

FACULTY OF ENGINEERING – RESEARCH DATA MANAGEMENT PROVISIONS 2020

1 Purpose and application

- (1) These provisions give practical effect within the Faculty of Engineering ("the Faculty") to the:
 - (a) Research Data Management Policy 2014 ("the Policy");
 - (b) Research Data Management Procedures 2015 ("the Procedures");
 - (c) <u>Cyber Security Standard Data Handling</u> ("the Data Handling Standard"); and
 - (d) <u>Cyber Security Standard Data Classification</u> ("the Data Classification Standard").
- (2) These provisions apply to University staff, research students and affiliates in the Faculty.

2 Commencement

These provisions commence on 1 March 2021.

3 Definitions

(1) Words and phrases used in these provisions and not otherwise defined in this document have the meanings they have in the Policy and Procedures.

Note: See clause 6 of the Policy and clause 3 of the Procedures.

Associate Dean means the person the Associate Dean (Research)

within the Faculty.

Note: See <u>University of Sydney (Governance of Faculties and University Schools) Rule 2016</u>

4 Identification of research data and primary materials to be retained

(1) The definition of research data and the nature of such data and materials varies greatly between disciplines within the Faculty.

Note: See clause 7 of the Policy for examples of research data.



- (2) When deciding which research data and primary materials to retain, chief investigators and research students, in consultation with their research supervisors, must:
 - (a) retain research data and primary materials to justify the outcomes of their research, and if necessary, defend those outcomes against challenge;
 - (b) retain research data and primary materials in a form that others can interpret, including as appropriate:
 - (i) descriptive metadata;
 - (ii) tools;
 - (iii) source data;
 - (iv) script parameters;
 - (v) survey questions and responses;
 - (vi) recordings and transcripts of interviews;
 - (vii) archival materials which are not accessible to the public;

Note: Some copied archival materials are available online, e.g. in the National Archives of Australia.

- (viii) unpublished materials, including online materials, which are liable to disappear over time, e.g. copies of political press releases or speeches;
- (ix) physical collections, including artefacts, manuscripts, specimens or samples;
- (x) physical materials or data that cannot be digitised;
- (xi) audio-visual materials;
- (xii) images, audio-visual recordings and related materials and records of artworks;
- (xiii) modelling results;
- (xiv) databases and excel spreadsheets; or
- (xv) other supplementary materials required to enable researchers to reanalyse or re-use the research data;
- (c) identify and record the instruments and software used to generate or analyse the research data.
- (d) retain copies of the software or source code used to generate or analyse the research data.

Note: See clause 8 and Schedule Two for retention periods.

- (3) Chief investigators and research students, in consultation with their supervisors:
 - should document physical data and primary materials in digital format, where possible, to minimise space and resources required to curate and store them:
 - (b) must document the types of research data and materials to be retained within a Research Data Management Plan (RDMP); and

Note: See clause 5 and clause 7 of the <u>Procedures</u> and see also clause 13 of the <u>Policy.</u>



(c) must store data that are classified as protected or highly protected in accordance with the <u>Data Classification Standard</u>, clause 13 of the <u>Policy</u> and clause 3 and Appendix A of the <u>Data Handling Standard</u>.

5 Research data management plans (RDMP)

(1) RDMPs record the researcher's plan for storing, retaining and disposing of research data which is acquired or generated in the course of a project.

Note: See the Research Data Management Plan checklist.

(2) All research projects must be supported by an RDMP in the manner specified in the Policy and Procedures.

Note: See clause 9 of the Policy and clause 5 of the Procedures,

- (3) RDMPs must be prepared and registered with the Office of the Deputy Vice Chancellor (Research):
 - (a) by researchers undertaking unfunded research that is expected to produce research publications or other outputs that require verification;
 - (b) by chief investigators:
 - (i) applying for Faculty funded grants, as specified in the application guidelines or conditions of award; and
 - (ii) undertaking research using University facilities;

and

(c) by research students, in consultation with their supervisors, as a condition of their performance evaluations throughout candidature.

Note: See Schedule One of the <u>Progress Planning and Review for Higher Degree</u>
<u>by Research Students Policy 2015</u>, the <u>Higher Degree by Research</u>
<u>Supervision Policy 2020</u>, and <u>Progress, Planning and Review for Higher</u>
<u>Degree by Research Students Policy 2020</u>. The RDMP form is accessed with the <u>DashR</u> tool.

- (4) RDMPs should record any agreements about ownership and management of research data upon the researcher leaving the University.
- (5) RDMPs must be updated when the research data management needs of the research change significantly from those captured in the current RDMP.
- (6) Research students must complete any research data management training prescribed by the Faculty or agreed to with their research supervisor.
- (7) Chief investigators and research students, in consultation with their supervisors, should:
 - (a) Contact their faculty Academic Liaison Librarian for assistance with creating RDMPs; and
 - (b) Retain a copy of their RDMP with their research records.

