

Principles of Good Scientific Practice at Technische Universität Braunschweig

Preamble

In its charter, Technische Universität Braunschweig committed to pay attention to the adherence to the principles of good scientific practice. Research, teaching, studies and continuing education including early career support are to be organised such that the university's tasks can be fulfilled in a responsible manner.

§ 1 Guiding Principles

(1) Researchers who work at the Technische Universität are obligated:

- To work according to the rules of science (*lege artis*),
- To document results and to consistently question all of their own findings,
- To ensure complete integrity regarding the contributions of partners, competitors and predecessors,
- To avoid and prevent scientific misconduct and to adhere to the rules described in the following.

(2) In addition to measures to discover and discipline scientific misconduct, appropriate measures to avoid scientific misconduct should be taken or strengthened. As the site of research, teaching and early career support, the University has an institutional responsibility on this matter.

(3) The head of every academic institution or working group has the duty to behave in an exemplary manner regarding good scientific practice. Students and junior researchers must be alert to possible misconduct in the interest of their own future plans.

§ 2 Supervising Students and Junior Researchers

(1) The faculties are called upon to adequately discuss scientific misconduct in the curriculum, for example in one of the compulsory introductory courses, and to teach students about the principles that apply at Technische Universität Braunschweig. This applies in particular to discussing how to properly handle others' data and texts as well as others' intellectual property.

(2) Academic work typically starts when writing the Bachelor's thesis or the final thesis for another basic level degree programme. It continues in a more in-depth manner in the Master's thesis and the dissertation. Besides teaching technical skills, the university is to convey to students and junior researchers ethical principles of academic work, of handling results responsibly and when cooperating with other researchers.

(3) Junior researchers have the right to regular academic supervision, advising and support. They are required to document their work independently, should report regularly on the progress of their work and take part in internal seminars. The supervisors must regularly review whether the students and doctoral candidates are fulfilling these obligations.

§ 3

Requirement for Academic Staff to Observe the Rules of Good Scientific Practice

When they are hired or appointed, academic staff members primarily employed by the university must obligate themselves in a written declaration to acknowledge and adhere to these Regulations. Academic staff members who work in a secondary employment relationship at Technische Universität Braunschweig must be expressly informed of these Regulations. It is binding for all academic staff members at TU Braunschweig.

§ 4

Cooperation and Management Responsibilities in Working Groups

In research areas in which several people work together on scientific research questions, the head of the working group (or research group) is responsible for organising the group such that the tasks of management, supervision, conflict management and quality assurance are clearly assigned and actually carried out. Those who lead working groups are also responsible for ensuring that students and junior researchers who work in the group receive adequate supervision. For each of the students and junior researchers, one person in the working group must be primarily responsible for them including informing them about the Principles to Ensure Good Scientific Practice at Technische Universität Braunschweig.

§ 5

Performance and Evaluation Criteria

Originality and quality must always have priority over quantity as criteria for performance and evaluation for examinations; when awarding academic degrees; for promotions, hiring and appointments as well as for funding allocation that is oriented on performance and workload.

§ 6

Retaining Primary Data, Final Theses and Dissertations

(1) As the foundation of publications, primary data is to be retained for 10 years on preservable and secured data carriers at the institution in which the data was created. To the extent possible, specimens that were used to obtain primary data should be retained for the same time period.

(2) Dissertations must be retained in the form in which they were submitted and published; details are regulated by the faculties. Final theses must also be retained; the retention period can be found in the relevant legal provisions.

§ 7

Academic Publications

Authors of academic publications are always jointly responsible for the content of the publications. Authorship can only be justified on the basis of a person's own academic contribution. So-called "honorary authorship" is not permitted.

§ 8 Academic Misconduct

- (1) Academic misconduct occurs when the following takes place intentionally or with gross negligence in an academic context:
 - a) False statements are made,
 - b) Others' intellectual property rights are violated or
 - c) The research activities of third parties are adversely affected in another way.
- (2) In particular, the actions listed in the appendix are to be considered academic misconduct.

