Participatory Data Science for Community Engagement Training Course

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

In today’s complex sociopolitical and health landscapes, researching sensitive topics such as gender-based violence, public health crises, or marginalized group experiences requires ethical rigor, cultural awareness, and participatory methods. Participatory Data Science empowers researchers and communities to collaborate through data-driven solutions that are inclusive, ethical, and actionable. Participatory Data Science for Community Engagement Training Course equips professionals, community leaders, and researchers with tools to co-create data initiatives that respect privacy, amplify local voices, and deliver measurable impact.

As data becomes central to policy and community development, mastering sensitive topic research methodologies while embracing community-centered data science is essential. This course emphasizes human-centered design, data ethics, trauma-informed approaches, and open-source tools to ensure ethical engagement. Participants will gain hands-on experience in qualitative and quantitative methods, data visualization, and storytelling for impact, enabling them to ethically research and address sensitive community issues.

Programme Curriculum

Participatory Data Science for Community Engagement Training Course

Introduction

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Course Objectives

1. Understand ethical research frameworks for sensitive topics.
2. Apply trauma-informed participatory methods in data collection.
3. Use community-centered data science tools for engagement.
4. Explore data privacy and consent mechanisms in vulnerable settings.
5. Design and implement inclusive survey instruments.
6. Interpret socially sensitive data using qualitative and quantitative techniques.
7. Leverage AI and open-source tools to support participatory analysis.
8. Build trust-based partnerships with community stakeholders.
9. Conduct intersectional analysis across gender, age, ethnicity, and more.
10. Translate findings into advocacy-oriented storytelling.
11. Assess and manage ethical risks in fieldwork.
12. Create actionable insights from lived experience data.
13. Build capacity for sustainable community engagement through data.

Target Audiences

1. Social science researchers
2. NGO project managers
3. Community health workers
4. Policy analysts
5. Journalists and data storytellers
6. Academic instructors
7. Human rights advocates
8. Urban planners and development specialists

Course Duration: 5 days

Course Modules

Module 1: Foundations of Researching Sensitive Topics

- Understanding sensitivity and vulnerability in research
- Ethical frameworks and international standards
- Navigating trauma and psychological safety
- Consent and anonymity in participatory research
- Tools for ethical planning and scoping
- **Case Study**: Addressing mental health stigma in rural youth research

Module 2: Community-Centered Participatory Methods

- Co-creation strategies with marginalized populations
- Stakeholder mapping and power analysis
- Participatory action research (PAR) principles
- Cultural humility and reflexivity
- Collaborative data prioritization
- **Case Study**: Women-led participatory mapping of sanitation gaps

Module 3: Data Collection in High-Risk Environments

- Designing safe qualitative and quantitative instruments
- Mobile data collection and remote methods
- Interview techniques for sensitive disclosures
- Real-time risk assessment
- Data safeguarding practices
- **Case Study**: Remote survey of LGBTQ+ experiences during conflict

Module 4: Data Ethics and Digital Rights

- Understanding data sovereignty
- Informed consent in digital contexts
- Encryption, storage, and access rights
- Open data vs protected data
- Algorithmic bias and mitigation
- **Case Study**: Community control of environmental health data

Module 5: Tools for Participatory Data Science

- Introduction to open-source tools (R, Python, KoboToolbox)
- Collaborative data platforms and dashboards
- Data cleaning and preprocessing for community use
- Citizen-generated data and crowdsourcing
- AI for local problem-solving
- **Case Study**: Youth-led air quality monitoring using low-cost sensors

Module 6: Analyzing Sensitive Data Responsibly

- Thematic coding and narrative analysis
- Intersectional data visualization
- Identifying patterns without re-traumatizing participants
- Validating data with community feedback
- Reducing bias in interpretation
- **Case Study**: Survivors' voices analysis for post-GBV policy reform

Module 7: Storytelling for Impact and Advocacy

- Principles of ethical storytelling
- Data journalism for community voices
- Visual narratives: infographics, videos, maps
- Designing advocacy campaigns with evidence
- Pitching findings to media and stakeholders
- **Case Study**: Story map of refugee resilience through data

Module 8: Sustainability and Scaling Participatory Research

- Building local research capacity
- Long-term partnerships and mentorship
- Open-access repositories and community data libraries
- Institutionalizing participatory data practices
- Measuring long-term impact
- **Case Study**: Scaling indigenous data stewardship for land protection

Training Methodology

- Interactive workshops with expert facilitators

- Real-world simulations and role play
- Community stakeholder engagement labs
- Group projects and field-based assignments
- Peer review and collaborative feedback loops
- Case-based learning with ethical dilemmas

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call *+254769199797*

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com