careers in Psychology, Neurosciences and Behaviour

You may want to explore our resource on other Regulated Healthcare Professions.

Canadian Medical Schools

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=314#h5p-129

Note On International Medical Schools

Before considering any Medical School, it is important to determine if the institution you are applying to is both recognized and accredited. The academic institution, name of your medical degree, and year of your graduation must be listed in the International Medical Education Directory to be accepted into Canada. To access this information, visit the Foundation of Advancement of International Medical Education and Research (FAIMER) and review the International Medical Education Directory.

General Admission Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. If you have a question regarding course equivalency, please contact the school directly. Be specific and send the description of the course (from the course calendar) identifying the prerequisite you want considered.

Reminders and resources:

- There is no specific program that is required or preferred to enter into Medical School. Students have been admitted to Medical Schools from a variety of undergraduate programs.
- The application process to Ontario's medical schools is centralized through OMSAS.
- For other Canadian medical schools, apply directly to the University school's website.
- For the competencies and skills you should develop as a future physician, reference the CanMEDS framework from the Royal College of Physicians and Surgeons of Canada.
- For information on medical schools abroad, consult Student Success Centre's guide.

Resources on Multiple Mini Interviews

Some Medical School's admission process involves participating in an MMI. Review Student Success Centre's Tips for MMIs. Sample questions are provided by:

- University of Calgary
- University of Saskatchewan
- University of British Columbia

Organizing Your Application

- **Do your research:** Every medical school has different application requirements. Create a document to keep track of each school's university study requirements, GPA calculation, pre-requisite courses, letters of reference, autobiographical sketch instructions, essays questions and standardized tests.
- **Create a timeline:** Develop a detailed timeline that includes all major milestones, such as MCAT preparation and test dates, course completion and application deadlines. For Ontario medical schools, the

application portal opens in July and closes early October – admission requirements can change each cycle.

- **Document Your Activities:** Keep a record of your extracurricular activities, research experience, volunteering, paid work and other activities (including supervisors to verify your activities).
- **Set Goals and Deadlines:** Break down the application process into manageable tasks and set specific goals and deadlines for each step to stay on track.
- **Seek Support:** Attend medical school information sessions, seek support from the SCCE, talk to current medical students, or connect with peers & friends.
- **Learn about Access Pathways:** If you are a member of an equity-seeking group, there are supports to help you navigate the med school application process.

Extracurriculars

Building a strong profile for your medical school application involves more than academic excellence. Medical schools are assessing your application holistically and are interested in learning about your life experiences, values, competencies, interests and other non-academic traits. Consult the CanMEDs framework and engage in activities that you have a genuine interest and passion to develop your skills as a Communicator, Collaborator, Leader, Health Advocate, Scholar and Professional.

Some examples of activities you could pursue:

- Research
- Leadership (clubs, sports, working groups)
- Volunteering/community service
- Hands-on experience in a healthcare setting
- Hobbies and passion projects
- Paid work

To enhance their application profile, some students pursue graduate-level studies to gain additional research experience, professional activities and strengthen their professional relationships for references (professors/supervisors). Note: most med schools do not give a GPA boost for graduate studies.

Relevant websites

- Association of Faculties of Medicine of Canada
- Canadian Federation of Medical Students
- College of Physicians and Surgeons of Ontario
- Ontario Medical Association
- Canadian Association for Medical Education
- Canadian Medical Association
- Royal College of Physicians and Surgeons of Canada
- College of Family Physicians of Canada
- Association of American Medical Colleges
- Accreditation Council of Graduate Medical Education

Need more support with deciding if studying Medicine is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Naturopathy Schools

Getting Started

Considering studying Naturopathy? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

What is naturopathic medicine?

Naturopathic medicine is a health care profession that focuses on prevention, treatment and overall quality of health through a self-healing process. It combines scientific knowledge with traditional and natural forms of medicine and focuses on using the body`s natural ability to heal itself.

What is the difference between naturopathic medicine and conventional medicine?

Both are similarly trained doctors, but the major difference between naturopathic doctors (NDs) and conventional doctors is the philosophies and therapies that they use. Conventional Doctors address medical treatment with pharmaceuticals and or surgery, whereas NDs address areas such as the physical, environmental and emotional aspects of health.

Programs in Naturopathy

These are naturopathy schools accredited by the Council on Naturopathic Medical Education in Canada and USA. Every school has their own admissions process and requirements. Refer to each school's website for more information.

