

Guidance notes - Data Management Plan template for UG and PGT students

A data management plan or DMP is a document that outlines how data will be handled both during a research project, and after the project is completed. The goal of a data management plan is to consider many aspects of data management before the project begins, ensuring that data are well-managed in the present and prepared for preservation in the future.

Please note that a UG or PGT student who anticipates publishing their results or basing a future funding application or research project on the data collected in the current project should complete the DMP template for PGR students instead <https://eprints.gla.ac.uk/179057/> . Please see 'Research Data Management information for taught students' for more information <https://edshare.gla.ac.uk/853/>

If you need further help when completing your data management plan, please contact the Research Data Management Service research-datamanagement@glasgow.ac.uk

1. Overview	
Researcher name	Fill in the name of the student conducting the research
Supervisor name	Fill in the name or names of the student's supervisor(s)
Project title	Fill in the title of the project
Project Summary	Give a brief overview of your research

2. Data	
What types of data will be collected or created?	
List the broad categories of data that will be collected or created during the project. Examples might include: <ul style="list-style-type: none"> • Semi-structured interview recordings • Transcripts of focus group sessions • Relational database of testaments found in archival collections • Experimental measurements • Metabolomic data • Gel images • Photographs / micrographs • Design data for sensors and test setup • Custom written code 	
What formats will you use?	
Identify the file formats that will be used for each category of data in the section above. Examples might include: <ul style="list-style-type: none"> • interview recordings will be in MPEG-4 format • transcripts will be in .rtf format • data in spreadsheets will be in .csv format • image data will be captured in the manufacturer's format but will be stored as .tif files 	

- design data will be in .igs and .gds format and also stored as .pdf
- code will be written in python

How much data will you collect?

For each of the categories of data identified in the first part of section 2, try to estimate the volume of data to be stored (in Gb / Tb). It can be helpful to identify the size of a single file of the appropriate type and then multiply up based on the number of each file type you anticipate collecting / creating. Please note that estimations of dataset size become more important with increasing size, to ensure sufficient storage is available.

3. Documentation

How will the data be documented and described?

To ensure future understanding of the research data and to maximise the potential for re-use of data, contextual information or documentation (metadata) should accompany research data. This provides a secondary user (or the original creator at a point in the future) with any necessary details on the origin or manipulation of the data in order to prevent any misuse, misinterpretation or confusion. Recognised standards for metadata (documentation) should be used where possible.

In this section, list any documentation you will record to contextualise the data files.

Are there any standards for this in your field of research?

Some areas of research have established standards for documentation and metadata. If these exist in your field of research, please list the standards to which you will work.

Examples might include:

- MIAME standards for microarray data
- CIF standards in crystallography
- DDI standards for social, behavioural and economic data
- FITS standards for astronomical data
- PDBx exchange dictionary for 3D protein structure data
- SDAC standard for documentation of astronomical catalogues
- SDMX standards for statistical data and metadata exchange

4. Ethics and Intellectual Property

Who owns the data in your project?

The answer to this question depends on your individual circumstances and whether you have assigned any of your rights to the University, a funder or another party.

The University's policy is that students who are not employed by the University own their IP unless this is governed by a third-party agreement (e.g. funding or sponsorship) or other factors which confer an interest in the IP. Students may also choose to assign their IPR to the University.

<https://www.gla.ac.uk/myglasgow/ris/innovation/intellectualproperty/#whoownsintellectualproperty%3F>

Detail any ethical, legal or commercial considerations relating to your research data

List any ethical, legal or commercial issues that affect your research data

Examples might include:

- I anticipate patenting outputs from my research, so the data must be kept confidential
- Third-party datasets used in my research are subject to copyright or licence restrictions

- My project will collect data relating to human participants
- Participants will be potentially identifiable in interview recordings

For more information on how data management planning fits with data protection and ethics processes at the University, please see <https://doi.org/10.36399/gla.pubs.202746>

How will these concerns be dealt with?

For each of the legal, ethical or commercial issues identified, detail how you will proceed, to minimise the impact on your research and the dissemination of your research. Please note that these issues may only apply to a subset of your total data, in which case it should be made clear exactly which data subsets are affected.

Examples might include:

- Permission will be sought from secondary sources to share the findings of the research.
- Ethical approval for this research has been sought / gained from XXX ethics committee and data will be processed in line with legal requirements (eg data protection / GDPR).

5. Storage and organisation

How will the data be named, organised and structured?

For each category of data, the researcher should outline how they will organise their folders and files, the file-naming convention that they will use and how they will keep track of versions. The actual file-naming conventions need not be detailed, but it should be indicated that detailed information will be included with project documentation.

How will the data be stored for the duration of the project?

Please indicate which University-provided storage options will be used for your research data. The University of Glasgow provides three main storage options which are suitable for research data:

- J: drive space – access to this can be arranged through your supervisor.
- OneDrive for Business <https://www.gla.ac.uk/myglasgow/it/office365/>
- Teams – your supervisor may decide to add you to a Team for your research project.

Please note that external storage providers who are not under contract to the University of Glasgow (such as DropBox, Google Drives, Box etc) should not be used for the storage of research data.

If you need advice about storing research data during your project, you can contact your local IT support (link below) for advice.

If your school or research group has opted out from central IT provision, advice on data storage should be sought from local IT support (link below).

<https://www.gla.ac.uk/myglasgow/it/localitsupport/>

How will the data be backed up during the project?

State how often the data will be backed up and to which locations. How many copies are being made? Storing data on laptops, computer hard drives or external storage devices alone is very risky. The use of robust, managed storage provided by university IT teams is preferable. Similarly, it is normally better to use automatic backup services provided by IT Services than rely on manual processes.

<https://www.gla.ac.uk/myglasgow/it/informationsecurity/backups/>

Does access to the data need to be controlled for the duration of the project?

List any datasets which you collect or create which contain confidential or personal information. For each of these datasets, state how the data will be stored and how security or confidentiality will be maintained.

This might include encryption of mobile devices and storage media and password protecting files or folders, but might also include physical measures such as locking your screen when you're away from your computer and locking your office door when you leave the office.

Lastly, consider how you might transfer files containing confidential information – will you send encrypted files via email, use the University file transfer service (<https://transfer.gla.ac.uk/>) or transfer files using shared network drives or OneDrive?

<https://www.gla.ac.uk/myglasgow/it/informationsecurity/confidentialdata/>

Who has the right to access the data during the project?

List the people (either by name or by position held) who should have access to your research data during your project. It may be that different people need access to different subsets of your research data.

6. Implementation

Who is responsible for implementing this plan?

Indicate here: who will be responsible for each data management activity?

How will this plan be kept up-to-date?

The researcher should provide a statement about how regularly the plan will be reviewed, and with whom. If the project is of very short duration, updating the plan may not be necessary. If the project is part of a wider programme of research, then consideration should be made about how the PGR DMP aligns with a wider programme DMP.

What actions are necessary to implement this plan?

What do you need to do to make this plan work?

Examples might include:

- Contact local IT support to ensure storage provision is adequate

What training or further information are needed to implement this plan?

The researcher should identify any further training or support that they might need to implement the DMP. For example, they might need to attend one of our workshops on managing research data or need to contact the Data Protection team for advice on GDPR.