§ 9 Investigating Academic Misconduct

- (1) Technische Universität Braunschweig will investigate all concrete suspicions of academic misconduct at the university without regard to the reputation of the person. If the suspicion of academic misconduct is raised against a person who has already left TU Braunschweig and the alleged misconduct occurred at TU Braunschweig, an investigation of the academic misconduct will still be conducted. If the person suspected of academic misconduct worked at another institution at the point in time for which the alleged violation of the rules of good scientific practice took place, TU Braunschweig typically asks that institution to review the case.
- (2) If student misconduct is related to student coursework or examinations, the faculty or the examination committee is responsible for investigating the misconduct. For other cases of misconduct, a standing Investigation Committee (§ 11) established by the Senate for this purpose is responsible for investigating and evaluating the case; if this Investigation Committee determines that there was academic misconduct, it recommends to the President measures that are appropriate for the individual case in the context of the legal possibilities. Details are regulated in § 9(3). If the misconduct was in connection with obtaining academic degrees and titles, the body responsible for awarding and revoking the affected title must be informed.
- (3) In particular, the Investigation Committee can recommend the following measures depending on the severity of the academic misconduct:
 - a) Labour law consequences (e.g. warnings, writeups, termination, contract dissolution) or (for civil servants) carrying out a disciplinary process and imposing disciplinary measures.
 - b) Initiating procedures to revoke academic degrees and honours (in particular revoking the doctoral title, revoking the right to teach or revoking the title "extraordinary professor").
 - c) If a criminal act or offence is suspected, contacting the relevant investigative authorities.
 - d) Call for the person responsible for the misconduct to remedy the consequences, e.g. by withdrawing publications that have not yet been published or correcting publications (retraction, addition of other people as co-authors etc.).
 - e) Informing affected researchers (cooperation partners, co-authors etc.), affected research facilities, academic journals and publishing houses (for publications), funding institutions and academic organisations, professional organisations, ministries and if there is a general public interest also the public, about the misconduct.

- f) Asserting claims for damages or surrender claims (e.g. for stolen scientific material).
- (4) The Investigation Committee's process does not replace other processes based on legislation or legal statutes (e.g. academic processes, processes in labour law or civil service law, civil or criminal proceedings). These are initiated by the responsible offices on the recommendation of the Investigation Committee.
- (5) If it is determined that misconduct occurred, then in cooperation with the Dean's offices of the affected faculties and under consideration of the recommendation of the Investigation Committee, the President must review whether and which of the suggested measures should be taken. The President informs the chair of the Investigation Committee of the measures taken.

§ 10 Ombudspersons

The President appoints to tenured, civil servant professors from the university as ombudspersons whom the members and associates of Technische Universität Braunschweig can contact confidentially, especially on questions of suspected academic misconduct. Instead of a professor, the President can also appoint a member of the group of academic staff. The ombudspersons' appointment is for a period of three years with the possibility of reappointment.

§ 11 Investigation Committee

The Senate is to establish an Investigation Committee. This Committee is made up of four members from the group of professors, one member from the group of academic staff and one person from the university administration who is qualified to hold the office of the judge. Instead of one member from the group of professors, the Senate can appoint a person associated with the university according to § 7(2) of Technische Universität Braunschweig's Charter as a voting member of the Investigation Committee. The term of office for the Committee members is two years with the possibility of reappointment. Proceedings that have been started are to be continued by the Committee members even when the term of office has ended. The Investigation Committee elects one of its members as the chair. The two ombudspersons are members of the Investigation Committee in an advisory capacity. The Investigation Committee may consult additional people who are experts in a scientific area that must be evaluated or who have experience in relevant proceedings; these people are members in an advisory capacity.

§ 12 General Rules of Procedure

- (1) The Investigation Committee's meetings are not open to the public. The Committee has a quorum if at least four members are present. All matters are to be treated confidentially by the Committee members. Witnesses and other persons included in the proceedings must be obligated to maintain confidentiality by the chair of the Committee.
- (2) Decisions by the Investigation Committee are passed by a majority of the votes, that is, four yes votes are required. Minutes are taken of the results.

