Training Course on Infrastructure Management for Libraries

Professional Development Training Course Outline

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

Course Introduction

In today's rapidly evolving information landscape, libraries are transforming from mere repositories of books into dynamic **community hubs** and **digital learning centers**. This paradigm shift necessitates a robust and adaptable **infrastructure** that supports traditional services alongside cutting-edge technologies. Effective **Infrastructure Management for Libraries** is no longer just about maintaining physical spaces; it encompasses the strategic planning, implementation, and optimization of **digital infrastructure**, **IT systems**, **network security**, and **sustainable operations**. This course provides library professionals with the essential knowledge and practical skills to navigate these complexities, ensuring libraries remain relevant, accessible, and resilient in the 21st century.

Training Course on Infrastructure Management for Libraries is designed to equip library leaders and staff with the tools to build and manage a **future-ready library infrastructure**. From **cloud solutions** and **data management** to **physical space optimization** and **user experience (UX)** design, we will explore key trends and best practices that drive efficiency, innovation, and **patron engagement**. Participants will gain insights into leveraging **open-source technologies**, implementing **cybersecurity best practices**, and fostering a culture of **digital literacy** within their institutions. By mastering infrastructure management, libraries can solidify their role as vital educational, cultural, and informational pillars within their communities.

Programme Curriculum

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Course Objectives

1. Develop comprehensive **infrastructure roadmaps** aligned with institutional goals and **community needs**.
2. Understand the principles and applications of **digital transformation**, including **digital preservation** and **electronic resource management**.
3. Evaluate and implement **cloud-based solutions** for enhanced scalability, accessibility, and cost-efficiency.
4. Design and manage robust **library network infrastructure** for seamless access to information resources.
5. Implement effective **cybersecurity frameworks** to protect sensitive patron data and library systems.
6. Master **library data management** techniques, including data governance, storage, and leveraging data for informed decision-making.
7. Explore innovative **library building design trends** and optimize physical spaces for diverse user activities and **flexible learning environments**.
8. Integrate **sustainable practices** and **green technology** into library operations and infrastructure development.
9. Evaluate and implement **open-source software solutions** for integrated library systems (ILS) and digital repositories.
10. Develop strategies for managing and optimizing **library IT assets** throughout their lifecycle.
11. Create and implement comprehensive **disaster recovery plans** for library infrastructure and data.
12. Design and enhance technology-driven services with a strong focus on **user-centric design** and **accessibility**.
13. Foster a culture of continuous learning and equip library staff with essential **digital literacy skills** for effective infrastructure management.

Organizational Benefits

- Improve the reliability and accessibility of library services, both physical and digital.

- Optimize resource allocation, reduce downtime, and streamline workflows.
- Safeguard sensitive patron and institutional data against cyber threats.
- Enable libraries to adapt to technological advancements and evolving user expectations.
- Make informed decisions on technology investments and leverage cost-effective solutions like open-source software and cloud computing.
- Create modern, intuitive, and accessible spaces and services that attract and retain users.
- Position the library as a leading hub for technology, education, and innovation within the community.
- Reduce environmental impact through the adoption of green technologies and practices.

Target Audience

1. Library Directors and Managers
2. IT Librarians and Systems Administrators.
3. Collection Development Librarians
4. Public Services Librarians
5. Archivists and Preservation Specialists.
6. Library School Students and Recent Graduates.
7. Facilities Managers in Libraries
8. Anyone interested in the intersection of library science and technology.

Course Outline

Module 1: Foundations of Library Infrastructure (4 hours)

- Defining Library Infrastructure in the Digital Age: Physical vs. Digital Assets
- The Evolution of Library Technology: From Automation to AI
- Strategic Planning and Needs Assessment for Infrastructure Development
- Budgeting and Funding for Library Infrastructure Projects
- **Case Study:** Analyzing a successful library's journey from traditional to hybrid infrastructure, highlighting key investment decisions and challenges.

