



**COARA ACTION PLAN OF
BRNO UNIVERSITY OF TECHNOLOGY
2024+**

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About Brno University of Technology

Brno University of Technology (BUT), with roots dating back to 1849, strives for the development of education, intellectual wealth, and progress through its educational and research activities. It is part of a network of public universities aligned with the mainstream of European higher education policy, embracing the principles and values of the European Higher Education Area (EHEA) and the European Research Area (ERA).

BUT is a modern research technical university with a comprehensive profile of technical and natural science education, combined with education in architecture, fine arts, and design, supplemented by economic and management education. As a member of a European university alliance, it is a registered European university that builds its profile as an international university through the number and support of foreign students.

Recognising the importance of graduates in technical fields and the results of research and development for the prosperity of industry and the national economy, BUT aims to develop technical education and foster critical thinking, imagination, creativity, problem-solving skills, project thinking, a sense of responsibility, and teamwork among its students. Its competitive advantage lies in integrating education, research, and technology with the arts.

BUT strengthens traditional and establishes new strategic partnerships to enhance academic and research collaboration with partner universities and improve cooperation with industry. Aware of its position and role in society, BUT sees it as its duty to set an example in responsible research assessment.

Current Status

BUT became a signatory of the [Agreement on Reforming Research Assessment](#) and joined the [CoARA](#) coalition in 2022. In the same year, the university leadership set a goal to organise [an internal evaluation of research and other creative activities](#) and allocated human resources and budget for this purpose. In 2023, the [International Scientific Advisory Board of BUT](#) (ISAB) was established. The ISAB serves as a key independent advisory body to the university, particularly regarding its strategic development and enhancing the quality of scientific, developmental, innovative, and educational activities.

[The internal evaluation of research and artistic activities at BUT in 2023](#) was conducted at the level of individual research areas and, in the case of art, at the level of artistic segments. It was based on benchmarking with selected European universities and self-evaluation of the evaluated units (faculties and university institutes) reflecting on their publication strategy, social and economic impact of their research activities, research vision, and the measures taken based on the results of the evaluation carried out by the International Evaluation Panel in 2020. All materials were submitted to ISAB, whose members subsequently visited individual evaluated units to provide feedback on the evaluation methodology. The 2023 evaluation and feedback from ISAB members became the cornerstone for preparing a peer review detailed [evaluation of research, other creative activities, and doctoral studies in 2024](#) which will be conducted at the level of individual departments of faculties/university institutes.

BUT Priorities in Research Assessment Reform

BUT considers all principles mentioned in the [Agreement on Reforming Research Assessment](#) essential for the future of responsible research evaluation. The university leadership views adherence to ethics and integrity in research as critical. At the same time, it supports freedom in research and transparency in assessment. For BUT, the main priority is to focus evaluation criteria on quality while considering the diversity of research activities and outputs. In the Czech Republic, a long-established evaluation system based on assigning points to every research output and the allocation of funding based on the total number of points scored by the institution allowed quality to be replaced by quantity of outputs. This changed with the introduction of [Methodology 17+](#) in 2017, which established a more balanced evaluation based on both quantitative and qualitative criteria; since then, the research assessment culture has been gradually evolving. A significant challenge in the constantly progressing ecosystem of science, research, and innovation is to recognise and value the growing variety of missions and the diverse outputs of research.

BUT understands open science as a fundamental starting point in setting policies for the preservation and publication of scientific publications and other results of educational and creative activities, managing research data according to FAIR Data principles, open access to research infrastructures, and implementing other measures in the field of educational and creative activities, emphasizing adherence to ethical principles in this area. Since 2022, it has been guided by the valid [Open Science Strategy at Brno University of Technology for the period 2022–2025](#).

Another priority is ensuring equal opportunities for all researchers regardless of their gender, career stage or background by enhancing a socially safe working environment. Being a technical university, ensuring gender equality among students and staff is a particularly pressing issue for BUT. To reach this goal, the university adheres to the valid [Gender Equality Plan 2022-2024](#) and holds the HR Award, following the [BUT Action Plan for the period 2023-2026](#).

