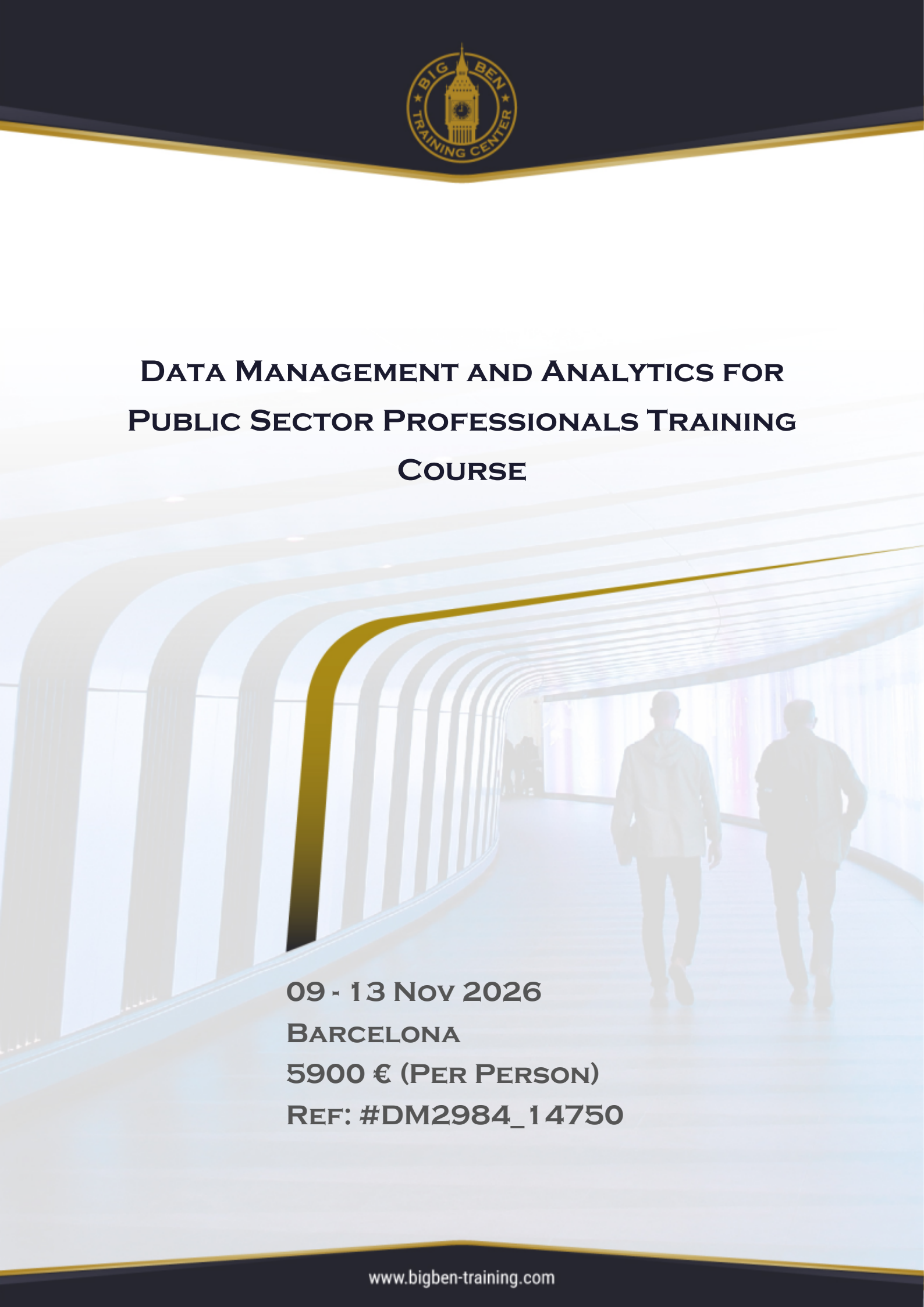
Data Management and Analytics for Public Sector Professionals Training Course



09 - 13 Nov 2026

Barcelona

5900 € (Per Person)

Ref: #DM2984_14750

Course Introduction / Overview:

In the digital age, government agencies are tasked with a growing volume of data, creating both opportunities and challenges for public service delivery and policymaking. This training course, offered by BIG BEN Training Center, is designed to equip public sector professionals with the essential skills to manage, analyze, and leverage this data effectively. We focus on a hands-on approach to data science for government, covering everything from data governance and public data analytics to data-driven policy-making and ethical considerations. The course incorporates key insights from academic and professional work in the field. For instance, we will explore concepts from The Government Analytics Handbook: Leveraging Data to Strengthen Public Administration, co-edited by Daniel Rogger and Christian Schuster, which highlights how governments can use their own administrative and survey data to diagnose and improve public sector productivity. The curriculum emphasizes practical application over theoretical concepts alone, ensuring that participants can immediately apply their new skills to real-world scenarios. We delve into government data strategy, the data lifecycle, and how to use data analytics to improve transparency, efficiency, and public service delivery. The ultimate goal is to empower public servants to move beyond simply collecting data to actively use it to create a more responsive and effective government.

