Research Data Repositories Training Course

Professional Development Training Course Outline

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

Course Introduction

Research Data Repositories are essential components of modern research ecosystems, enabling secure data storage, long-term preservation, open science, FAIR Data Principles, research integrity, digital transformation, metadata management, reproducible research, and global scientific collaboration. Organizations increasingly require robust repository solutions that enhance research visibility, improve compliance with funding requirements, support data governance, strengthen cybersecurity, and maximize research impact through efficient data sharing and accessibility. Effective repository management promotes innovation, transparency, and evidence-based decision-making across academic, government, healthcare, and private sector institutions.

Research Data Repositories Training Course equips participants with practical skills for designing, implementing, managing, securing, and optimizing research data repositories using international best practices. The course explores repository architecture, metadata standards, persistent identifiers, interoperability, cloud technologies, AI-powered data discovery, digital preservation, legal compliance, and repository sustainability. Participants will gain hands-on knowledge for building efficient repositories that support high-quality research, institutional excellence, and global knowledge exchange.

Programme Curriculum

Research Data Repositories Training Course

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Course Objectives

By the end of this course participants will be able to:

1. Understand modern research data repository frameworks.
2. Apply FAIR Data Principles for repository management.
3. Design scalable digital repository infrastructures.
4. Implement metadata standards for improved discoverability.
5. Strengthen research data governance and compliance.
6. Integrate persistent identifiers and citation systems.
7. Improve repository security and cybersecurity practices.
8. Develop effective digital preservation strategies.
9. Enhance repository interoperability and data sharing.
10. Utilize AI and automation in repository management.
11. Monitor repository performance using analytics dashboards.
12. Promote Open Science and collaborative research.
13. Develop sustainable institutional repository strategies.

Organizational Benefits

- Improved institutional research visibility.
- Enhanced compliance with funding agencies.
- Better knowledge management.
- Stronger research collaboration.
- Increased operational efficiency.
- Improved data security.
- Reduced data loss risks.
- Better decision-making through accessible data.
- Enhanced institutional reputation.
- Sustainable digital research infrastructure.

Target Audiences

- Researchers
- Research Managers
- Librarians
- Data Scientists

- University Administrators
- IT Professionals
- Government Research Officers
- NGO Research Specialists

Course Duration: 5 days

Course Modules

Module 1: Introduction to Research Data Repositories

- Repository concepts and architecture
- Repository types and platforms
- FAIR Data Principles
- Open Science practices
- Repository lifecycle
- Case Study: CERN Zenodo Repository

Module 2: Metadata and Data Documentation

- Metadata standards
- Dublin Core implementation
- Data documentation practices
- Persistent identifiers
- Data quality assurance
- Case Study: Dryad Digital Repository

Module 3: Repository Infrastructure

- Repository software platforms
- Cloud repository solutions
- Storage technologies
- Backup strategies
- Scalability planning
- Case Study: Harvard Dataverse

Module 4: Data Governance and Compliance

- Research data policies
- Legal and ethical requirements
- GDPR and privacy compliance
- Intellectual property management
- Access control

- Case Study: UK Data Service

Module 5: Repository Security

- Cybersecurity fundamentals
- User authentication
- Data encryption
- Risk management
- Disaster recovery planning
- Case Study: National Institutes of Health Data Repository

Module 6: Digital Preservation

- Preservation standards
- Long-term archiving
- File format sustainability
- Preservation workflows
- Repository maintenance
- Case Study: Digital Preservation Coalition

Module 7: Repository Analytics and Emerging Technologies

- Repository performance metrics
- Usage analytics
- AI-powered data discovery
- Automation tools
- Repository interoperability
- Case Study: European Open Science Cloud (EOSC)

Module 8: Repository Strategy and Sustainability

- Repository governance models
- Funding strategies
- Institutional implementation planning
- Collaboration frameworks
- Continuous improvement
- Case Study: Australian Research Data Commons (ARDC)

Training Methodology

- Interactive expert-led presentations

- Practical repository configuration exercises
- Hands-on metadata creation sessions
- Software demonstrations
- Group discussions and peer learning
- Global case study analysis
- Repository assessment workshops
- AI-enabled repository management exercises
- Problem-solving simulations
- Action planning and participant evaluations

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