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=337#h5p-122

Relevant websites

- Canadian Association of Naturopathic Doctors
- Ontario Association of Naturopathic Doctors
- Public Health Agency of Canada
- Nova Scotia Association of Naturopathic Doctors
- The British Columbia Naturopathic Association
- Manitoba Naturopathic Association
- Saskatchewan Association of Naturopathic Practitioners
- The International Naturopathic Students' Association

Need more support with deciding if studying Naturopathy is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Optometry School

Getting Started

Considering Optometry? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Finding Optometry Schools and Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=340#h5p-113

Relevant websites

- Association of School and Colleges of Optometry
- Canadian Association of Optometry Students
- Canadian Association of Optometrists
- College of Optometrists of Ontario
- Ontario Association of Optometrists
- University of Waterloo Optometry Student Society

General Admissions Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. Below are some general admission pieces and requirements you may find.

Academic requirements

- Completion of 3 or more years of a Bachelor of Science degree with a minimum overall average
- Completion of all specified Optometry prerequisite courses

Non-academic requirements

- Optometry shadowing or volunteer experience
- Completion of Optometry Admissions Test (OAT)
- Completion of CASPer Test: an online test which assesses non-cognitive skills and interpersonal characteristics
- Letter of References
- Interview

OAT

The Optometry Admission Test (OAT) is a standardized test sponsored by the Association of Schools and Colleges of Optometry (ASCO) to test general scientific information. Completion of the OAT may be required for entry into an optometry program. Visit each schools' specific optometry admissions website for more information.

There are four components to the OAT:

1. Survey of the Natural Sciences (Biology, Chemistry, Organic Chemistry)
2. Reading Comprehension
3. Physics
4. Quantitative Reasoning

Canadian optometry practice requirements

Once students graduate from an optometry program, they are required to pass the profession's registration exam and jurisprudence exam in order to practice. Exams should be taken in the region they wish to practice. In Ontario, registration exams are administered by the Canadian Examiners in Optometry (CEO-ECO) and jurisprudence exams are administered by the College of Optometrists of Ontario.

More information regarding exams and steps to becoming a Doctor of Optometry in Ontario can be found here and here.

Need more support with deciding if Optometry is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

Pharmacy School

Getting Started

Considering Pharmacy? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

How to become a Pharmacist?

If you're considering a career in pharmacy, the University of Waterloo's **Manual: How to Become a Pharmacist** offers a helpful overview of the education and steps required to enter the profession. This resource is a great starting point for understanding the pathway and planning your next steps.

Finding Canadian Pharmacy Schools and Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=343#h5p-112

Relevant websites

- Association of Faculties of Pharmacy of Canada
- Canadian Pharmacists Association
- Canadian Association of Pharmacy Students and Interns
- Canadian Society for Pharmaceutical Sciences
- National Association of Pharmacy Regulatory Authorities
- Ontario College of Pharmacists
- Ontario Pharmacists Association
- Pharmacy Examining Board of Canada

General Admissions Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. Below are some general admission pieces and requirements you may find.

- completion of a certain number of years of post-secondary university education
- completion of prerequisite courses
- minimum Grade Point Average (GPA)
- Completion of a Pharmacy Admission Information Form (AIF)
- Completion of CASPer: an online test which assesses for non-cognitive skills and interpersonal characteristics
- Completion of Snapshot: a three-question one-way interview tool used to highlight applicants' communication skills and motivation for the profession
- Letters of Reference
- Interview
- Documentation of up-to-date immunizations

Pharmacy In The US

- For more information on admissions and processes of pursuing Pharmacy in the US, visit the American Association of Colleges of Pharmacy (AACP) website.
- For more information on individual Pharmacy school requirements, visit PharmCAS, a website run by the AACP which serves as a centralized application service for students applying to colleges and schools of pharmacy across the United States.
- Individual schools will have their own admission requirements for prospective students; thus interested applicants are strongly urged to pay attention to all requirements before applying to the school of their choice.

Need more support with deciding if Pharmacy is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School

- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Psychology Graduate Programs

Getting Started

Considering further studies in Psychology? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Clinical psychology vs. counselling psychology

- Clinical psychology has focus in psychopathology, assessment and intervention for individuals who suffer from mental and physical disorders.
- Counselling psychology supports individuals through "everyday experiences" typically with focus on the individual's personal growth.