GAP Analysis and CoARA Action Plan of BUT

Commitments of ARRA
<p>1. Recognise the diversity of contributions to, and careers in, research in accordance with the needs and nature of the research +</p> <p>6. Review and develop research assessment criteria, tools and processes</p>
<p>Current Status</p> <ul style="list-style-type: none"> The preparation of research evaluation processes at BUT is always carried out in cooperation with representatives of faculties and university institutes to identify the diverse outputs of all research areas and artistic segments included in the evaluation. A list of these outputs with comments from the evaluated units is part of the self-evaluation reports submitted to evaluators. Feedback on the evaluation methodology is provided by the International Scientific Advisory Board of BUT. The diversity of outputs across various research fields and workplaces is also respected by the Academic and Research Staff Evaluation System (SHAP), which is a self-assessment and planning tool for the further development of the evaluated employee, with evaluations occurring annually. One of BUT's activities to support the recognition of the contributions of a diverse range of outputs is the establishment of Rector's Awards for extraordinary research and artistic outputs. The Rector's Awards, introduced in 2023, recognise not only publication outputs but also artistic or architectural works, works with alternative impact indicators, such as media resonance, and extraordinary contributions to society, and allow for the nomination of outputs that do not fall into any established category. BUT is the proud recipient of the HR Excellence in Research Award by the European Commission. We are following the principles of the European Charter and the Code of Practice in the process of recruiting and selecting all staff. The recruitment and selection procedures at BUT are regulated by The Rules for Selection Procedures for Filling the Posts of Academic, Research and Development Staff, Senior Staff and Other Positions at BUT. BUT promotes equal opportunities and non-discrimination. The process of career advancement, development, and remuneration is currently managed by individual faculties and university institutes of BUT, which set their own motivational tools for remuneration while respecting the BUT Wage Regulations and other university-wide internal regulations and norms. A career regulation for BUT is being prepared in order to increase transparency of career advancement criteria. In 2022, a Methodological Sheet for admission procedures and a Guide for employee recruitment/selection/hiring were issued.
<p>Desired Status</p> <p>It is necessary to set up a system for ongoing review of evaluation processes, including evaluated outputs, to reflect current trends in the research space, to account for the specifics of individual fields, and to consider the specifics of the career paths of evaluated individuals and the missions of research teams or higher organisational units.</p>
<p>Action Plan Steps</p> <ul style="list-style-type: none"> Continuing collaboration with the International Scientific Advisory Board of BUT (ISAB). ISAB collaborates in establishing evaluation methodology to reflect diversity in all aspects of evaluation. The evaluation methodology is discussed with its members, and ISAB members also participate in the evaluation as a coordinating body overseeing the transparency, consistency, and fairness of the evaluation process. 2024+ Establishing a working group for evaluating research and other creative activities. This working group will include all relevant actor groups, i.e., researchers and academic staff at various career stages representing different fields, as well as managers and administrators in research. The working group will propose updates to evaluated outputs and evaluation criteria for both individual assessments (the

Academic and Research Staff Evaluation System – SHAP) and for the evaluation of individual departments of faculties/university institutes and higher units.

2024+

- Creation of a position for the **Vice-Rector for Human Resource Management**, whose responsibilities will include the system for selecting and recruiting academic and research staff, evaluation, career development management, continuous professional development and further education, ensuring gender equality, and the internationalisation of the internal environment, including the information system and ensuring employee care functions, including care for foreign employees.

2024

- Setting up the **career regulation of BUT**. The university views career regulation as an important tool for transparent and effective planning and management of careers not only for academic and research staff across the university. By the BUT HR Award Action Plan 2023-26, a concept for the BUT career regulation will be created in 2024.

2024-2025

- **Promoting responsible evaluation at the level of providers** (Czech Science Foundation, Technology Agency of the Czech Republic, etc.) **and at the national evaluation level** according to Methodology 17+ through BUT representatives in various provider bodies, the Council for Research, Development, and Innovation etc.

2024+

- Preparation of a **Code of Gender-Sensitive Communication**. The aim of the Code is to familiarise the academic and non-academic community with the principles of gender-sensitive communication and measures that can be adopted to improve communication culture not only at BUT. It contains recommendations for various forms of communication used in public meetings, conferences, articles, publications, and other presentations of BUT, including scientific research outputs etc.

2024

- Revision of the BUT Gender Equality Plan 2022-2024 and creation of a **new supplemented Gender Equality Plan** for the period 2025-2028.

2024

2. Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators

Current Status

- In 2023, [International Scientific Advisory Board of BUT](#) (ISAB) was established, which is a significant advisory body in the area of research evaluation. ISAB plays a coordinating role in evaluation, overseeing transparency, fairness, and consistency in evaluation. It also serves as an advisory body for setting the evaluation methodology.
- In 2023, an [internal evaluation of research and creative activities](#) was conducted, focusing on benchmarking of BUT faculties' and university institutes' performance in the most significant fields with prominent European universities and on self-evaluation.
- Preparations for the evaluation of research, other creative activities, and doctoral studies in 2024 are underway, which will be based on peer review evaluations by 47 international evaluators. The evaluation will be conducted at the level of individual departments or clusters of related departments. ISAB members will be involved in a coordinating role (see above).

