Description of Data Steward School 2026 Modules

Module 1 – Intensive Onsite Course

Planned programme points and thematic blocks*:

Monday, 6 July 2026

1. Opening by the Vice-Rector for Science at the University of Silesia, Dr. hab. Agnieszka Turska-Kawa, Prof. UŚ
2. Lecture: Open Science as a Foundation of Innovation in the European and Global Research System
3. Keynote speech [TBA]
4. Introduction to DSS 2026 and networking session: *Let's get to know each other!*
5. Data lifecycle: from data creation to research data management
6. Lecture + digital lab
7. Data quality and data modelling
8. Roles and competencies of data stewards, data managers, and data librarians in research data management
9. Data in the Making
10. Gala dinner

Tuesday, 7 July 2026

1. FAIR and CARE principles: introduction
2. FAIR Implementation Profiles (FIP)
3. Metadata: introduction
4. Metadata: lab session
5. Persistent identifiers in the data ecosystem: applications, integration, and PID policies
6. Legal and ethical issues: intellectual property law, personal data, sensitive data
7. Day summary: Q&A
8. Expert consultations
9. Meet the organisations: RDA and SKON

Wednesday, 8 July 2026

1. Persistent identifiers in the data ecosystem: applications, integration, and PID policies
2. Data security
3. Research data repositories: functions, standards, certification, and data publishing process
4. Workshop: preparing data for publication – repository work, anonymisation and pseudonymisation
5. Data Management Plan: preparation
6. Data Management Plan: implementation and reporting
7. Meet the repositories (hands-on work with services for science): Bridge of Knowledge, TU Wien, RODBUK

Thursday, 9 July 2026

1. Tools and technologies in the work of a data steward (DMP tools, metadata, workflows, AI)
2. AI in research data management: applications, automation, risks
3. AI in science: legal and ethical principles
4. EOSC Federation and EOSC PL for Polish science
5. How to train and communicate RDM: introduction
6. Researcher Development Framework (RDF)
7. Day summary: Q&A
8. Expert consultations
9. Meet the infrastructures: KMD and PL-Grid

Friday, 10 July 2026

1. Policies, strategies, structures, and roles of open science in research institutions: presentations and panel discussion
2. Certificate ceremony for DSS 2025 graduates
3. DSS 2026 summary and official closing of Module 1
4. DSS Alumni Meeting & DSS 2026 Farewell Party

*Programme subject to change (order of sessions and daily schedule may be adjusted)

Module 2 – Specialisations

Focus: experimental data, simulations, computational infrastructures

This track focuses on managing data in experimental and technical sciences. It includes working with large datasets, laboratory and simulation data, and using digital tools and AI for data analysis and processing.

Competencies developed:

- management of large and complex datasets (big data)
- organisation and documentation of experimental data
- use of digital tools and AI in data analysis
- ensuring research reproducibility
- application of data standards in technical sciences

Focus: qualitative, textual, and social data

This track addresses qualitative and social data, including interviews, surveys, and archives. It includes ethical considerations, protection of sensitive data, and methods for managing and sharing data in social sciences and digital humanities.

Competencies developed:

- management of qualitative data (interviews, texts, archives)
- anonymisation and protection of sensitive data
- consent management and research ethics
- preparing data for reuse
- working with data in digital humanities

Focus: environmental, biological, and observational data

This specialisation covers the management of environmental, biological, and observational data. Participants learn how to work with field data, sensors, and monitoring systems, as well as principles of data interoperability.

Competencies developed:

- management of field and observational data
- integration of data from multiple sources (sensors, monitoring systems)
- application of interoperability standards
- organisation of biological and environmental data
- preparing data for analysis and scientific modelling

Focus: institutional support

This track prepares participants to support researchers in research data management. It includes developing data policies, implementing open science principles, and managing data workflows in institutions and academic libraries.

Competencies developed:

- development and implementation of data management policies
- supporting researchers in RDM and open science
- managing data workflows within organisations
- compliance with regulations (GDPR, Data Act)
- building the role of a data steward within institutions

Focus: data infrastructure

This specialisation focuses on the operation of research data repositories. It covers data ingest processes (submission, preparation, publication), metadata management, FAIR standards, identifiers, and ensuring data quality and accessibility.

Competencies developed:

- operation and development of data repositories
- data ingest processes (submission, validation, publication)
- creation and management of metadata
- application of FAIR standards and persistent identifiers (PIDs)
- ensuring data quality and accessibility

Focus: data quality, ethics, and trust-building

This track focuses on responsible research data management, incorporating FAIR, CARE, and TRUST principles. Participants learn how to ensure data quality, reliability, and compliance with ethical and regulatory requirements, as well as how to build trust in data and research infrastructures.

Competencies developed:

- ensuring quality and reliability of research data
- applying FAIR and CARE principles in practice
- managing sensitive data and ethical aspects of research
- building trust in data, repositories, and data stewardship services
- understanding and implementing TRUST principles in data infrastructures

Focus: educational and communication competencies

This track develops skills in designing and delivering training in research data management. Participants learn how to effectively transfer knowledge, build training programmes, and support competency development within organisations.

Competencies developed:

- designing RDM training programmes
- delivering training sessions and workshops for diverse audiences
- communicating research data management concepts
- developing educational materials
- promoting open science awareness within organisations