London Interdisciplinary Social Science Doctoral Training Partnership

Advanced Research Methods in Social Sciences

Course Code & Title	LISS373 - Introduction to programming using Python				
Convenor(s)	Lina Kramer				
Institution	King's College London		**Department**	Department of Political Economy	
Academic Year	2022-23		**Term**	Spring term	
Number of sessions	4	**Research Platform**	Please choose one of the following: • Quantitative Research (QuT)	**Length of Session(s)**	2h

Day, Date	Start : End	Room Location
19th, April 2023 26th, April 2023 3rd, May 2023 10th, May 2023	09:00 am to 11:00 am	Via Zoom

Enrolment Links:	Available to book on SkillsForge from **Tuesday 11th April 2023**. Click to log in and register: https://training.kcl.ac.uk/kcl/#he/dev/eventDetails,;em,providerCode=LISS,providerOrgAlias=kcl,number=373,; Questions? Visit our Training FAQ here: Frequently Asked Questions - LISS DTP (liss-dtp.ac.uk)

Course Description:

This course is designed for PhD students of the social sciences who wish to learn how to program using Python, a general-purpose programming language that is more and more used in research settings. The course introduces students to an Integrated Development Environment (IDE) interface and the basics of programming with Python. Each session covers a series of topics in form of short lectures with interactive elements. All sessions finish with a self-test and exercise which ought to be completed before the next session. By the end of this course, students will have gained introductory-level programming skills in Python.

Course outline:

Session	Lecture topics
19th April 2023 09:00 – 11:00	• Introduction to Python • Installing Python and an IDE • Basic features of an IDE interface • Data types and common operations • Assigning variables
26th April 2023 09:00 – 11:00	• Lists and common list methods • Tuples and common tuple methods • Dictionaries and common dictionary methods • Importing packages, variables and data files
3rd May 2023 09:00 – 11:00	• If statements • For loops • While loops • And / Or statements
10th May 2023 09:00 – 11:00	• Functions • Objects and Classes

Eligibility: You must be a PhD student at either King's College London, Queen Mary University of London, or Imperial College London, using social science methodologies, and be based in a department that does not already offer such training.

The course does not assume any prior programming knowledge.

Pre-course preparation: No pre-course preparation is necessary.

Nonetheless, here are some free online resources to explore at your leisure:

- [Python for Non-Programmers](#)
- [Python Beginners Guide](#)
- [Introductory Books](#)
- [Python Standard Library](#)
- [Python FAQs](#)

Number of students:

- Minimum number required to run: 5
- Maximum number of places available: 25