The practice of psychology in Ontario

The practice of psychology is a regulated healthcare profession in Ontario. The practice is monitored by The College of Psychologists of Ontario (CPO). The CPO offers two certificates of registration which authorize autonomous practice in psychology:

Psychologist

- Doctoral degree (3-5 years in length) with practical experience as part of doctoral studies
- One year of on-the-job training

Psychological Associate

- Master's degree (1-2 years in length) in psychology
- Five years of practical training

In Ontario, Psychologists and Psychological Associates work within the same scope of practice and are required to pass the same licensing exams. The difference between the two certifications is the type of education and training completed as listed above.

Qualifying for practice

Psychologist

In order to meet the degree requirements for registration as a psychologist, applicants must complete a doctoral program that is accredited by the Canadian Psychological Association (CPA) or another accrediting body. Contact universities to confirm their accreditation status.

Psychological associate

The CPA does not accredit masters-level programs; however, the CPO does accept applications from master's level programs for registration as a psychological associate. Contact universities to determine program eligibility for registration as a psychological associate with the CPO.

Clinical and Counseling Psychology Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: *https://ecampusontario.pressbooks.pub/scec/?p=358#h5p-123*

General Admissions Information

Every school has their own admissions process and requirements. Refer to each school's website for more information. Below are some general admission pieces and requirements you may find.

- 4-year Honours degree in Psychology or in a relevant field
- Completed courses in research methods or statistics
- Statement of Interest
- Letter of References
- Curriculum Vitae
- Interview

Relevant websites

- Canadian Counselling and Psychotherapy Association
- Canadian Council of Professional Psychology Programs
- Canadian Mental Health Association
- Canadian Psychological Association
- Canadian Universities Career Guide
- College of Psychologists of Ontario
- Ontario Psychological Association

Need more support with deciding if further studies in Psychology is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Physician Assistant Training

Getting Started

Considering becoming a Physician Assistant? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

What is a Physician Assistant?

A Physician Assistant is a health care professional who provides a broad range of medical services while working under the supervision of a physician. Physician Assistants help to increase access to health care in a timely manner and reduce the workload of physicians to ensure excellence in health care.

Canadian Physician Assistant Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=346#h5p-117

Every school has their own admissions process and requirements. Refer to each school's website for more information.

How are Physician Assistants trained?

Physician Assistant programs consist of a unique combination between academics and clinical placements in a problem-based learning format. In this format, clinical problems require students to understand the underlying biological, physical and behavioral principles and integrate this knowledge with appropriate collection of data

and appraisal of evidence in order to find a solution. In this way, students are able create lifelong working and learning habits that allow them to work within a team and learn from their peers.

Relevant websites

- Canadian Association of Physician Assistants
- Canadian Medical Association – Physician Assistants
- Health Force Ontario – Physician Assistants

Need more support with deciding if becoming a Physician Assistant is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC
Stay informed on upcoming workshops, information sessions and application tips.

Rehabilitation Sciences

Getting Started

Considering Rehabilitation Sciences? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Rehabilitation Science Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=349#h5p-116

More information about rehabilitation sciences

Occupational Therapy: Aims to help people learn or re-learn activities of daily living, including dressing, bathing, preparing meals, answering the phone or getting up after a fall. Occupational therapists often do this by breaking activities into smaller steps and/or suggesting adaptive devices or mobility equipment to patients.

Physical Therapy/Physiotherapy: Aims to restore physical function and range of motion through treatment of the anatomy. Physical Therapists work with patients pre or post-surgery, after injury or accidents, and through illnesses, age related conditions and chronic disease,

Audiology: Aims to maintain function and maximize communication in patients with hearing impairments. Audiologists will assess and evaluate auditory function, as well as fit and dispense a variety of assistive listening devices as required.

Speech-Language Pathology: Aims to assess, treat and manage communication (i.e. speech, language and voice) and swallowing disorders. Speech-Language Pathologists treat disorders such as Aphasia, Apraxia, Cleft Palate, Dysphagia and Selective Mutism.

Rehabilitation Science (Thesis/Research option): Aims to develop advanced knowledge and evaluation skills in the field, allowing graduates to contribute to Rehabilitation Sciences through research and leadership.

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends

What occupation areas build on rehabilitation sciences?

- Art Therapy
- Disability & Career Counseling
- Music Therapy
- Psychiatry
- Respiratory Therapy
- Recreational Therapy
- Speech and Language Therapy
- Palliative & Hospice Care
- Social Work
- Consulting and Management
- Nursing Specializations
- Occupational Health and Safety
- Ethics
- Osteopathology

Relevant websites

- Canadian Association of Occupational Therapists
- Canadian Occupational Therapy Foundation
- Canadian Physiotherapy Association
- College of Occupational Therapists of Ontario

Ontario Rehabilitation Sciences Programs Application Service (ORPAS)

- Applications for the Ontario Universities are available on OUAC.
- All entry-to-practice rehabilitation science programs including occupational therapy, physical/ physiotherapy, speech-language pathology and audiology.
- Every school has their own admissions process and requirements. Refer to each school's website for more information.

