Compute Ontario Summer School

Information Session

Compute Ontario

Presented by:
Ann Allan
Training Coordinator

Brief Overview

- For more information about this year's offerings Attend:
  - Overview of Training Opportunities in the School and "Beyond"
  - Instructed by Ramses van Zon.

- June 1 – June 19
- Over 40 courses delivered by experts in the field
- Topics including Advanced Research Computing (ARC), High Performance Computing (HPC), Research Data Management (RDM), and Research Software (RS).
- Introductory, intermediate and advanced level courses, there is something for everyone.

Compute Ontario

How do I Enrol in Courses?

1. Sign-up or Sign-in

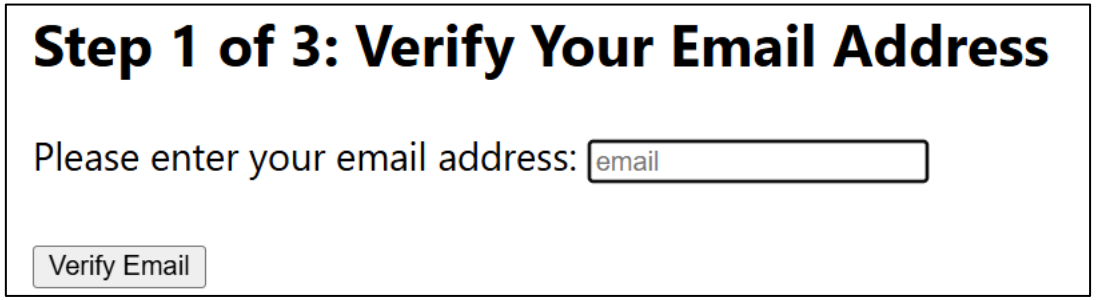
Create a Compute Ontario Training Account or Log-in

2. Enrol in Courses

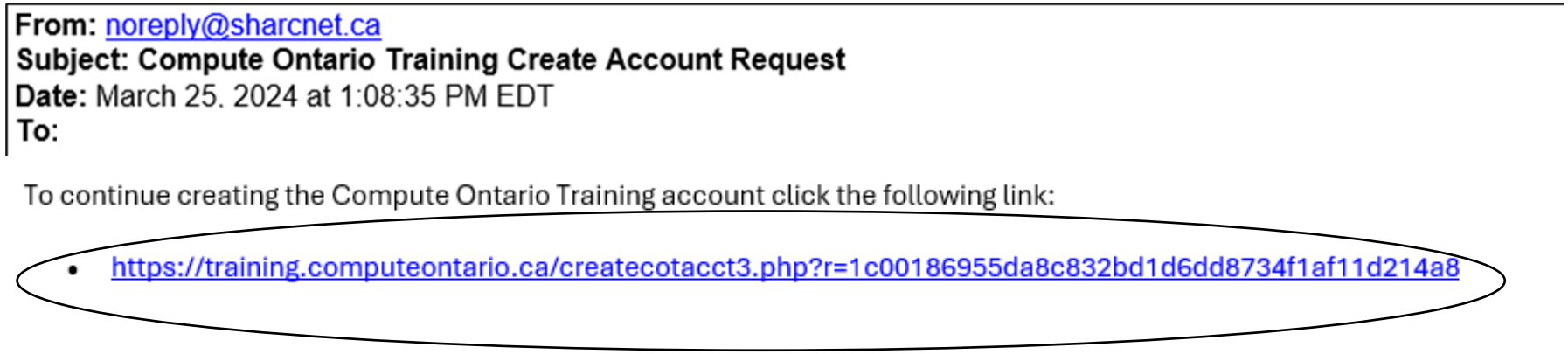
Select courses on the Summer School Landing page

Sign-up: Creating a Compute Ontario Training Account

1. Provide your email address



2. Open your email and select the first link: circled below



Sign-up: Creating a Compute Ontario Training Account

3. Provide your account information:

- Link in Email will lead to step 3

Step 3 of 3: Provide Account Information

Thank you for verifying your email. Please fill out the account information below:

First Name: First Name
Last/Family Name: Last/Family Name
Email:
Preferred Username: cot- (NOTE: This username is **not** guaranteed.)
Password: Password
Re-type Password: Re-type Password
Phone: Phone
Institution: Institution
Department: Department
City: City
Country: CA
Language: English

Create Account

Sign-In

Compute Ontario Training Login Page

Log in using your account credentials:

Username:

Username

(NOTE: You cannot use your email address to log in.)

Password:

Password

Log in

Forgot Username? :: Forgot Password?

