DCC Call for applications Autumn 2023

The mission of the TU Delft DCC is to help researchers produce FAIR data, improve research software, and apply suitable computing practices to increase the efficiency of the research process.

About the call

This call offers hands-on support for research projects that involve data management and/or software development. A DCC staff member will join your research group part-time for a period of 3-10 months to collaboratively work on building solutions, transferring best practices and techniques, and setting up computing infrastructure for your project.

In line with our mission, we will prioritise projects that are willing to apply the FAIR principles while pursuing their specific research goals. Projects should also be open to exploring the benefits of following Open Science practices through implementing best practices such as documenting project data and code, sharing their output, and working collaboratively.

For examples of how we support researchers at TU Delft watch the video to find out what researchers say about us.

What support can be applied for?

The DCC has experience across all TU Delft faculties in supporting research projects to apply data and software solutions. For an overview of the DCC expertise, please see the Appendix or our website.

The capacity within the DCC to support data management requests has grown; we encourage projects with a data management component, such as data mining, visualizations and dashboards, pipelines, processing, and packaging, to apply for support.

Selected projects receive support, free of charge. This means that members of the DCC will provide hands-on support by collaborating with your research group, which can include development time, workshops and training materials, documentation, and technical consultation. The support is provided on a part-time basis.

One of the primary objectives of the DCC is to utilize the support provided as an opportunity to transfer digital skills and knowledge to researchers. Consequently, the developed solutions should be designed and implemented with active involvement from the research group. We can only support researchers that are engaged in and have time to dedicate to the project's development.

Information Event

To answer questions and provide information about the specific aims of this call, the support offered, and the expertise of the DCC, an information event will be organized on **Thursday 21 September 2023 (15:00-16:00)**. The event will be hosted online. If you want to join this event, register here.

The DCC team will also be present at the **Research Support Day** on **Tuesday 26 September 2023.** More information about the Research Support Day can be found here.

Application procedure

1. Complete the A**pplication Document** and prepare any additional documents you would like to attach to your application; applications must be completed in English. You can find the **application form** attached to this document or on our website: dcc.tudelft.nl. The call is open to all research staff at TU Delft and applicants who received support from the DCC in the past may again request support through this call.
2. Go to the DCC website and submit your application by clicking the submit application button at the bottom of the Current Call for Support page. On the website, you will be able to upload your application and provide contact information. Applications can be submitted from **4 September 2023 until 9 October 2023.** Terms and Conditions apply to the support provided by the DCC. Applications received after the deadline will not be considered for support.
3. A confirmation will be sent to the applicant's email address upon submitting the application. If you have any questions about your application, please contact us via email: dcc@tudelft.nl

Review procedure

Applications will be subject to a review process, comprising three steps: an eligibility check, an application review, and a final decision.

1. Eligibility check

Applications that comply with the following criteria will be considered eligible for support:

1. The application describes a project or idea that involves data management, research software, and/or execution of computational tasks
2. A mid- to long-term (3-10 months) period of DCC support is requested
3. One or more people in the applicant's research group are committed to co-developing solutions for the duration of the collaboration with the DCC.
4. If the project has a data component: The project has a Data Management Plan (DMP), or the applicant agrees to create one within the scope of the DCC support activities
5. If the project has a software component: The person(s) who will co-develop the solutions has experience with programming and version control

Applicants will receive an email to inform them of the eligibility of their applications.

2. Application review

Due to the current capacity of the DCC team, we unfortunately cannot offer support to all the applications that meet the eligibility criteria. Applications will therefore be subject to a selection procedure. To ensure impartiality, applications are anonymized during the review process. Members of the DCC will assess the eligible applications and rank them based on the following criteria:

1. The project is at a stage where DCC support can produce tangible results and will create a meaningful impact for the research group or community
2. The expected deliverables of the support request have a wider impact within the research community and are likely to be (re)used by others
3. The goals of the support request are feasible to achieve during the support period by the DCC
4. The deliverables of the project can be shared as openly as possible and contribute to more FAIR (Findable, Accessible, Interoperable, and Reusable) research outcomes
5. The requested technical skills are available in the DCC team, or it is realistic for the DCC team to obtain them during the support period
6. The co-developers in the research group have appropriate technical skills to collaborate with the DCC
7. The applicant will give appropriate credit to the contribution of the DCC

Next, shortlisted applications will be invited to an Intake meeting to further clarify and scope the requested support.

3. Final decision

The final decision on awarding support to eligible applications will be taken by the DCC, based on the outcome of the intake meetings. All eligible applications will receive an email with the final decision for awarding support.

Expanding DCC capacity

The DCC is a growing team of data managers and research software engineers. If applications couldn't be awarded hands-on support initially due to capacity limitations, they might be contacted at a later stage during the call support period if the DCC's capacity allows for additional support.

Timeline

Call for DCC support applications open	4 September 2023 - 9 October 2023
Information Event	21 September 2023
Intake meetings	23 October - 10 November 2023
Final decision	15 November 2023
DCC hands-on support	1 December 2023 - 1 October 2024

Other opportunities

FAIR4RS Program

In the Spring of 2023, the DCC offered a 13-week 'FAIR for Research Software Program' (FAIR4RS program) that aimed to teach participants the essential tools to create scientific software following the FAIR principles. The DCC aims to renew this call in the Spring of 2024.

Contact details

If you would like more information before submitting an application, please contact us by email: dcc@tudelft.nl

Appendix – DCC expertise

Data management

- Choosing among and implementing data management tools available at TU Delft
- Data storage, access, back-ups, and collection (example, SURF, TU Delft)
- Database management
- Data visualization and dashboards
- Data mining
- Implementing a (meta)data documentation standard relevant to your research domain
- Structuring and preparing data for deposition in a research data repository such as 4TU.ResearchData

Software development

- Publishing, packaging, compiling, distribution, and release of software for reproducible research
- Software development tools and environments
- Software development best-practices:
  - Code structure and modularity
  - Documentation and code readability
  - Maintainability
  - Testing and software quality
  - Continuous integration
- Collaborative development with tools such as GitHub/GitLab
- Software performance optimization
- Software architecture and management

Computational workflows and infrastructure

- Setting up workflows, tools, and platforms to facilitate reproducible data analysis
- Working with HPC clusters and performing parallel computations
- Deploying software on available infrastructure