More about the 2024 evaluation can be found at the BUT website: <https://www.vut.cz/en/rad/evaluation/2024>. The evaluation is being prepared in accordance with CoARA commitments and the principles of the [Leiden Manifesto](#).

- One of the supports for managing career growth and monitoring the effectiveness and fulfilment of the activities plan of academic staff is the **Academic and Research Staff Evaluation System** (SHAP), which has been in place at BUT since 2020. Additionally, evaluations of non-academic staff have been conducted at the BUT Rectorate since 2023. Some other BUT organisational units have also joined the evaluation of non-academic staff.

Desired Status

Implementation of a system of regular peer review evaluations of faculty a university institute departments. At the individual researchers level, conduct regular annual assessment of academic and research staff. In cooperation with the working group for evaluating research and other creative activities, monitor and revise the assessment system.

Action Plan Steps:

- Conduct [peer-review evaluation of research, other creative activities, and doctoral studies in 2024](#).
2024
- Review the results of the national evaluation in 2020 and **prepare for the national evaluation according to [Methodology 2017+](#) in 2025** focused on social relevance, viability, strategy, and concept of the university by an international evaluation panel.
2024-2025
- **Evaluate the process and outcomes of the [2024 evaluation](#)**, and assess the fulfillment of individual ARRA commitments. Propose improvements for the next evaluation (the expected interval is five years).
2026
- Conduct **revision of the annual evaluation of Academic and Research Staff Evaluation (SHAP)** in cooperation with the working group for evaluating research and other creative activities.
2025+
- Engage in the **4th Generation University (4GU) project**. This project, led by Elsevier and TU Eindhoven, aims to develop a methodology that allows for monitoring and a better understanding of the impact of universities on local innovation ecosystems. This project aims to bridge understanding around leading innovation ecosystems with data-driven indicators such as those encapsulated in the concept of '[next generation metrics](#)'.
2024
- Based on the outputs of the [2024 evaluation](#) and new trends in research assessment, **establish a peer review assessment system for evaluation in 2029**.
2028

3. Abandon inappropriate uses in research assessment of journal- and publication based metrics, in particular inappropriate uses of Journal Impact Factor (JIF) and h-index

Current Status

- Since the [Czech national system for evaluating research](#) is partially based on journal metrics measuring journal citation (Article Influence Score), this metric is included in our assessment materials, but only as one of many metrics that serve as supplementary information for peer review evaluations. The primary source of information for the evaluators is the self-evaluation report and the on-site visit to the assessed unit. The self-evaluation report is primarily based on a textual section where the evaluated unit describes its activities, mission, vision, outputs, impact of research etc., and where it can also comment on the afore-mentioned metrics.
- The H-index and JIF are not used for assessing the quality and impact of scientific activities within research evaluations.

Desired Status

Continued responsible use of metrics as supplementary data for evaluators. The significance of the metrics must always be sufficiently explained, its limits must be stated, and the evaluated individual or unit must always have the opportunity to comment on these metrics.

Action Plan Steps

- **Incorporate responsible use of metrics into self-evaluation forms** for evaluated units for the 2024 evaluation.
2024

- **Revise the use of metrics within the Academic and Research Staff Evaluation System (SHAP) in 2025.**
2024-2025
- **Revise the use of metrics for the 2029 research and artistic activities evaluation.**
2028

4. Avoid the use of rankings of research organisations in research assessment

Current Status

At BUT, the results of BUT's placements in university rankings are used only for marketing purposes, they are never used in any type of research evaluation or remuneration neither at the level of departments nor individual researchers.

BUT have representatives in the [Task Force Benchmark](#) of [CESAER](#) alliance which allows us to engage with ranking agencies, establish regular communication channels to provide feedback and concerns on updates on the ranking methodologies, foster formal and informal peer-learning opportunities, and share good practices and methods of benchmarking and rankings analysis.

Desired Status

Employees and the public are informed about the limits of university rankings.

