

TU Graz RDM Policy:

Faculty-specific Implementation Strategy Mathematics, Physics and Geodesy

v1.2 (20.5.2022)

Legal validity remains restricted to the German original



Notes for the Faculty Implementation Strategy drafting committee:

The faculty-specific strategy mandates some issues as obligatory (*in italics*), while other parts are left to the discretion of the faculty.

Roles can be revised by faculty drafting committees, by removing, combining or adding roles.

As a reminder, the Framework Policy for RDM (Research Data Management) describes the faculties' role as:

Faculties must develop and oversee faculty-specific implementation strategies describing the roles and responsibilities of institutes, research groups and individual researchers for the following tasks:

- Collection, documentation and storage of research data during the research process.
- Ensuring that research data supporting peer-reviewed publications are appropriately documented and shared in a research data repository in accordance with the FAIR principles (Findable, Accessible, Interoperable, Reusable) for at least 10 years from the date that the research results are published, unless there are valid reasons not to do so.
- Ensuring data management plans are written and updated in accordance with the RDM data regulations and procedures of funders and/or the Faculty-specific Implementation Strategy document (including information about data collection, documentation, assignment of metadata, archiving, information about access to, storage of and destruction of data).
- Evaluating the efficacy of the Faculty-specific Implementation Strategy.
- RDM training at the appropriate-level (e.g., within faculties, institutes or doctoral schools, etc.), in line with available resources.

Preface

This Research Data Management Implementation Strategy of the Faculty of Mathematics, Physics and Geodesy is part of the Framework Policy for RDM (Research Data Management) at the Graz University of Technology. This document helps refine the broader Framework Policy to tailor it to the disciplinary requirements of each faculty. It defines data management roles and responsibilities of the different parties within the faculty, and thus supports efficient practices for working with research data at the faculty. The overall aim of these activities is to encourage and support the adoption of FAIR data practices and -principles² in TU Graz research.

This implementation strategy document is supported by the definitions laid down in the Framework Policy, by the roles and responsibilities defined therein, as well as the online provisions and guidelines on Research Data Management made by TU Graz.³

This document is a guideline for aspirational aims related to RDM. Implementation will take some years and will depend on the availability of resources.

The document takes into account the special features of research at the Faculty of Mathematics, Physics and Geodesy. This includes industrial cooperations and direct contracts

¹ https://www.tugraz.at/sites/research-data-management-rdm/policy/rdm-policy-at-tu-graz/

² https://www.tugraz.at/sites/rdm/the-fair-principles/

³ <u>https://www.tugraz.at/sites/rdm/home/</u>



from the private sector as well as national and international funded projects, which often involve a large number of companies. In the vast majority of cases, these projects contain NDA documents (NonDisclosure Agreement). In view of these special features, research data must be checked for contractual provisions and confidentiality regulations.

This implementation strategy document acknowledges that:

Individual departments and research groups have different working practices and processes and will therefore require dedicated guidelines. Data stewardship denotes the entire process of managing research data from its creation to its re-use and preservation, and is not to be equated with Open Science. While it is beneficial to publish research data openly, there might be valid ethical, legal or commercial implications, which will make data inappropriate for open sharing.

Research data can have different meanings for different disciplines. Source code, experimental notes, protocols, and other forms of information supporting traditional publications are also within the scope of this policy. For the purposes of this implementation strategy, we understand research data to be any evidence that supports research findings (see the Glossary⁴).

Roles and Responsibilities

Note that the Faculty of Mathematics, Physics and Geodesy Research Data Management Implementation Strategy document only specifies the roles and responsibilities of Faculty-specific stakeholders. The roles of the library, ZID, the rectorate, and university support areas (e.g. F&T-Haus) at TU Graz are defined in the TU Graz Framework Policy for RDM⁵.

In order to encourage and support the adoption of FAIR data practices and principles at the Faculty of Mathematics, Physics and Geodesy, the faculty hereby specifies the following roles and responsibilities.