Target Audience / This training course is suitable for:

- Government officials and civil servants at all levels.
- Policy analysts and researchers.
- Public sector managers and administrators.
- IT and data professionals working in government agencies.
- Professionals involved in urban planning, public health, and social services.
- Individuals interested in data governance and data ethics in the public sector.

Target Sectors and Industries:

- Federal, state, and local government agencies.
- Public administration.
- Nonprofit organizations and NGOs with a public service focus.
- Defense and national security.
- Public health and social services.
- Law enforcement and justice systems.
- Regulatory bodies and public utilities.

Target Organizations Departments:

- Planning and Policy Departments.
- Information Technology and Data Management Departments.
- Finance and Budget Departments.
- Human Resources Departments.
- Public Works and Infrastructure Departments.
- Auditing and Compliance Departments.
- Citizen Services and Customer Relations Departments.

Course Offerings:

By the end of this course, the participants will have able to:

- Understand the fundamentals of public data analytics and its importance for modern governance.
- Apply data governance principles to ensure data integrity and compliance within government agencies.
- Utilize data visualization techniques to communicate complex information clearly to stakeholders.
- Develop a strategic approach to data management and data-driven decision-making in the public sector.
- Navigate the ethical and privacy challenges associated with public sector data.
- Use analytical methods to improve public service delivery and evaluate the effectiveness of policies.
- Identify opportunities for leveraging data to enhance organizational efficiency and resource allocation.

Course Methodology:

This training course uses a mix of interactive and practical learning methods to make sure you can apply what you learn. Our approach moves beyond a traditional classroom setting, giving you the tools to succeed in real-world situations. We will work with a variety of hands-on case studies and exercises that reflect the types of data management and analytics challenges faced in the public sector. These case studies will help you practice using different analytical tools and techniques. We also put a lot of emphasis on group work and interactive discussions, because collaboration is key to solving complex problems. You will have opportunities to work with your peers, sharing insights and developing solutions together. The course also includes a variety of interactive activities to make sure the information sticks. Our trainers, who are experts in data management for government, will give you personalized feedback on your work, helping you improve your skills throughout the course. This whole experience is designed to be engaging, practical, and directly relevant to the specific needs of public sector professionals.

Course Agenda (Course Units):

Unit One: Foundations of Data in the Public Sector

- The role of data-driven policymaking in modern government.
- Understanding the public sector data lifecycle.
- Principles of data governance and data quality for government agencies.
- Data privacy, security, and ethical considerations.
- Introduction to open data initiatives and their impact.
- Developing a government data strategy.
- Case studies on data management in public administration.

Unit Two: Data Collection and Management Essentials

- Identifying and acquiring data from diverse public sources.
- Techniques for data cleaning and preparation.
- Structuring data for analysis and reporting.
- Introduction to data management tools for government use.
- Ensuring data integrity and accuracy.
- Best practices for storing and archiving public data.
- Creating a data inventory for your department.

Unit Three: Fundamentals of Public Data Analytics

- Introduction to descriptive, diagnostic, and predictive analytics.
- Using statistical methods for policy evaluation.
- Conducting exploratory data analysis for public issues.
- Introduction to data analysis software and platforms.
- Measuring and tracking key performance indicators (KPIs) in government.
- Applying analytics to improve delivery service.
- Case studies on using analytics for urban planning and public health.

Unit Four: Data Visualization and Communication

- Principles of effective data visualization for public audiences.
- Choosing the right charts and graphs to tell a data story.
- Creating dashboards for real-time monitoring of government services.
- Communicating complex data insights to non-technical stakeholders.
- Using visual analytics to identify trends and patterns in public data.
- Building a compelling narrative with data.
- Practical exercises in creating data visualizations.

Unit Five: Advanced Topics and Future Trends

- Predictive modeling for public sector forecasting and resource allocation.
- Introduction to machine learning in government.
- The role of artificial intelligence in public administration.
- Leveraging big data for smart cities and public policy analytics.
- Emerging trends in data governance and data ethics.
- Building a data culture within a public organization.
- Final project: developing a data-driven solution for a public sector challenge.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

In an era of increasing public data transparency, how can government agencies balance the need for open data access with the crucial requirements of citizen privacy and security?

What unique qualities does this course offer compared to other courses?

This course stands out by focusing specifically on the unique challenges and opportunities of data management and analytics within the public sector. Unlike other general courses, this one is tailored to the specific context of government agencies, addressing concerns like data governance, regulatory compliance, and ethical considerations that are critical for public servants. We move beyond just teaching analytical tools; we show how to apply these tools to improve public services and inform policy. The curriculum is built on practical examples and hands-on exercises that use real government data sets, allowing participants to work with the exact types of data they encounter daily. The expertise of BIG BEN Training Center is in making complex topics accessible and relevant, ensuring that participants not only understand the concepts but can also immediately implement what they learn to solve real-world problems. We also place strong emphasis on fostering a data-driven culture, which is essential for any government agency aiming to be more efficient and responsive.