

# DCC - Call for projects 2024

This call is aimed at TU Delft researchers who want to improve their research data management and software development. TU Delft researchers can apply for 3-11 months of hands-on co-development from the DCC for their research project. Support is provided between November 2024 and September 2025.

## About the call

*The mission of the TU Delft Digital Competence Centre is to empower researchers in creating and managing FAIR data, developing research software, and applying appropriate computing practices to enhance the research process.*

This call supports TU Delft research projects where code and/or data constitute essential components. The DCC offers hands-on support to collaborate on building data and software solutions, transferring best practices, and setting up infrastructure for software and data management. Some examples of how we support researchers at TU Delft can be found in this [video](#).

In line with our mission, we will prioritise research projects that are willing to apply the FAIR<sup>1</sup> principles for data and software. We support researchers in exploring the benefits of Open Science by implementing best practices for sharing their output and enabling collaboration.

## Who can apply for support?

The call is open to all TU Delft research staff, including PhD candidates, postdoctoral researchers, and group leaders. The applicant/co-developer needs to

- Hold a TU Delft contract for at least the duration of the requested support
- Be available for active collaboration
- Adopt responsibility for maintaining the co-developed solutions

The developed solutions are designed and implemented with active involvement from the research group. We can therefore only support researchers who are engaged in and have time to dedicate to the project's development.

When the project is a collaboration between multiple researchers, we encourage the main developer to apply. Researchers who have received support from the DCC in the past are also welcome to request support again through this call.

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<sup>1</sup> Findable, Accessible, Interoperable, Reusable

## How can we support you?

The DCC offers hands-on support through active collaboration between researchers and our Data Managers and/or Research Software Engineers. This support is offered in-kind, free of charge. The offered support will mainly entail hands-on co-development time but can also include technical consultation, providing workshops and training materials, or mentoring. The support is provided **between November 2024 and September 2025**, part-time, for 3 up to 11 months.

The call supports research projects ranging in scope from individual PhD projects to collaborations between multiple research groups, and in maturity from an idea to a well-established project. For an overview of supported projects, have a look at our [showcase](#).

The DCC has a wide range of expertise in supporting research data and software and has successfully supported research projects across all TU Delft faculties in co-developing data and software solutions. For an overview of the DCC expertise, please see the Appendix or our [website](#).

The available expertise of the DCC has increased and we can now also provide support on **AI and Machine Learning, Data Analytics, and Cloud Workflows**. We encourage projects with these components to apply for support.

## Submitting the application

1. Complete the **Application Form** and prepare any additional supporting PDF-documents you would like to attach to your application. You can find the **Application Form** attached to this document or on our website: [www.dcc.tudelft.nl](http://www.dcc.tudelft.nl).
2. Submit the filled-out application form by clicking the submit application button at the bottom of the Current Call for Support page on the [DCC website](#). You will be able to upload your application and provide contact information. Applications can be submitted from **21 August 2024 until 25 September 2024**. 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](mailto:dcc@tudelft.nl).

By submitting your application, you agree to the **Terms and Conditions** of the support provided by the DCC.

## Review procedure

Applications will be subject to a review process, which consists of 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 research project or idea that involves data management, data analytics, research software, and/or execution of computational tasks
2. A 3-to-11-month period of DCC support is requested
3. One or more research staff are available to co-develop solutions during 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 researchers who will co-develop the solutions have basic knowledge of programming.

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

### 2. Application review

Due to limited capacity, 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 based on the following criteria:

#### *Feasibility*

- The project is at a stage at which DCC support can produce tangible results and will create a meaningful impact for the researcher
- It is feasible to provide the requested support within the support period
- 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

#### *Commitment*

- The co-developers in the research group have appropriate technical skills to collaborate with the DCC, or it is realistic for the co-developers to obtain the required skills during the support period
- The applicant can maintain the requested solution after completion of the DCC support
- The applicant agrees to give appropriate credit to the contribution of the DCC

#### *Impact*

- The expected deliverables of the support request have a wider impact within the research community and are likely to be (re)used by others
- The deliverables of the project can be shared as openly as possible and contribute to more FAIR (Findable, Accessible, Interoperable, and Reusable) research outcomes
- Opportunity for knowledge transfer

Based on the initial application review, short-listed 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.

If applications couldn't be awarded hands-on support initially due to limited capacity, they may be contacted at a later stage during the call support period if additional capacity becomes available.

## Timeline

Call for DCC support applications open	21 August – 25 September
Application submission deadline	25 September at 14:00h
Eligibility check and initial review	26 September - 2 October
Intake meetings	3 October– 23 October
Final decision	25 October
Support period	November 2024 – September 2025

## Other support opportunities

### Code & Data Office Hours

The DCC offers 45-minute consultations to discuss your data and software challenges with experienced Data Managers and Research Software Engineers. If you would like to brainstorm the best strategies and next steps to solve your problem, book an appointment on [our website](#).

### CodeChecks

Starting in October 2024 the DCC will offer CodeChecks through the Code & Data Office Hours. [CODECHECK](#) offers an independent verification for code associated with research papers prior to publication, with the aim of reproducing the published results and removing barriers to sharing and reuse of the code. If the independent codechecker successfully runs your code, your publication will be awarded a “certificate of executable computation” by the CODECHECK organization. Visit the [DCC's Code & Data Office Hours webpage](#) for more information and to book a CodeCheck-appointment for your project.

### FAIR4RS Program

In the Spring of 2023 and 2024, the DCC offered a 13-week [‘FAIR for Research Software Program’ \(FAIR4RS program\)](#) This mentoring program aimed to help participants implement the essential tools to create scientific software following the FAIR principles in their own project. The DCC aims to renew this call in the Spring of 2025.

## Contact details

If you would like more information before submitting an application, please contact us by email:

[dcc@tudelft.nl](mailto:dcc@tudelft.nl).

If you want to stay informed about DCC's activities, please sign-up for our mailing list by [filling out this form](#).

## Appendix – DCC expertise

### ***Data management***

- Choosing among and implementing data management tools available at TU Delft
- Data storage, access, back-ups, and collection (SURF, TU Delft)
- Database management
- 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

### ***Data analytics***

- Data mining
- Reproducible data analysis
- Visualization and dashboards
- Machine learning

### ***Software development***

- Publishing, packaging, compiling, distribution, and release of software for reproducible research
- Collaborative development through platforms such as GitHub/GitLab
- Software performance optimization
- Software design and architecture
- Artificial Intelligence and machine learning applications
- Web development

### ***Software quality***

- Code structure and modularity
- Documentation and code readability
- Maintainability and reusability
- Software testing
- Automation through CI/CD

### ***Computational workflows, Cloud, and HPC infrastructure***

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