Need more support with deciding if rehabilitation sciences are right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Regulated Healthcare Professions

Below is a list of all regulated healthcare professions in Ontario. Click on the job titles to learn more.

- Audiologist and Speech-Language Pathologist
- Midwife
- Chiropodist
- Naturopath
- Chiropractor
- Nurse
- Dental Hygienist
- Occupational Therapist
- Dentistry
- Optician
- Dental Technologist
- Optometrist
- Denturist
- Pharmacist
- Pharmacist Technician
- Dietitian
- Physician and Surgeon
- Homeopath
- Physiotherapist
- Kinesiologist
- Psychologist
- Massage Therapy
- Psychotherapist and Registered Mental Health Therapist
- Medical Laboratory Technologist
- Respiratory Therapist
- Medical Radiation Technologist
- Traditional Chinese Medicine Practitioner and Acupuncturist

Want to explore more occupations of interest? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Additional Resources To Explore

- Government of Canada – Health: National health policy, drug regulation, and public health initiatives.
- Health Force Ontario: Recruitment and support for health professionals in Ontario.
- Health Profession Regulators of Ontario (HPRO): Oversight of Ontario's regulated health professions and public protection.

Need more support with exploring your options?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Teacher's College

Getting Started

Considering Teacher's College? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Programs in Ontario

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=352#h5p-128

Teacher's College applications are administered by Ontario Universities Application Service TEAS. Every school has their own admissions process and requirements. Refer to each school's website for more information.

What grade do I want to teach?

- Primary/Junior (Junior Kindergarten-Grade 6) – You are not required to select a specific teaching subject
- Junior/Intermediate (Grade 4-10) – You are required to select 1 teaching subject
- Intermediate/Senior (Grade 7-12) – You are required to select 2 teaching subjects

*Please note that not all teachers' colleges offer the same teachable subjects or grade level qualifications

How many units do I need for a teachable subject?

- At the Junior/Intermediate level, you will generally need 18-24 units in 1 teaching subject (generally a minimum of 6 units being level 2 or above)
- At the Intermediate/Senior level, you will generally need 30-36 units in 1 teaching subject (generally a

minimum of 6 units being level 2 or above), and 18-24 units in a second teaching subject (generally a minimum of 3 units being level 2 or above)
- For specific requirements please refer to OUAC.

What do I need to do to be a competitive candidate?

- Complete all required courses to achieve your teachable subjects
- Maintain an overall average above the minimum
- Junior/Intermediate: Gain volunteer or work experience with the age group you want to teach
- Intermediate/Senior: Gain experience in your teaching subjects
- Effectively convey your experiences/ skills through your Experience Profile

What if I have a Life Science degree?

- Consult each school's section in the TEAS information handbook for a list of teachable subjects offered and the requirements to qualify
- You will be required to complete a concentration of courses in one or two disciplines to teach at the Junior/ Intermediate or Intermediate/Senior level

Relevant websites

- Canadian Teachers' Federation
- Education Canada
- Ontario College of Teachers
- Ontario Ministry of Training & Education
- Apply to Education

Need more support with deciding if Teacher's College is right for you?

Meet with a Science Career Advisor
Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3
Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

Veterinary Medicine School

Getting Started

Considering Veterinary Medicine? This chapter is to help you explore, plan, and navigate the process of exploring your options and applying.

We recommend starting with the following chapter, Applying to Graduate and Professional School.

For personalized support, book an appointment with a Science Career Advisor at the Science Careers & Experience Centre (BSB 127) on OSCARplus.

Canadian Veterinary Medicine Programs

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=355#h5p-118

Typical entrance requirements

Every school has their own admissions process and requirements. Refer to each school's website for more information. Some requirements may include:

- Complete a minimum of three years in an undergraduate science program
- Complete required pre-requisite courses
- Gain practical hands-on experience working with animals
- Complete a Background Information Form
- Letters of Reference
- Interview

Relevant websites

- Canadian Veterinary Medical Association
- College of Veterinarians of Ontario
- International Veterinary Students' Association

- National Board of Veterinary Medical Examiners
- Ontario Veterinary Medical Association
- World Veterinary Association
- College of Integrative Veterinary Therapies
- Veterinarians Without Borders
- Association of American Veterinary Medical Colleges

What is the difference between a Veterinarian and a Veterinary Technician?