Note:

You may have previously logged in with your CCDB account

If you would like to keep your account data when creating a Compute Ontario Training account, contact support@tech.alliancecan.ca with the subject "COSS 2026"

Don't forget to add 'cot-' to the beginning of your username.

Enrol in Courses

1. Select Link to Course underneath the course title on the Landing Page

:: Mon., June 1 ::
9:00 AM to 10:25 AM EDT

Overview of training opportunity in the School and beyond

:: Link to Course :: Expand description ::

Enrol in Courses

2. Select Enrol me

Overview of Training Opportunities in the School and "Beyond"

Enrolment options

Overview of Training Opportunities in the School and "Beyond"

Description: Are you not sure which workshops to sign up for in this Summer School? In this session, we will give an overview of the program of the Compute Ontario Summer School to help you decide. We'll also show you what other training opportunity in Advanced Research Computing and Research Data Management are available for you in Canada after the summer school.

Teacher: Ramses van Zon (SciNet, University of Toronto)

Level: Introductory

Format: Webinar

Certificate: Attendance

Prerequisites: None

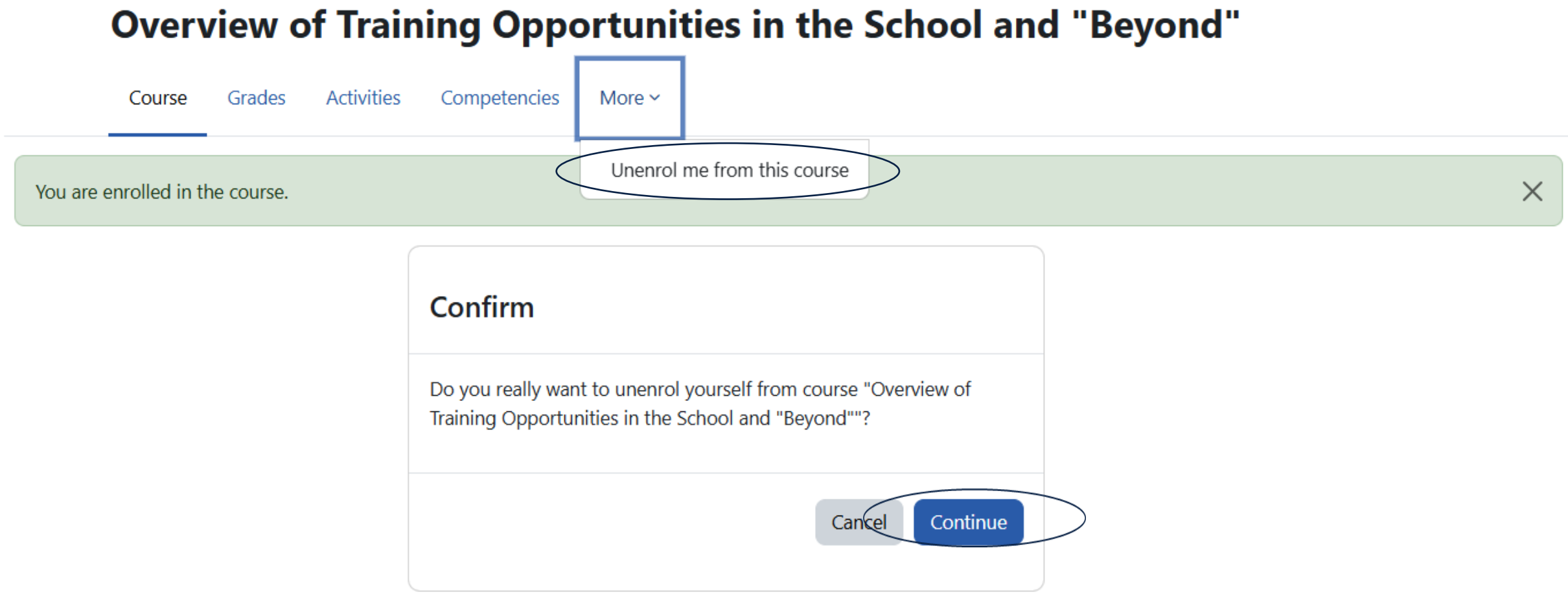
Self enrolment (Participant)

No enrolment key required.