Faculty Deans are expected to:

- Further develop and keep up to date this Faculty-specific Implementation Strategy
- With regard to RDM as a link between the rectorate and the institutes, take appropriate
 actions to ensure that the faculty members are sufficiently informed about the
 guidelines, processes and training activities and that the rectorate is informed about
 the faculty-specific issues.
- Coordinate and promote appropriate collaboration between the institutes and the university level in the provision of appropriate RDM infrastructure and tools (as described in the Framework Policy).

Heads of Institutes are expected to:

 Ensure awareness of FAIR data and good RDM-practices among all researchers and students within their institute.

⁴ https://www.tugraz.at/sites/research-data-management-rdm/rdm-policy/personal-data/

⁵ https://www.tugraz.at/sites/research-data-management-rdm/policy/rdm-policy-at-tu-graz/



- Develop and implement efficient strategies to monitor and review RDM-practices.
- Ensure adequate communication and collaboration between institutes, faculty, and university level in providing appropriate RDM infrastructure (as detailed in the Framework Policy)

Research Group Leaders are expected to:

Ensure that all members of their research group (including PhD students) are aware
of FAIR principles and are trained to effectively manage research data, and that they
adhere to the expectations outlined within this implementation strategy document.

Principal investigators are expected to:

 Ensure that all project members plan for good data management from the outset of any research project and comply with good data management practice throughout the project's lifecycle.

Principal investigators are further expected to:

- Comply with contractual obligations about ownership of, and rights relating to, research datasets resulting from projects funded by external agencies or commercial companies.⁶
- Ensure adequate resources for good data management in each project.

PhD Supervisors are expected to:

 Develop and agree on a strategy for the management of research data, together with their PhD students, at the beginning of the research work.

PhD Supervisors are further expected to:

- Ensure that PhD students attend relevant training on data management, if available.
- Ensure that their PhD students make all data and code underlying their completed PhD theses appropriately documented and accessible for at least 10 years from the end of the research project, in accordance with the FAIR principles (Findable, Accessible, Interoperable and Reusable), unless there are valid reasons which make research data unsuitable for sharing. (For all students starting in a doctoral program from 01.07.2022 onwards)

⁶ Intellectual property rights (IPR) are dealt with in different acts, e.g. Urheberrechtsgesetz (UrhG), Patentgesetz 1970 (PatG), Gebrauchsmustergesetz (GMG), Markenschutzgesetz 1970 or Universities Act 2002 (UG 2002) and in researchers' employment contracts with TU Graz. Handling of IPR is also specified in additional guidelines and agreements (e.g. grant or consortium agreements) of and with TU Graz. As many different legal norms as well as contracts are involved, a general statement regarding intellectual property rights (e.g. ownership) covering each case, cannot be made. In most cases, however, TU Graz is owner of the IPR generated by its employees and TU Graz has the right to choose how the data are published and shared. Researchers are encouraged to contact F&T-Haus for further advice in this regard. https://www.tugraz.at/tu-graz/organisationsstruktur/serviceeinrichtungen-und-stabsstellen/forschungs-technologie-haus/



Individual Researchers are expected to:

• Ensure that research data, code and any other materials needed to reproduce research findings⁷, are appropriately documented, stored and shared in a research data repository in accordance with the FAIR principles for at least 10 years from the end of the research project, unless there are valid reasons not to do so.

Individual researchers are further expected to

- Understand who owns research data resulting from their projects and what that implies in terms of data management, particularly sharing and publishing.
- Properly cite research data.⁸
- Undertake training in good data management, as required and available.

In addition, PhD students are expected to:

 Develop a strategy for handling research data at the beginning of the research and agree it with their supervisors.

Further, PhD students should:

• Attend the relevant training in data management, as required and available.

Ensure that all data and code underlying completed PhD theses are appropriately
documented and accessible for at least 10 years from the end of the research project,
in accordance with the FAIR principles (Findable, Accessible, Interoperable and
Reusable), unless there are valid reasons which make research data unsuitable for
sharing.

⁷ At a minimum, as mandated in the Framework Policy, researchers should ensure that research data supporting peer-reviewed publications are appropriately documented and shared, unless there are valid reasons not to do so.

⁸ See, for example, the FORCE11 Data Citation Principles: https://www.force11.org/datacitationprinciples