Action Plan Steps

- Continuously conduct awareness campaigns within the university and externally to clarify the data from which rankings are derived and what they represent. This includes integrating the topic into the [Rector's Council](#) discussions, meetings of vice-deans for science and research with the vicerector, and especially raising awareness among all employees via information in news updates on BUT webpage, newsletters, the inclusion of the topic in seminars and workshops content conducted by the Research Support Department in cooperation with the Strategy and Analysis Department, and inclusion of the topic in „coffee meetings“ of BUT employees with the Vice-Rector for Research and Knowledge Transfer (informal meetings, to which all BUT employees are invited to discuss various topics falling under the research and knowledge transfer agenda, including research evaluation).
2024+

5. Commit resources to reforming research assessment as is needed to achieve the organisational changes committed to

Current Status

BUT regularly allocates resources for research evaluation. In 2022, personnel and financial resources were allocated for the [internal evaluation of 2023](#). A new employee was hired in the Research Support Development for the research and other creative activities evaluation agenda. In 2023, resources were allocated for organising [the Evaluation of research, other creative activities, and doctoral studies in 2024](#), which involves the participation of 47 foreign evaluators and 11 ISAB members. Those responsible for preparing the evaluation regularly attend relevant training and conferences related to research evaluation and other aspects concerning the research space (open science, research data management, science communication, gender equality, inclusion etc.).

Desired Status

Ensure sufficient resources for continuous evaluation reform.

Action Plan Steps

- Continue regularly **allocating financial and personnel resources** for responsible research evaluation.
2024+
- Continuously ensure **quality personnel** responsible for evaluation agendas and **provide further education in research evaluation**.

2024+
7. Raise awareness of research assessment reform and provide transparent communication, guidance, and training on assessment criteria and processes as well as their use
<p>Current Status</p> <p>At present, the research assessment is being prepared primarily in cooperation with the leadership of the faculties and university institutes. The principles of evaluation, methodology and evaluation criteria are discussed mainly at the level of the Rector's Council and meetings of vice-deans for science and research with the vice-rector. Furthermore, seminars are organised for department managers to explain the evaluation methodology, principles, supporting materials etc. The Vice-Rector for Research and Knowledge Transfer has introduced informal coffee meetings to which all BUT employees are invited to discuss various topics falling under the research and knowledge transfer agenda, including research evaluation.</p>
<p>Desired Status</p> <p>An extremely important part of the entire evaluation process is awareness-raising within the university. All employees should have access to relevant information about the reform of research assessment, its goals, forms, criteria and outputs. External communication will also take place. Promoting the principles of responsible research assessment in state administrative bodies, scientific councils and other bodies where BUT employees are represented.</p>
<p>Action Plan Steps</p> <ul style="list-style-type: none"> • Awareness-raising of responsible research assessment and its reform will be conducted in the form of educational and outreach events for university employees, and the topic will also be included as one of the topics of the following communication platforms: <ul style="list-style-type: none"> ○ Rector's Council ○ Meetings of vice-deans for science and research with the Vice-Rector for Research and Knowledge Transfer ○ Informal coffee meetings of the Vice-Rector for Research and Knowledge Transfer with BUT employees ○ Training and workshops organised by the Research Support Department <p>Furthermore, awareness-raising inside and outside the organisation will be carried out through regular internal communication channels (new webpage about the research assessment, newsletter, news on the website, university magazine Události, communication with vice-deans and heads of institutes, articles on external websites related to research).</p> <p style="text-align: center;">2024+</p>
8. Exchange practices and experiences to enable mutual learning within and beyond the Coalition + 9. Communicate progress made on adherence to the Principles and implementation of the Commitments + 10. Evaluate practices, criteria and tools based on solid evidence and the state-of-the-art in research on research, and make data openly available for evidence gathering and research
<p>Current Status</p> <p>BUT has already begun sharing best practices, particularly with organisations that are part of the CESAER and EULIST coalitions alongside BUT. For example, BUT presented its initial progress after joining the CoARA coalition at the "CoARA and its Consequences for University Rankings" workshop held in November 2023 by the CESAER alliance of technical universities. Another platform where BUT shares its experiences with implementing ARRA is the European university EULIST.</p>

Desired Status

BUT will continue to utilise various platforms to share experiences related to the implementation of ARRA and to inform about the progress made in adhering to the principles and fulfilling the commitments of the coalition.

Action Plan Steps

- Share experiences within **European alliances** [EULIST](#), [CESAER](#), [EUA](#).
2024+
- Share experiences with **Czech organisations** (e.g., through the Czech Association of Managers and Administrators in Research – [CZARMA](#)).
2024+
- Engage in the **4th Generation University (4GU) project (see commitment 2)**. One of the aims of the project is to promote the 4GU concept, share data, and exchange lessons learned and best practices in the area of indicators of universities' impact on local innovation ecosystems.