ICTD
المركز العالمي للتدريب والتطوير
International Centre For Training & Development



Empowering Decisions with Spatial Data: Capture, Analysis, and Visualization

Course Introduction:

- Overview of spatial data and its importance in decision-making.
- Objectives of the training program.
- The role of spatial data in various sectors (environmental, urban planning, disaster management).

Course Objectives:

Upon the successful completion of this course, each participant will be able to:-

- Understand the types and sources of spatial data.
- Learn techniques for capturing and managing spatial data.
- Explore analysis methods for deriving insights from spatial data.
- Gain skills in visualizing spatial data effectively.
- Discuss case studies that demonstrate the impact of spatial data on decision-making.

Who Should Attend?

- Data analysts and GIS professionals
- Urban planners and environmental scientists
- Business analysts and decision-makers
- Industry professionals involved in spatial data applications

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Course Outline:

Day 1: Introduction to Spatial Data

- Definition and types of spatial data (vector, raster).
- Overview of spatial data sources: remote sensing, surveys, and databases.
- Importance of spatial data in informed decision-making.

Day 2: Data Capture Techniques

- Methods for capturing spatial data (GPS, remote sensing, field surveys).
- Introduction to data collection tools and technologies.

Day 3: Spatial Data Analysis

- Overview of spatial analysis techniques (overlay, proximity analysis, spatial statistics).

- Tools for analyzing spatial data (GIS software, statistical packages).
- Case studies on spatial analysis applications in real-world scenarios.

Day 4: Visualization Techniques

- Principles of effective data visualization.
- Techniques for creating impactful maps and visual representations of spatial data.

Day 5: Making Informed Decisions with Spatial Data

- Best practices for integrating spatial data into decision-making processes.
- Discussion of challenges and limitations in using spatial data.
- Review of case studies showcasing successful applications of spatial data in decision-making.
- Final project: develop a spatial data analysis and visualization project that addresses a specific decision-making scenario.

Course Methodology:

A variety of methodologies will be used during the course that includes:

- (30%) Based on Case Studies
- (30%) Techniques
- (30%) Role Play
- (10%) Concepts
- Pre-test and Post-test
- Variety of Learning Methods
- Lectures
- Case Studies and Self Questionaires
- Group Work
- Discussion
- Presentation

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Course Certificate:

International Center for Training & Development (ICTD) will award an internationally recognized certificate(s) for each delegate on completion of training.

Course Fees:

To be advised as per course locations. This rate includes participant's manual, Hand-Outs, buffet lunch, coffee/tea on arrival, morning & afternoon of each day.

Course Timings:

Daily Course Timings:

08:00 - 08:20	Morning Coffee / Tea
08:20 - 10:00	First Session
10:00 - 10:20	Coffee / Tea / Snacks
10:20 - 12:20	Second Session
12:20 - 13:30	Lunch Break & Prayer Break
13:30 - 15:00	Last Session

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