- Veterinarians are doctors with four years of medical school training
- Veterinary Technicians have a role analogous to nurses and have a college degree in a Veterinary Technology program. Learn more at Ontario Colleges.

What are some other career opportunities for working with animals?

- Animal Care Attendant
- Animal Control Officers
- Biologist
- Animal Groomer
- Animal Welfare Lawyer
- Zoologist/Zookeeper
- Animal Trainer
- Animal-assisted Therapist
- Animal Nutritionist
- Laboratory technician
- Researcher
- Veterinarian Technician
- Animal Behaviorist

Want to learn more about one of these occupations? Use the Government of Canada Job Bank "Job Profiles" tool to explore job descriptions, education requirements, and labour market trends.

Need more support with deciding if Veterinary Medicine is right for you?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Design your future with SCIENCE 2DL3

Enrol in **SCIENCE 2DL3: Design Your Science Career**— an interactive career development course designed to help undergraduate students take charge of their future with creativity and confidence.

Explore these additional chapters:

- Applying to Graduate and Professional School
- Creating Your Résumé And CV
- Crafting Personal Statements and Letters of Intent
- Requesting Letters of References

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, information sessions and application tips.

LIFE IN THE WORKPLACE: WHAT TO KNOW?

Workplace Professionalism

Transitioning from the classroom to your first co-op, internship, practicum or job involves learning that workplaces have different standards and expectations of behaviour, communication and interactions than other spaces.

Professionalism is a crucial set of skills that show you are reliable, respectful, and ready to contribute. Professionalism is reflected in your attitude, your accountability for your work, and your ability to adapt and positively add to the workplace culture.

It also guides how you communicate, from writing clear emails to participating effectively in meetings. This chapter will provide you with the practical knowledge needed to navigate any professional environment with confidence and build a strong reputation from day one.

The ART of Professionalism

Rhonda Sutton's article, "The ART of Professionalism," invites post-secondary students to view their careers as **creative works**, shaped by intentional choices and behaviors. She reframes professionalism as a **dynamic and personal process**, not just a checklist of technical skills. Instead, it includes human-centered competencies such as **self-awareness, ethical conduct**, and **interpersonal effectiveness**—qualities essential for meaningful collaboration and long-term success.

Sutton introduces the **ART framework** to guide professional growth:

- **Attitude**: How you present yourself, prepare for engagements, and interact with others. Your attitude reflects your internal values and influences how others perceive you.
- **Responsibility**: Taking ownership of your actions, being dependable, and learning from both successes and setbacks. Responsibility builds trust and shows maturity.
- **Trust**: The foundation of strong relationships, built through honesty, empathy, integrity, and reliability. Trust is earned and essential for effective teamwork.

By embodying **Attitude, Responsibility, and Trust**, you can shape not just a career, but a **reputation and legacy** that reflects your values and impact.

Watch: Introduction to Workplace Professionalism

The content in this video covers:

- Standard expectations of professional behaviour in the workplace
- How standards of professionalism vary across different types of workplaces
- How to communicate well at work and write effective emails
- The concept of 'managing up'

One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ecampusontario.pressbooks.pub/scec/?p=1261

Examples of key professional attributes

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1261#h5p-80

Learn more about in-demand professional skills provided by indeed.

Case Studies: Professional vs. Unprofessional Conduct

The stories below are examples of common unprofessional behaviours in the workplace. Flip the card to read about what they could do differently next time.

An interactive H5P element has been excluded from this version of the text. You can view it online here:
https://ecampusontario.pressbooks.pub/scec/?p=1261#h5p-79

An interactive H5P element has been excluded from this version of the text. You can view it online here: https://ecampusontario.pressbooks.pub/scec/?p=1261#h5p-94

Quick Chapter Recap

Professionalism is a learned skill that you can develop over time! Always ask for suggestions and support and know that you will grow in these skills over your career. Room for growth is normal and expected.

Need more support with navigating the workplace?

Meet with a Science Career Advisor

Book a 30-minute appointment with the **Science Careers & Experience Centre (BSB 127)** in advance through OSCARplus.

Explore these additional chapters:

- What is your Professional Identity?
- Introduction to Science Professional Competencies

Follow us on Instagram @McMasterSCEC

Stay informed on upcoming workshops, networking opportunities and career tips from peers, advisors and employers.