Enrol me

How to Unenrol from a Course

Select "Unenrol me from this course" found in the More menu on each course page



Schedule Notes

- All Course times are listed in EDT
- Some courses overlap so look closely at dates and times
- Please unenrol from courses that you find you are unable to attend so others can enrol (you can re-enrol later)

The link to the frequently asked questions (FAQ page) can be found on the landing page under registration

Compute Ontario

Course Descriptions

- Abstract
- Teacher
- Level (Introductory, Intermediate, Advanced)
- Format (workshop, Lecture + hands-on, webinar, Lecture, Panel)
- Certificate (attendance or Completion)
- Pre-requisites (e.g. experience with a programming language)

Resources for practical activities:

- Laptop
- Magic Castle
- Course specific (check the course main page)

Important Links

Landing Page/Schedule/Enrolment

Create An Account

Log-in

Frequently asked questions (FAQ's)

Contacts

Compute Ontario Training Coordinator: Ann Allan

ann.allan@computeontario.ca

OR

support@tech.alliancecan.ca with the subject "COSS 2026"

Content Overview

- Some courses overlap
- Please check the schedule carefully, you cannot attend two courses simultaneously

Unofficial Subject Streams

- High-Performance Computing (HPC) and Overview
- Research Data Management
- Artificial Intelligence and Machine Learning
- Bioinformatics
- Neuroanalytics
- Programming languages and Tools
- Parallel Programming
- Software Tools and Infrastructure
- Security

General High Performance Computing (HPC) and Overview

:: Mon., June 1 :: 09:00 to 10:25 EDT		**Overview of training opportunity in the School and beyond** :: Link to Course :: Expand description ::
:: Tue., June 2 :: 09:00 to 12:00 EDT		**Introduction to Advanced Research Computing** :: Link to Course :: Expand description ::
:: Fri., June 12 :: 09:00 to 12:00 EDT 13:30 to 16:30 EDT		**Scaling Up HPC Workflows** :: Link to Course :: Expand description ::
:: Thu., June 11 :: 9:00 AM to 12:00 PM EDT	Galaxy Canada	**From Raw Data to Results: No Terminal Required with UseGalaxy.ca!** :: Link to Course :: Expand description ::

Research Data Management

:: Mon., June 8 ::
13:30 to 16:30 EDT

Reproducible Research: Practices and Tools

:: Link to Course :: Expand description ::

:: Tue., June 9 ::
09:00 to 10:25 EDT

From Policy to Practice: Preparing for the Data Deposit Requirement of the Tri-Agency RDM Policy

:: Link to Course :: Expand description ::

:: Tue., June 9 ::
10:35 to 12:00 EDT

REBs & DRI

:: Link to Course :: Expand description ::

:: Tue., June 9 ::
13:30 to 14:55 EDT

Indigenous Data Sovereignty in practice: The Supporting Indigenous Language Revitalization (SILR) Caretaking Directives

:: Link to Course :: Expand description ::

:: Tue., June 9 ::
3:05 PM to 4:30 PM EDT

Introduction to Alliance RDM Services

:: Link to Course :: Expand description ::

Research Data Management

:: Wed., June 10 :: 9:00 AM to 10:25 AM EDT		**Introduction to Data Curation and Deposit** :: Link to Course :: Expand description ::
:: Wed., June 10 :: 10:35 AM to 12:00 PM EDT		**Using Odesi & Scholars GeoPortal for research data discovery, exploration, and reuse** :: Link to Course :: Expand description ::
:: Thu., June 11 :: 3:05 PM to 4:30 PM EDT		**Introduction to data deposit and sharing in Borealis, the Canadian Dataverse Repository** :: Link to Course :: Expand description ::
:: Wed., June 17 :: 1:30 PM to 2:55 PM EDT		**TDM at the University of Toronto Libraries: Services and Platforms** :: Link to Course :: Expand description ::
:: Wed., June 17 :: 3:05 PM to 4:30 PM EDT		**Exploring the intersection of AI, Copyright, and RDM in the Canadian Context** :: Link to Course :: Expand description ::

Artificial Intelligence And Machine Learning

:: Mon., June 1 ::
1:30 PM to 4:30 PM EDT

AI Showcase

:: Link to Course :: Expand description ::

:: Tue., June 2 ::
1:30 PM to 4:30 PM EDT

PyTorch

Profiling AI Software with Pytorch Profiler + Nsight Systems

This course is full.

:: Link to Course :: Expand description ::

:: Mon., June 8 ::
3:05 PM to 4:30 PM EDT

Leveraging Large Language Models for Academic Research: Opportunities, Workflows, and Responsible Use

:: Link to Course :: Expand description ::

:: Mon., June 8 ::
10:35 AM to 12:00 PM EDT

Extracting Information from Health Data using AI

:: Link to Course :: Expand description ::

Artificial Intelligence And Machine Learning

:: Wed., June 10 :: 1:30 PM to 4:30 PM EDT		**Text Mining in the Context of LLMs** :: Link to Course :: Expand description ::
:: Mon., June 15 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT		**Machine learning** :: Link to Course :: Expand description ::
:: Fri., June 19 :: 9:00 AM to 12:00 PM EDT		**Data Preparation for Machine Learning** :: Link to Course :: Expand description ::

