What is Chemistry?

Chemistry is a Physical Science that studies composition, structure, properties of and changes in matter. Chemistry, as a central science, bridges biology, physics and astronomy, as well as art, humanities and science allowing us to understand the world. Chemistry examines topics including:

- Chemical composition, structure and reactivity of everything that surrounds us
- Design and synthesis of new compounds (pharmaceuticals, materials, dyes etc.)
- Explanation of chemical change on an atomic and molecular level – understanding what drives the chemical change
- Systematisation of chemical knowledge

Skills of Chemistry Grads

- Engage in team-based research, analysis and problem solving
- Design and/or conduct laboratory research including data collection, analysis and interpretation
- Write technical reports and project proposals
- Present scientific research in an organized and succinct manner for a wide variety of audiences
- Information retrieval and strategic problem solving
- Application of modern analytical and synthetic instrumentation and laboratory techniques
- Statistical reasoning and methodology
- Effective monitoring, observation and measurement techniques

What makes Chemistry at UTSC unique?

- The chemistry specialist programs has award-winning, highly motivated and engaging instructors as well as dedicated program supervisors
- The practical component of the programs takes place in a new building with state-of-the-art space and instrumentation.

Entry-Level Jobs for Bachelor Grads

Common employment destinations include:

- Water Treatment Plant Operator in City Services
- Document Controller in Manufacturing
- Quality Control Supervisor in Pharmaceuticals
- Chemist Policy Analyst in Government
- Clinical Research Assistant in Hospitals
- Clinical Sales Representative in Medical Supplies
- Project Technician in Waste Management
- Junior Environmental Scientist in Energy Production
- Medical Laboratory Assistant in Healthcare

The Career Directory: www.canadastop100.com/tcd

Graduate & Professional Studies

Popular further education opportunities include:

- Professional schools:
  - Medicine
  - Pharmacy
  - Law
  - Chemical engineering
- Further graduate education:
  - Chemistry – Master and PhD (as a specialization in one of many chemistry disciplines)
  - Chemical technology – graduate degree
  - Education – Diploma or masters

Use LinkedIn!

UTSC Chemistry graduates are working in Research, Education, Healthcare and Operations.

Attend our LinkedIn workshop to learn about the Find Alumni tool!

Chemistry Grads from UTSC have gone on to:

- McDonald’s
- Restaurants Canada (Director)
- YRDSB (Teacher)
- Vive Crop Protection (Laboratory Coordinator)
Examples of Fields that ‘Fit’ the Skills of Chemistry Grads

- Health & Safety
- Government (Municipal, Regional, Provincial, Federal)
- Education
- Research & Development
- Waste Management
- Forestry & Mining
- Biotechnology
- Food Science

Your 4-Year Career Exploration Action Plan

1. Do Your Research

The databases below provide you with details about job prospects, nature of work, educational requirements, working conditions, pay and related career paths:

Career Cruising: Log into cln.utoronto.ca, click on Resources, and click on Career Cruising to be logged in automatically

O*Net: online.onetcenter.org (U.S. site)

Attend our workshop Discover Your Skills and Career Options, meet with a Career Counsellor, and use our resources to get to know your skills, values, personality and interests:

www.utsc.utoronto.ca/aacc/get-know-yourself

Use the advice on our tip sheets for gathering info:

- Information Interviews
- Working On-Campus
- Internships
- Volunteering

2. Explore Career Options & Get Experience

Gain exposure to your options in the world of work and make connections while you’re a student via campus events and programs listed on cln.utoronto.ca and ccr.utoronto.ca:

- Extern Job Shadowing
- In the Field
- Explore It! (course-based)
- Partners in Leadership (4th year students)
- iLead, uLead, weLead (Dep’t of Student Life)
- Employer Information Sessions
- Career & Volunteer Fairs
- Departmental Student Association Events

Apply for Work Study jobs on CLN in the Fall and Spring! You might also find work via www.scsu.ca/jobs.

Find networking opportunities, internship programs and entry-level jobs via websites like www.talentegg.ca and www.charityvillage.ca.

As an upper year student (14+ credits), attend UTSC’s Get Hired Conference and participate in Jobs for Grad.

As a graduate, explore internships and other trainee programs like www.careeredge.ca

3. Build Your Network

Explore Professional Associations and get involved: volunteer for their events and conferences, and get to know people in your industry of interest. These are your future mentors, supervisors and colleagues!

Environmental & Physical Sciences Student Association - www.myepsa.ca
Association of the Chemical Profession of Ontario - www.acpo.on.ca
The Chemical Institute of Canada - www.cheminst.ca
Canadian Society of Clinical Chemists (CSCC) - www.csc.ca
Canadian Institute of Food Science and Technology - www.ift.org
Canadian Forestry Association - www.canadianforestry.com
Mining Association of Canada - www.mining.ca
Canadian Education Association - www.cea-ace.ca
Infrastructure Health & Safety Ontario - www.ihsa.ca

Please note: This document is a starting point for your further research into career options in this field of study. For more information on this program and course requirements, please visit the departmental website at the top of the first page.