Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

www.tcd.ie/ssp/CPD/

Trinity College Dublin
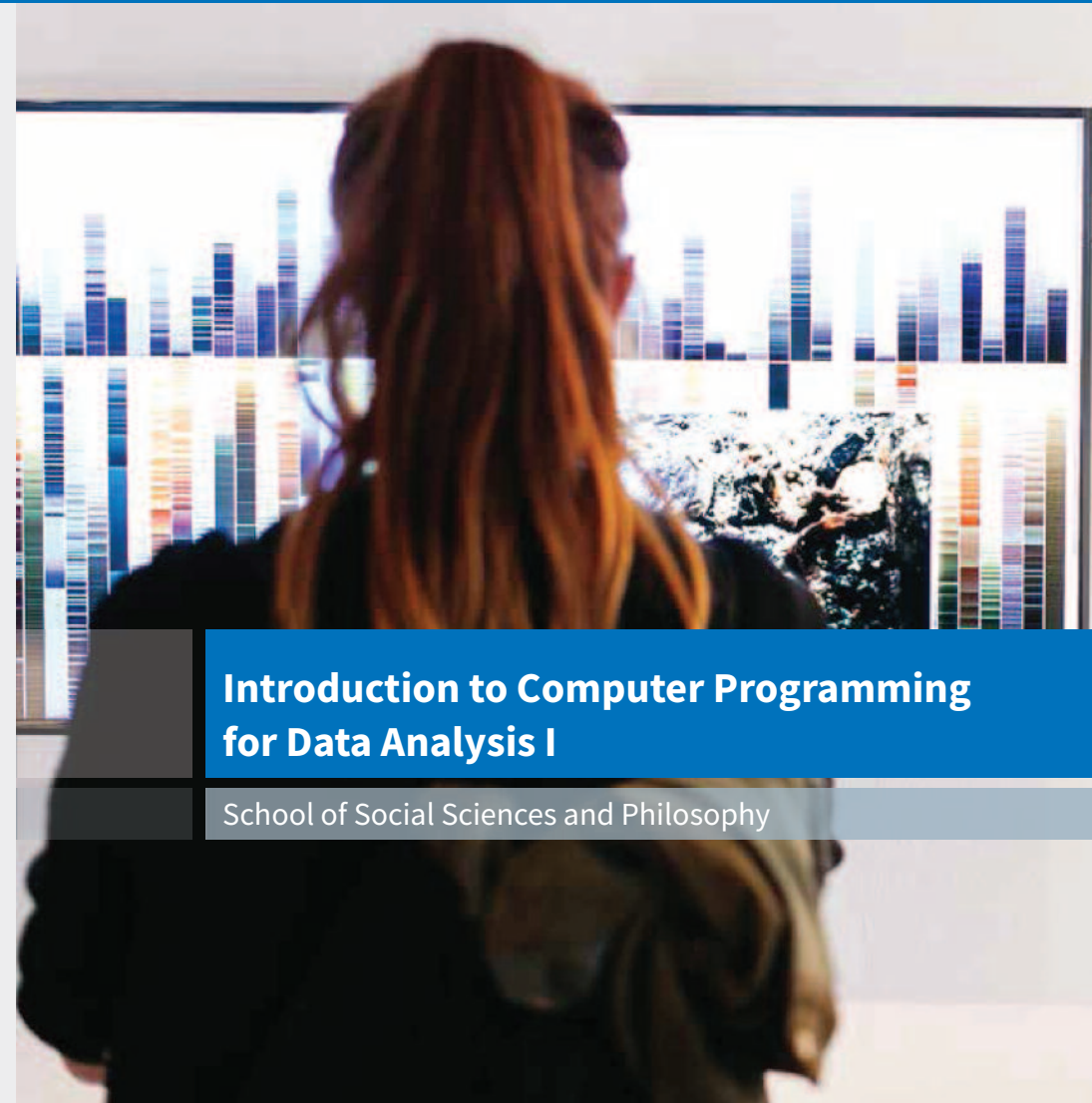Coláiste na Tríonóide, Baile Átha Cliath
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Why study a Continuing Professional Development Programme with the TCD School of Social Science & Philosophy?

This suite of CPD programmes will enable professionals to enhance their skills in data science and trains participants in the fundamental knowledge and skills of social data analysis. These modules have been co-created with key industry partners to address the scarcity of training in data science in Ireland. Some of the benefits of the modules include:

- **Learn in the environment of Ireland's top university**
- **Courses taught by leading Trinity academics**
- **Earn a Certificate of Completion in the selected CPD programme**
- **Access to Trinity's Virtual Learning Environment – Blackboard**
- **Short courses with flexible modes of delivery**
- **Small class sizes**

Who is this course for?

Working professionals from the private and not-for-profit sectors. Managers; HR professionals; product developers; market researchers; service providers; marketers / brand managers and compliance officers from the financial, insurance, legal, IT and consumer products / services industries.

Rialtas na hÉireann
Government of Ireland

FUTURE JOBS IRELAND
Preparing Now for Tomorrow's Economy

HCI Human Capital Initiative

Introduction to Computer Programming for Data Analysis I

School of Social Sciences and Philosophy

Contact   **School of Social Sciences and Philosophy**

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Computer Programming for Social Scientists

The Computer Programming for Social Scientists is part of a programme of Continuous Professional Development in the area of Applied Social Data Analysis that the School of Social Sciences and Philosophy will deliver.

Addressing the scarcity of training in data science in Ireland and co-created with key industry partners, the Computer Programming for Social Scientists CPD programme trains participants in the fundamental knowledge and skills of social data analysis.

What topics will you cover?

On successful completion of the CPD, participants will be able to:
- Describe core programming concepts, language structures, and design principles.
- Demonstrate command of the R programming languages, including the ability to write, execute and debug scripts for social science research.
- Design project workflows through GitHub.
- Perform data transformation, visualization and analysis tasks using R.

The Computer Programming for Social Scientists CPD will introduce participants to fundamental computer programming skills for social data analysis. In particular, it will introduce participants to the R programming language, a state-of-the-art tool for statistical analysis. The aim is for participants to acquire basic programming skills.

In this course students will learn how to apply software engineering and design principles to their project workflow, automate and scale up routine analytical tasks with the help of R programming language.

The Computer Programming for Social Scientists CPD introduces participants to the core programming concepts e.g., functions, variables, conditions, loops, data structures, working with libraries. It also covers data management and visualization. Best practices in project workflow and version control will be introduced using GitHub. Participants will engage with the material in a hands-on environment, which will include programming exercises throughout the CPD.

Choose your delivery mode

Delivery mode 1	Delivery mode 2
5 consecutive weeks One 5-hour session each week on the Trinity Campus	**1 week** 1 week intensive programme 5 hours each day for 5 days on the Trinity Campus
Start Date: 27 April 2022 **End Date:** 25 May 2022	**Start Date:** 22 August 2022 **End Date:** 2 September 2022

How to apply and fees

You can enrol on this module through the Trinity website here:
https://www.tcd.ie/courses/hci-cpd/az-of-cpd-courses/introduction-to-computer-programming-for-data-analysis-1/index.php

The closing date is April 21, 2022.

The course fee of €1,500 includes access to the course materials via Blackboard (Trinity's Virtual Learning Environment) for the duration of the course.
No prior programming experience is required.

Participants should have access to a laptop with camera and a microphone.