Network Analysis in Social Sciences Training Course

Professional Development Training Course Outline

Category	Research and Data Analysis	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Network Analysis in Social Sciences is a transformative approach to understanding complex human interactions, relationships, and social structures. This course equips researchers, analysts, and professionals with advanced tools to map, visualize, and interpret social networks, uncovering hidden patterns and dynamics. Leveraging cutting-edge methodologies such as Social Network Analysis (SNA), graph theory, and data visualization, participants will gain hands-on experience in identifying influencers, understanding group behaviors, and predicting social phenomena. By combining theoretical frameworks with practical applications, this course bridges the gap between social theory and data-driven insights, empowering participants to make evidence-based decisions in research, policy-making, and organizational strategy.

Participants will explore the intersection of social science research and network theory, learning to collect, clean, and analyze relational data using state-of-the-art software tools like Gephi, UCINET, and R. Through interactive exercises, real-world case studies, and collaborative projects, learners will enhance their analytical thinking, critical reasoning, and data interpretation skills. Network Analysis in Social Sciences Training Course is designed to transform social science research practices by equipping participants with competencies in visualizing complex networks, detecting communities, measuring centrality, and applying predictive models. By the end of the course, participants will be ready to implement network-based strategies in academia, business analytics, public policy, and beyond, making them highly sought-after professionals in the era of data-driven social research.

Programme Curriculum

Network Analysis in Social Sciences Training Course

Introduction

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Course Duration

10 days

Course Objectives

1. Understand fundamental concepts of Social Network Analysis (SNA) and network theory.
2. Explore graph theory applications in social sciences research.
3. Learn techniques for social network data collection and cleaning.
4. Master visualization of social networks using tools like Gephi and UCINET.
5. Analyze social network structures, relationships, and patterns.
6. Identify key influencers, bridges, and central actors in networks.
7. Detect communities and clusters within social networks.
8. Apply metrics like centrality, density, and cohesion in real-world networks.
9. Utilize predictive modeling to forecast social behaviors and trends.
10. Integrate network analysis into research, policy, and organizational strategy.
11. Develop case studies and hands-on projects to strengthen analytical skills.
12. Interpret complex network data and communicate insights effectively.
13. Stay updated on emerging trends in network analysis, big data, and social research.

Target Audience

1. Social Science Researchers and Academicians
2. Data Analysts and Data Scientists
3. Policy Analysts and Government Researchers
4. Marketing and Social Media Strategists
5. Organizational Development Professionals
6. Public Health and Community Outreach Specialists
7. Graduate and Postgraduate Students in Social Sciences
8. Nonprofit and NGO Professionals involved in Social Research

Course Modules

Module 1: Introduction to Network Analysis

- Fundamentals of network theory in social sciences
- Nodes, edges, and network structures
- Types of social networks
- Real-world examples of network applications
- Case Study: Friendship networks in high schools

Module 2: Data Collection for Social Networks

- Methods of collecting relational data
- Surveys, interviews, and online sources
- Ethical considerations in social network research
- Data cleaning and preprocessing
- Case Study: Social media interaction dataset analysis

Module 3: Network Visualization Tools

- Introduction to Gephi, UCINET, and R packages
- Visualization techniques for clarity and impact
- Customizing network layouts
- Interpreting visual patterns
- Case Study: Visualizing political influence networks

Module 4: Network Metrics and Centrality Measures

- Degree, betweenness, closeness, and eigenvector centrality
- Network density and connectivity
- Identifying key influencers
- Metrics interpretation for decision-making
- Case Study: Leadership roles in corporate networks

Module 5: Community Detection and Clustering

- Understanding network modularity
- Algorithms for community detection
- Applications in social groups and organizations
- Practical exercises with sample networks
- Case Study: Online forum community analysis

Module 6: Social Network Dynamics

- Evolution of social networks over time
- Temporal network analysis
- Detecting emerging trends and behaviors
- Analyzing longitudinal network data
- Case Study: Tracking collaboration networks in research institutions

Module 7: Network Data Modeling

- Introduction to statistical network models

- Exponential Random Graph Models (ERGMs)
- Stochastic Actor-Oriented Models (SAOM)
- Model validation and interpretation
- Case Study: Co-authorship networks in academia

Module 8: Predictive Analysis in Networks

- Link prediction and diffusion modeling
- Forecasting social behavior trends
- Network-based recommendation systems
- Practical application in social media analytics
- Case Study: Predicting viral content spread

Module 9: Organizational Network Analysis

- Mapping internal company relationships
- Identifying collaboration bottlenecks
- Enhancing team efficiency using networks
- Leadership and influence mapping
- Case Study: Employee network analysis in a multinational company

Module 10: Policy and Governance Networks

- Understanding governance and stakeholder networks
- Policy diffusion and network influence
- Strategic planning using network insights
- Evaluating network impact on decision-making
- Case Study: Public health intervention networks

Module 11: Network Ethics and Data Privacy

- Ensuring confidentiality in network research
- Data anonymization techniques
- Responsible use of social network data
- Ethical challenges in digital networks
- Case Study: Privacy concerns in social media studies

Module 12: Advanced Visualization Techniques

- Interactive dashboards and network animations
- Dynamic network representation
- Multi-layered network visualization
- Storytelling with network data
- Case Study: Visualizing global trade networks

Module 13: Social Media Network Analysis

- Twitter, Facebook, and LinkedIn data mining
- Hashtag and trend analysis
- Detecting influencers and sentiment patterns
- Engagement and reach metrics
- Case Study: Political campaign network analysis

Module 14: Network Analysis in Public Health

- Disease transmission networks
- Contact tracing and epidemic modeling
- Identifying high-risk nodes and communities
- Evaluating intervention strategies
- Case Study: COVID-19 contact network analysis

Module 15: Capstone Project & Applied Network Analysis

- Real-world project design
- Data collection, visualization, and interpretation
- Presentation and discussion of findings
- Applying learned tools and techniques
- Case Study: Cross-sector collaboration network evaluation

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

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	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

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