Note: Contact the <u>Library for research data management training and support.</u> Contacts for research data management training and support are listed in Schedule One.



6 Ownership of research data and primary materials

- (1) The ownership of data and primary materials is as specified in clause 11 of the Policy.
- (2) Researchers and research students may create research data and materials that may be subject to an agreement with an external party. Chief investigators should contact the Director, Research Pipeline and Pre-Award in the Deputy Vice-Chancellor (Research) portfolio for assistance with research collaboration agreements or other research related contracts or agreements.

Note: See *Research Grants and Contracts* on the Research Support <u>website</u> and the <u>University copyright website</u>.

(3) Chief investigators and research students, in consultation with their supervisors, should record the creators or collectors of research data and materials, and note any applicable research collaboration agreements in their RDMP.

7 Retention of research data, primary materials and research records.

- (1) All research data must be re retained in accordance with clause 10 of the <u>Policy</u> and clause 9 of the <u>Research Code of Conduct 2019</u>.
- (2) All researchers are expected to familiarise themselves with these requirements.
- (3) Applicable retention periods are listed in Schedule Two.
- (4) Research agreements or contracts: chief investigators must be aware of any additional data retention requirements stipulated in their research agreement or contract.

Note: See the Research Agreements Policy 2011

- (5) Challenged results: if the results from research are challenged or are subject to a dispute, including litigation, all relevant data and materials must be retained for at least six months after notification by the University that an investigation or dispute has been finalised, regardless of the expiration of any otherwise applicable retention periods.
- (6) Chief investigators and research students should document the applicable minimum retention periods in their RDMP.
- (7) At the end of the retention period, researchers must make a recommendation to share, retain, archive or dispose the research data and materials. This recommendation must be based upon the record within the RDMP and subject to the requirements of legislation, University policy and any applicable ethical, contractual or confidentiality obligations.

Note: Contact digital.research@sydney.edu.au for questions about research data management.

8 Preferred formats

- Formats for data retention should be in accordance with clause 8 of the Procedures.
- (2) Chief investigators and research students, in consultation with their supervisors, should contact the Library's Research Data Manager for advice on preferred digital file formats.



Note: See the <u>Research Data Management Guidelines</u> or contact the <u>Library's Research</u> Data Manager

(3) Chief investigators and research students, in consultation with their supervisors, should document their choices of file format in their RDMP.

9 Sharing research data and metadata

(1) Subject to legislation, policy or ethical, contractual or confidentiality obligations, research data may be shared at any stage of a research project.

Note: See clause 12 of the Policy and clause 10 of the Procedures.

- (2) There are many ways to share research data, including, but not limited to:
 - (a) creating a record creating a record for a dataset in the <u>University's Research Data Registry</u> and advertising that record to <u>Research Data Australia</u>;
 - (b) depositing completed research datasets in the University's online digital registry for collecting, curating and advertising descriptive and administrative information about the research datasets it holds: and

Note: See Sydney eScholarship.

- (c) depositing completed research dataset in an open access, mediated access or restricted access discipline repository.
- (3) When sharing data to support research publications, chief investigators or research students, in consultation with their research supervisors, may deposit supplementary data sets in a preferred format in the University's open access institutional repository, and provide a persistent link to their publisher.

Note: Depositing a data set in the University's open access repository and providing a persistent link to the publisher enables the researcher and the University to retain their rights to the dataset.

- (4) For advice on depositing supplementary datasets in the University's open access repository, chief investigators or research students, in consultation with their supervisors, should contact:
 - (a) repository support;
 - (b) Sydney eScholarship; or
 - (c) the University Library
- (5) For assistance with sharing research data at any stage during or following their research project, chief investigators and research students, in consultation with their supervisors, should contact the <u>Library's Research Data Manager</u>.
- (6) Chief investigators and research students, in consultation with their supervisors, should document decisions regarding data sharing in their RDMP.

10 Disposal of research data and primary materials

(1) Chief investigators and research students, in consultation with their supervisors, should state their intentions for the disposal of data and materials, including sharing, archiving or destruction, in their RDMP.

Note: See subclause 10(5) of the Policy.



11 Retaining and managing data, primary materials and records when a researcher or research student leaves the University

(1) Research students must:

- (a) provide their research supervisor with a copy of the research data, research records and where applicable, primary materials and retained physical materials, as specified in their RDMP;
- (b) create a record of the research datasets within the University's metadata store; and
- (c) contact their faculty Academic Liaison Librarian to create a record for the data.

Note: See the Library website.

(2) Research Supervisors must:

- (a) communicate and explain the requirements of this provision to their research students;
- obtain a copy of their research students' research data, research records and any primary materials and retained physical materials at the end of the project, or when the research student leaves the University;
- (c) assist their research students to create a record in the University's metadata store;
- (d) retain their research students' research data research records and any primary materials for the minimum retention period; and
- (e) at the end of the required retention period, make a recommendation to their Head of School to share, retain, archive or destroy the research data, research records and primary materials. This recommendation must be based upon the record within the University's Research Data Registry and comply with the requirements of legislation, policy, and any applicable ethical, contractual, or confidentiality obligations.