§ 13
Preliminary Process

- (1) If a member or an associate of TU Braunschweig have a concrete reason to suspect academic misconduct, then this person should inform the chair of the Investigation Committee. The information should be given in writing; if the information is given orally, a written note is to be made. The person suspected of misconduct is to be given an opportunity to address the accusation within four weeks. She or he is to be informed of the evidence against her or him and any evidence material submitted. The source of the information is not revealed if it is possible to make a statement without knowing the name of the person making the accusation.
- (2) After statement has been received from the person accused of misconduct or at the end of the four-week deadline, the Investigation Committee decides within four weeks - if applicable, after hearing the head of the academic facility at which the accused works - whether the preliminary process should be ended or whether a formal investigation process is to be opened. Reasons to end the process include the clarification of what was thought to be misconduct if the information about the misconduct is shown to be false or if the information about the misconduct did not include enough concrete evidence. A formal investigation process is opened if there are adequate grounds to suspect misconduct.
- (3) All persons directly involved in the preliminary process must be informed of the decision. They are given an opportunity to appeal the process being ended in writing within two weeks including reasons; this appeal is to be directed to the chair of the Investigation Committee.
- (4) The Investigation Committee makes the final decision on whether the appeal is to be rejected and the preliminary process ended or whether a formal investigation will be opened.
- (5) The Executive Board and any heads of the scientific facilities included according to § 13(2) are to be informed of the decision taken according to § 13(2) and (4); if the process is ended with the consensus of all parties, which must be taken note of in writing, then management does not need to be informed.

§ 14
Formal Investigation

- (1) The chair of the Investigation Committee informs the President if a formal investigation is opened.
- (2) The Investigation Committee reviews the accusation with a free consideration of the evidence. It has the right to take any steps necessary to clarify the facts of the case. To do so, it can obtain all necessary information and statements from any university members or other persons involved and invite them to come before the Committee for discussion. In individual cases, it may also call on the Equal Opportunities Officer or experts from the relevant subject. The incriminating and exculpatory facts and evidence are to be documented.

- (3) Upon request, the person accused of academic misconduct is to be given an opportunity to speak before the Investigation Committee; for this, he or she may bring along one trusted person for support.
- (4) If the Investigation Committee believes misconduct has not been proven, the proceedings are stopped and the President is informed. If the Investigation Committee believes misconduct has been proven, it submits the results of its investigation to the President including a suggestion on how to proceed according to § 9(3).
- (5) The person being accused of academic misconduct must be informed in writing of the primary reasons that led to the proceedings being stopped or being forwarded to the President. The informant is also to be notified of the result. There is no internal appeal process for the Committee's decision.
- (6) At the end of a formal investigation process, the chair of the Investigation Committee identifies all persons involved in the case and advises those persons who were involved without fault in processes of academic misconduct on how to ensure their personal and academic integrity.

§ 15 Entry into Force

These Principles enter into force on the day after they are made public to the university in Technische Universität Braunschweig's Publication of Announcements. At the same time, the Regulations from March 23, 2000, which were announced on March 22, 2000, Publication of Announcements no. 258, are no longer in force.

Appendix 1

CATALOGUE OF BEHAVIOURS THAT ARE TO BE VIEWED AS MISCONDUCT

I. Academic Misconduct

Academic misconduct occurs when the following takes place intentionally or with gross negligence in an academic context: false statements are made, others' intellectual property rights are violated or the research activities of others are adversely affected in another way. In the end, the circumstances of the individual case are decisive.

In particular, the following behaviours could be considered academic misconduct:

1. False statements are made:
 - a. Data is fabricated;
 - b. Data is falsified, e.g.
 - aa. By selecting and rejecting undesirable results without revealing this,
 - bb. By manipulating a representation or figure;
 - c. False information in an application or a grant application (including false information about a publication medium or forthcoming publications);

2. Violating intellectual property rights:
 - a. In relation to someone else's work protected by copyright or someone else' key scientific insights, hypotheses, doctrines or research approaches:
 - aa. The unauthorised use of material claiming authorship (plagiarism), bb. Exploiting research approaches and ideas, especially as a reviewer (theft of ideas),
 - cc. Claiming or unjustifiably assuming academic authorship or co-authorship,
 - dd. Falsifying the content or
 - ee. Publishing or making accessible without authorisation
 to third parties as long as the work, insight, hypothesis, doctrine or research approach have not yet been published;
 - b. Claiming authorship or co-authorship of someone else without their approval;

3. Adversely affecting others' research activities:
 - a. Sabotaging research activities (including damaging, destroying or manipulating experimental setups, equipment, documents, hardware, software, chemicals or other things needed by someone else to carry

out an experiment),

- b. Disposing of primary data if this violates legal provisions or recognised principles of scientific work in the discipline.

II. Academic misconduct can also result from shared responsibility for someone

else's misconduct, in particular by:

1. Active participation in others' misconduct,
2. Knowledge of others' falsifications,
3. Co-authorship on publications with falsifications,
4. Gross negligence in supervisory duties.