Module 2: Network & Connectivity Management (5 hours)

- Understanding Library Network Topologies and Architectures
- Wireless Networks and Public Access Challenges
- Bandwidth Management and Internet Service Provider (ISP) Relations
- Troubleshooting Common Network Issues
- **Case Study:** A public library's experience with expanding Wi-Fi coverage to underserved communities and the technical and logistical hurdles faced.

Module 3: Cybersecurity and Data Privacy (6 hours)

- Threat Landscape for Libraries: Ransomware, Phishing, and Data Breaches
- Implementing Robust Cybersecurity Protocols: Firewalls, Antivirus, Intrusion Detection
- Data Privacy Regulations (e.g., GDPR, local privacy laws) and Patron Data Protection
- Incident Response Planning and Business Continuity
- **Case Study:** A university library's recovery process after a major cyberattack, focusing on their preparedness, response, and lessons learned.

Module 4: Digital Infrastructure & Cloud Solutions (5 hours)

- Servers, Storage, and Data Centers: On-premise vs. Cloud

- Introduction to Cloud Computing Models: IaaS, PaaS, SaaS for Libraries
- Migrating Library Systems to the Cloud: Benefits and Challenges
- Virtualization and Containerization for Efficient Resource Utilization
- **Case Study:** How a consortium of small academic libraries successfully leveraged a shared cloud platform to host their integrated library systems, reducing individual IT burdens.

Module 5: Library Systems & Software Management (6 hours)

- Integrated Library Systems (ILS) and Library Services Platforms (LSP)
- Exploring Open-Source ILS: Koha, Evergreen, FOLIO
- Digital Asset Management (DAM) Systems and Institutional Repositories
- Software Licensing, Updates, and Patch Management
- **Case Study:** A public library's decision-making process for migrating from a proprietary ILS to Koha, detailing the implementation, training, and community engagement.

Module 6: Physical Infrastructure & Modern Spaces (4 hours)

- Ergonomics and User Comfort in Library Design
- Smart Library Technologies: RFID, Self-Checkout, Automated Material Handling
- Accessibility Standards (ADA compliance) and Inclusive Design
- Sustainable Building Practices and Energy Efficiency in Libraries
- **Case Study:** A newly renovated library building showcasing flexible spaces, integrated technology, and green architecture to meet 21st-century user needs.

Module 7: Digital Preservation & Archiving (5 hours)

- The Importance of Digital Preservation: Ensuring Long-Term Access
- File Formats, Metadata, and Digital Object Integrity
- Storage Solutions for Digital Archives: Redundancy and Geographic Distribution
- Developing and Implementing Digital Preservation Policies
- **Case Study:** A national library's efforts to preserve born-digital cultural heritage, including partnerships with content creators and technological solutions.

Module 8: Emerging Technologies & Future Trends (5 hours)

- Artificial Intelligence (AI) and Machine Learning in Libraries
- Blockchain for Secure Data and Rights Management
- Virtual Reality (VR) and Augmented Reality (AR) in Library Spaces
- Internet of Things (IoT) and Smart Library Environments
- **Case Study:** A research library piloting AI-powered reference services and the challenges and successes of integrating this new technology.

Training Methodology

This course will employ a blended learning approach, combining interactive lectures with practical, hands-on activities to ensure a dynamic and engaging learning experience for adult learners.

- **Interactive Lectures:** Concise presentations of key concepts and theories.
- **Group Discussions:** Facilitated discussions to share experiences, challenges, and best practices.
- **Case Studies Analysis:** In-depth examination of real-world library infrastructure projects and challenges.

- **Hands-on Workshops:** Practical exercises using relevant tools and software (e.g., network configuration simulators, basic cybersecurity tools, open-source ILS demonstrations).
- **Guest Speakers:** Industry experts and experienced library professionals sharing their insights.
- **Q&A Sessions:** Dedicated time for participants to ask questions and receive expert advice.
- **Collaborative Problem-Solving:** Group activities to address hypothetical infrastructure challenges.
- **Resource Sharing:** Provision of curated readings, tools, and templates for continued learning and application.

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

Start Date	End Date	Location	Price
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

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