



# London Interdisciplinary Social Science Doctoral Training Partnership

## Advanced Research Methods in Social Sciences

<b>Course Code &amp; Title</b>	<b>LISS373 - Introduction to programming using Python</b>				
<b>Convenor(s)</b>	Lina Kramer				
<b>Institution</b>	King's College London	<b>Department</b>		Department of Political Economy	
<b>Academic Year</b>	2023-24	<b>Term</b>		Autumn term	
<b>Number of sessions</b>	4	<b>Research Platform</b>	Quantitative Research (QuT)	<b>Length of Session(s)</b>	2h
<b>Day, Date</b>		<b>Start : End</b>		<b>Room Location</b>	
4 <sup>th</sup> , October 2023 11 <sup>th</sup> , October 2023 18 <sup>th</sup> , October 2023 25 <sup>th</sup> , October 2023		09:00 am to 11:00 am		Via Zoom	
<b>Enrolment Links:</b>	Available to book on SkillsForge from <b>Thursday 21<sup>st</sup> September 2023</b> . Click to log in and register: <a href="https://training.kcl.ac.uk/kcl/#he/dev/eventDetails;;em,providerCode=LISS,providerOrgAlias=kcl,number=373;">https://training.kcl.ac.uk/kcl/#he/dev/eventDetails;;em,providerCode=LISS,providerOrgAlias=kcl,number=373;</a> Questions? Visit our Training FAQ here: <a href="https://training.kcl.ac.uk/kcl/#he/dev/eventDetails;;em,providerCode=LISS,providerOrgAlias=kcl,number=373;">Frequently Asked Questions - LISS DTP (liss-dtp.ac.uk)</a>				

### 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 the 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
4 <sup>th</sup> October 2023 09:00 – 11:00	<ul style="list-style-type: none"> <li>• Introduction to Python</li> <li>• Installing Python and an IDE</li> <li>• Basic features of an IDE interface</li> <li>• Data types and common operations</li> <li>• Assigning variables</li> </ul>
11 <sup>th</sup> October 2023 09:00 – 11:00	<ul style="list-style-type: none"> <li>• Lists and common list methods</li> <li>• Tuples and common tuple methods</li> <li>• Dictionaries and common dictionary methods</li> <li>• Importing packages, variables and data files</li> </ul>
18 <sup>th</sup> October 2023 09:00 – 11:00	<ul style="list-style-type: none"> <li>• If statements</li> <li>• For loops</li> <li>• While loops</li> <li>• And / Or statements</li> </ul>
25 <sup>th</sup> October 2023 09:00 – 11:00	<ul style="list-style-type: none"> <li>• Functions</li> <li>• Objects and Classes</li> </ul>



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**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