Training Course on Global Positioning System and Mobile Mapping Technologies

Professional Development Training Course Outline

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

Course Introduction

In an increasingly connected world, the integration of Global Positioning System (GPS) and mobile mapping technologies is revolutionizing how we collect, analyze, and utilize spatial data. This Training Course on GPS and Mobile Mapping for General Applications equips participants with the knowledge and skills to harness these tools for real-world applications. From navigation to data collection, GPS and mobile mapping play pivotal roles in industries such as transportation, agriculture, urban planning, and environmental management.

The course is designed to provide a comprehensive introduction to GPS technology and mobile mapping, covering fundamental principles, operational techniques, and their practical applications. Participants will gain hands-on experience using GPS devices and mobile mapping software, ensuring they are well-prepared to apply these technologies in diverse scenarios

Programme Curriculum

Training Course on Global Positioning System and Mobile Mapping Technologies

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The course is designed to provide a comprehensive introduction to GPS technology and mobile mapping, covering fundamental principles, operational techniques, and their practical applications. Participants will gain hands-on experience using GPS devices and mobile mapping software, ensuring they are well-prepared to apply these technologies in diverse scenarios. Through real-life case studies, participants will explore the transformative power of GPS and mobile mapping in streamlining workflows, improving accuracy, and enhancing decision-making. Whether you're a professional looking to upskill or a beginner keen to explore this field, this course provides the tools to thrive in a data-driven era.

Course Duration

5 Days

Course Objectives

1. Understand the principles of GPS technology and mobile mapping.
2. Learn how to operate GPS devices and mapping software effectively.
3. Acquire skills in collecting and analyzing spatial data.
4. Explore the integration of GPS with other GIS tools.
5. Identify the applications of mobile mapping in various industries.
6. Develop proficiency in route planning and navigation using GPS.
7. Understand the challenges and limitations of GPS and mobile mapping.
8. Use GPS technology for data accuracy and quality assurance.
9. Apply mobile mapping techniques in real-world projects.
10. Build capacity for future advancements in spatial technology.

Organizational Benefits

1. Enhancing the technical expertise of employees in GPS and mobile mapping.
2. Improving efficiency in spatial data collection and management.
3. Streamlining workflows through accurate geospatial insights.
4. Empowering teams to make data-driven decisions.
5. Gaining a competitive edge with advanced mapping capabilities.
6. Reducing operational costs through efficient data acquisition.
7. Enhancing project planning and implementation with precise location data.
8. Promoting innovation in spatial technology applications.
9. Strengthening data accuracy and reducing errors in mapping tasks.
10. Building a foundation for advanced geospatial technology adoption.

Target Participants

- Professionals in urban planning, transportation, and logistics.
- Environmental scientists and conservationists.
- Land surveyors and geospatial analysts.
- Academics and students in GIS-related fields.

- Engineers working on infrastructure and development projects.
- Agricultural specialists using GPS for precision farming.
- Disaster response teams utilizing GPS for field operations.
- IT professionals integrating GPS with data systems.
- NGO staff working on spatial data-driven projects.
- Anyone interested in learning GPS and mobile mapping techniques

Course Outline

Module 1: Fundamentals of GPS Technology

1. Understanding the components of GPS systems.
2. Satellite-based positioning and navigation principles.
3. GPS signal structure and error sources.
4. Exploring GPS applications across industries.
5. Case Study: GPS use in disaster response and recovery.

Module 2: Introduction to Mobile Mapping

1. Overview of mobile mapping systems and tools.
2. Mobile device integration with GPS technology.
3. Types of data collected through mobile mapping.
4. Benefits and limitations of mobile mapping.
5. Case Study: Mobile mapping for urban infrastructure projects.

Module 3: Data Collection Techniques

1. Setting up and configuring GPS devices for data collection.
2. Capturing spatial data with mobile mapping applications.
3. Techniques for improving data accuracy and precision.
4. Exporting and storing GPS data for analysis.
5. Case Study: Field data collection for agricultural mapping.

Module 4: Data Processing and Analysis

1. Importing GPS data into GIS software.
2. Cleaning and validating collected spatial data.
3. Analyzing geospatial data for decision-making.
4. Visualizing GPS data through maps and reports.
5. Case Study: Using GPS data for environmental monitoring.

Module 5: Advanced Applications of GPS and Mobile Mapping

1. Real-time GPS tracking and monitoring.
2. Integrating GPS with Internet of Things (IoT) devices.
3. Leveraging GPS in autonomous systems.
4. Enhancing data security in GPS applications.
5. Case Study: Advanced GPS applications in fleet management.

Module 6: Challenges and Future Trends in GPS and Mobile Mapping

1. Overcoming common GPS and mapping challenges.
2. Exploring future advancements in GPS technology.
3. The role of AI in enhancing mobile mapping capabilities.
4. Adapting to technological disruptions in the geospatial field.
5. Case Study: Innovative GPS solutions in smart city development

Training Methodology

The instructor led trainings are delivered using a blended learning approach and comprises of presentations, guided sessions of practical exercise, web-based tutorials and group work. Our facilitators are seasoned industry experts with years of experience, working as professional and trainers in these fields.

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
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

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