PATTERN.

Empowering Open and Responsible
Research and Innovation

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Overview of learning opportunities: Citizen Science

PATTERN mapping of
Open Responsible
Research and
Innovation (RRI)
training opportunities
for researchers

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1 Introduction

Welcome to PATTERN summary booklet presenting the results of our recent mapping activity which identified over 60 available trainings on citizen science tailored to researchers at every stage of their careers.

You can find the full report **"Report on the analysis of existing training activities and quality assessment"**

here!

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1.1 What is Citizen Science?

Citizen Science refers to the practice of public participation and collaboration in scientific research to increase scientific knowledge. Through citizen science, individuals who are not professional scientists contribute to research by gathering, analysing, and reporting data.

In today's dynamic European research area (ERA) landscape, the growing prominence of citizen science as a powerful and inclusive research approach has significantly reshaped the way researchers engage with their communities and conduct their studies. Recognizing the critical role of researchers in the citizen science ecosystem, we embarked on a detailed exploration to curate a diverse array of training resources, some of which are outlined in this booklet.

As the boundaries between traditional research and public participation continue to blur, it has become increasingly crucial for researchers to possess the necessary tools and knowledge to effectively navigate the intricacies of citizen science. **By delving into the distinct features and advantages of each training resource, researchers can make informed decisions about which resources align best with their professional aspirations and research goals.**

We invite you to delve into this **highlight of resources**, which serves as a valuable resource for **researchers seeking to enhance their understanding of citizen science methodologies and foster meaningful collaborations with diverse communities.**

You can find the full report with **ALL resources on Citizen Science** in the "Report on the analysis of existing training activities and quality assessment"

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2 Highlights of mapped trainings on Citizen Science

2.1 Citizen Science and Scientific Crowdsourcing: an Introduction

This is a formal university course on a variety of different citizen science topics from theory to practice. The course aims at providing a good understanding of citizen science and becoming familiar with the academic literature in this area and covers: the technical aspects of citizen science projects, how to make projects participant-centred, volunteer management, user-centred design, and human-computer interaction, and much more.

	Training mode	Online
	Link	**Click here**
	Year	2022
	Duration	30 hours
	Organisation	UCL; Multiple
	Primary language	English
	Expertise level	All
	Certificate or qualification	ECTS

2.2 Doing citizen science as open science: what, why and how

This course describes the ethical, scientific, social, and legal imperatives for practising open science. It clarifies common misconceptions of open and describes the products of open science and the collaborative and inclusive processes they enable. By attending this course, you'll be able to identify which aspects of open science are and are not already implemented by your citizen science project and to evaluate and choose tools to implement open science for all components of your project including text, images, data, software, hardware, and other media.

	Training mode	Online
	Link	**Click here**
	Year	2021
	Duration	1.75 hours
	Organisation	EU-Citizen.science
	Primary language	English
	Expertise level	Beginner
	Certificate or qualification	Badge

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2.3 Storytelling for citizen science

This course will give you the ground and tools to look in a different way at how you can communicate about your current project and how to craft a story that matters and connects to different audiences. It will also provide examples of stories and resources for you to study further and deeper. You will understand the value of stories and how they can help you connect with people when using it for communicating citizen science.

	Training mode	Online
	Link	**Click here**
	Year	2021
	Duration	2.5 hours
	Organisation	EU-Citizen.science
	Primary language	English
	Expertise level	Beginner
	Certificate or qualification	Badge

2.4 Citizen Science Projects: How to Make a Difference

In this course, you will investigate what citizen science and citizen observatories are and explore current projects happening around the world, what they do and how to get involved. You will engage with the general process of a citizen science project, the tools used and where to find them and model the steps to create your own citizen science project. You will further collect and analyse data on relevant issues such as environmental challenges and disaster management, and discuss the results of your findings.

	Training mode	Online
	Link	**Click here**
	Year	2021
	Duration	1.75 hours
	Organisation	University of Dundee and Future learn (WeObserve), UK
	Primary language	English
	Expertise level	Beginner
	Certificate or qualification	Badge

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2.5 Citizen Science in the (Digital) Arts and Humanities

This course looks at the variety of practices within 'citizen science', how you as a humanist might get started working with them, what issues you might be wary of along the way and how research Infrastructures can potentially help you. Through this course, you will be able to recognise and define common approaches to incorporating citizen science into research projects in the arts and humanities while being aware of strategies and tools for managing citizen input to research.

	Training mode	Online
	Link	**Click here**
	Year	2021
	Duration	
	Organisation	EU-Citizen.science
	Primary language	
	Expertise level	
	Certificate or qualification	Badge

You can find the full report with **ALL mapped resources on Citizen Science** in the "Report on the analysis of existing training activities and quality assessment"

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Additional resources

Moreover, several guides and resources may also help you to get started and further develop. Among these we recommend the following:

Citizen Science Skilling for Library Staff, Researchers, and the Public Part of the four part book series: **Citizen Science for Research Libraries — A Guide**	**here!**
Community-based participatory research: **A guide to ethical principles and practice**	**here!**
Communication in Citizen Science. **A practical guide to communication and engagement in citizen science**	**here!**
Participatory Science Toolkit against pollution	**here!**
The Science of Citizen Science	**here!**
EU-Citizen.Science platform, the site of reference for Citizen Science in Europe.	**here!**

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