Note: See subclause 10(5) of the Policy.

(3) Researchers must:

- save a copy of their digital research data to the University's Research Data Store;
- (b) create a record for their research datasets and any associated primary materials within the University's Research Data Registry;
- (c) provide a reference to their chief investigator and the Research Director; and
- (d) contact their Faculty Liaison Librarian to create a record for their data.

Note: See the Library website



NOTES

Faculty of Engineering Research Data Management Provisions 2020

Date adopted: 1 March 2021

Date commenced: 1 March 2021

Date amended:

Approved by: Professor Willy Zwaenepoel, Dean, Faculty of Engineering

Signature:

Related documents:

Copyright Act 1968 (Cth)

Cyber Security Policy 2019

Higher Degree by Research Supervision Policy 2020

Research Agreements Policy 2011

Research Code of Conduct 2019

Research Data Management Policy 2014

Research Data Management Procedures 2015

Cyber Security Standard - Data Handling

Cyber Security Standard - Data Classification

AMENDMENT HISTORY

Provision Amendment Commencing



SCHEDULE ONE

CONTACTS FOR RESEARCH DATA MANAGEMENT TRAINING AND SUPPORT

Chief investigators and research students, having first consulted with their supervisors, are encouraged to contact the following for advice and assistance with research data management training and support.

Requirement	Key contact	Addresses and links
Research data management training and support, including individual assistance with research data management	Faculty of Engineering Faculty Liaison Librarians (FLL).	See the <u>Library website</u> .
plans.		See the <u>SIH website</u>
Identifying which research data and primary materials are to be retained or other advice on the interpretation of the provisions in this document or the Procedures and Standards	Head of School of the Faculty	See the Faculty of Engineering website
Identifying how to store and manage research data and primary materials that are classified as protected or highly protected	The Cyber Security Governance Team	See the <u>Cyber Security website</u>
Interpreting data ownership clauses in research grants, research collaboration agreements and contracts	Director, Research Pipeline and Pre- Award, Research Portfolio	See the Research Support Website, Research Grants & Contracts
Selecting appropriate storage for digital data, materials and research records	Faculty IT Manager	See the ICT website to contact the Faculty IT Manager for the Faculty of Engineering See the Procedures
Transferring data and materials (including physical materials) into the University from another institution or out of the University to another institution.	Research Portfolio	See the MTA form on the Research Services Portal See also the Cyber Security website See clause 7 of the Procedures



Requirement	Key contact	Addresses and links
Describing and documenting research data collections.	Research Data Manager; University Library	See the Research Data Management Guidelines website:
		See also the <u>Research Data</u> <u>Management Policy 2014</u> , clause 8 Metadata and documentation.
Depositing completed digital datasets in the appropriate institutional or discipline repository, including setting the appropriate access permissions or restrictions when required.	Research Data Manager, University Library	See the Research Data Management Guidelines website
General advice on copyright and IP in research data or selecting an appropriate University approved license for open access datasets.	Manager, Copyright Services, University Library	See the Copyright website
Advice on patents and other registered IP rights, commercialisation of research, advice on selecting alternative licenses or terms of use to enable open access to research datasets.	Translation and Commercialisation Research Portfolio	See the <u>Translation and commercialisation website</u> Or contact: <u>cdip@sydney.edu.au</u>



SCHEDULE TWO RETENTION PERIODS FOR RESEARCH DATA

All research data must be retained in accordance with clause 9 of the <u>Research Code of Conduct 2019</u>. The following retention periods apply to the management of research data and materials within the Faculty.

Data type	Retention period	Notes
Machine, instrument or sensor generated data	5 years	The <i>minimum</i> retention period for non-human data is five years.
Source code and computational data, such as binary or ASCII data (computer or telecommunications text), software generated data including input parameters, scripts, software versions and samples of output data	5 years	Source code and computational data, such as binary or ASCII data, software generated data including input parameters, scripts, software versions and samples of output data are considered research data within the Faculty, and must be retained as per the provisions of the Policy, the Procedures and these provisions.
Data involving human research participants	15 years	The minimum retention period for research data collected during clinical trials is 15 years or otherwise in accordance with the applicable requirements of the Therapeutic Goods Administration (TGA), or Department of Health and Ageing.
		For a list of minimum retention periods for other types of data collected from human participants, refer to clause 9(6) of the Research Code of Conduct 2019.
Data from clinical trials	15 years minimum	Data relating to research subjects who were children at the time it was collected must be retained for the longer of 20 years or until the subjects reaches the age of 25.
Data relating to patent applications	20 years or the life of the patent	Data that relates to any patent applications must be retained for the life of the patent, generally 20 years;