Bioinformatics

:: Mon., June 1 :: 9:00 AM to 12:00 PM EDT		**Bioinformatics: Analysis of RNA-sequencing Data** :: Link to Course :: Expand description ::
:: Mon., June 1 :: 1:30 PM to 4:30 PM EDT		**Bioinformatics: Long-read Sequencing Applications** :: Link to Course :: Expand description ::
:: Tue., June 2 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT		**Introduction to Single cell RNA sequencing and analysis** :: Link to Course :: Expand description ::
:: Wed., June 3 :: 10:35 AM to 12:00 PM EDT		**High Performance Rapid Prototyping in Biological Sequence Analysis** :: Link to Course :: Expand description ::
:: Wed., June 3 :: 1:30 PM to 4:30 PM EDT		**Bioinformatics for Pathway Enrichment Analysis** :: Link to Course :: Expand description ::
:: Fri., June 5 :: 9:00 AM to 10:25 AM EDT		**Population genomics in complex agricultural crops: comparing SNP panels and GBS workflows** :: Link to Course :: Expand description ::

Neuroanalytics

:: Tue., June 16 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT **:: Wed., June 17 ::** 9:00 AM to 12:00 PM EDT	 **Introduction to Neural Network Programming** :: Link to Course :: Expand description ::

Programming Languages and Tools

:: Wed., June 3 :: 9:00 AM to 10:25 AM EDT	**Introduction of R Shiny** :: Link to Course :: Expand description ::
:: Wed., June 3 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Introduction to Python** :: Link to Course :: Expand description ::
:: Thu., June 4 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Fortran as a Second Language** :: Link to Course :: Expand description ::
:: Fri., June 5 :: 1:30 PM to 4:30 PM EDT	**Introduction to R** :: Link to Course :: Expand description ::
:: Tue., June 9 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**C as a Second Language** :: Link to Course :: Expand description ::

Programming Languages and Tools

:: Thu., June 11 ::
9:00 AM to 12:00 PM EDT
1:30 PM to 4:30 PM EDT

High Performance Computing in Python

:: Link to Course :: Expand description ::

:: Fri., June 12 ::
9:00 AM to 12:00 PM EDT

Incorporating Other Languages into Python

:: Link to Course :: Expand description ::

:: Mon., June 15 ::
9:00 AM to 12:00 PM EDT
1:30 PM to 4:30 PM EDT

:: Tue., June 16 ::
9:00 AM to 12:00 PM EDT
1:30 PM to 4:30 PM EDT

C++26 and HPC

:: Link to Course :: Expand description ::

:: Wed., June 17 ::
9:00 AM to 12:00 PM EDT
1:30 PM to 4:30 PM EDT

:: Thu., June 18 ::
9:00 AM to 12:00 PM EDT
1:30 PM to 4:30 PM EDT

Introduction to Julia

:: Link to Course :: Expand description ::

Parallel Programming

:: Fri., June 5 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Multicore Parallel Programming with OpenMP** :: Link to Course :: Expand description ::
:: Wed., June 10 :: 1:30 PM to 4:30 PM EDT	**DASK** :: Link to Course :: Expand description ::
:: Wed., June 17 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT **:: Thu., June 18 ::** 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT **:: Fri., June 19 ::** 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	 **Programming GPUs with CUDA** :: Link to Course :: Expand description ::

Software Tools and Infrastructure

:: Mon., June 1 :: 10:35 AM to 12:00 PM EDT	**Interactive Computing with Open OnDemand** :: Link to Course :: Expand description ::
:: Thu., June 4 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Introduction to Linux shell** :: Link to Course :: Expand description ::
:: Mon., June 8 :: 9:00 AM to 12:00 PM EDT	**An Introduction to OpenFoam** :: Link to Course :: Expand description ::
:: Wed., June 10 :: 9:00 AM to 12:00 PM EDT	**Introduction to Version control (Git)** :: Link to Course :: Expand description ::
:: Thu., June 18 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Scientific Visualization with ParaView** :: Link to Course :: Expand description ::
:: Fri., June 19 :: 9:00 AM to 12:00 PM EDT 1:30 PM to 4:30 PM EDT	**Using Apptainer Containers** :: Link to Course :: Expand description ::

Security

:: Mon., June 8 ::
9:00 AM to 10:25 AM EDT

System Security - Defensive Techniques

:: Link to Course :: Expand description ::

:: Mon., June 8 ::
1:30 PM to 2:55 PM EDT

Data security

:: Link to Course :: Expand description ::

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