

Statute

International Graduate School of Science and Engineering (IGSSE)

with effect from 24.09.2024

On the basis of Art. 29 (5) sentence 5 of the Bavarian Higher Education Innovation Act (BayHIG) dated 5 August 2022 (GVBI. P. 414 BayRS 2210-1-3-WK), last amended by § 3 of the Act of 23 June 2023 (GVBI. P. 251) and by § 2 of the Act of 24 July 2023 (GVBI. P. 455), as well as on the basis of § 1 (3) of the Charter of the Technical University of Munich (GOTUM) dated 10 May 2023 and on the basis of § 3 (2) TUM Graduate School statute (TUM-GS statute) dated 23/08/2021, the International Graduate School of Science and Engineering (IGSSE) issues the following Statute in accordance with the Executive Board of the TUM-GS and the Board of Management:

§ 1

Name and position within the TUM Graduate School

The International Graduate School of Science and Engineering (IGSSE) graduate center is a central scientific institution of TUM pursuant to Art. 29 (5) BayHIG. Pursuant to § 3 (2) of the TUM-GS statute, the IGSSE is established within the framework of the TUM Graduate School, it sets its own multidisciplinary priorities beyond the boundaries of schools and has an international and interdisciplinary focus. The name and image of the IGSSE are guided by the corporate design of TUM and the TUM Graduate School.

§ 2

Objectives and tasks

- 1. The regulations according to § 2 and § 14 of the TUM-GS statute dated 23/08/2021 on the objectives and tasks of the TUM-GS and the graduate centers shall apply.
- 2. The program pillars of the IGSSE encompass all disciplines of TUM and promote research cooperation across disciplines, institutions and national borders through topics, selection procedures and interdisciplinary integration of doctoral candidates in teams. These collaborations yield a high level of original scientific output and go hand in hand with the unique development of skills among IGSSE doctoral candidates from all TUM disciplines. With its interdisciplinary focus, the IGSSE builds bridges between natural sciences and engineering, medicine and life sciences, social and educational sciences as well as economics.
- 3. Needs-based qualification programs form the heart of the IGSSE's doctoral program pillars. Beyond general personal development and imparting first-class scientific and research skills, each IGSSE qualification program places great emphasis on the training of interdisciplinary thinking and the ability to cooperate. An international research stay for doctoral candidates is of particularly high importance in the qualification programs. An additional focus is the topic of science communication in the sense of the ability to communicate scientific content and its social significance in dialog with various social groups.



- 4. In line with the guiding principle of diversity at TUM and the TUM-GS, the IGSSE promotes science and innovation in an open society. The objective is the inclusion of all IGSSE members in the scientific community, irrespective of gender, nationality, religion and ideology, disability, age or sexual identity. The reconciliation of family and science is to be strengthened for all doctoral candidates and the proportion of female doctoral candidates is to be increased through appropriate measures.
- 5. In order to implement its program pillars, the IGSSE approves specific funding according to the IGSSE's pillar-specific funding guidelines (§§ 13, 15).
- 6. The IGSSE ensures the quality of its program pillars, continually develops them and takes the initiative for new, innovative program pillars and measures. The IGSSE actively supports TUM's strategic innovation concepts in relation to doctoral candidates and plays a leading or supporting role in the implementation of selected projects, such as fund management.
- 7. The IGSSE contributes to the external image of TUM in cooperation with the responsible TUM institutions.

Structure

- (1) The regulations according to § 3 and § 14 of the TUM-GS statute dated 23/08/2021 on the structure of the TUM-GS and the graduate centers shall apply.
- (2) The IGSSE develops and operates various program pillars, with an individual focus in each case. The program pillars for doctoral candidates share common standards and elements, which are implemented in a modularized system (§ 15).
- (3) The portfolio of program pillars at the IGSSE is subject to continuous development. According to § 8 (2) et seq., new program pillars can be incorporated and existing ones can be discontinued. The program pillars at the IGSSE include:
- a. International Project Teams
- b. Innovation Networks
- c. Other program pillars incorporated according to (3) sentence 2, for example in cooperation with foreign universities or TUM partner institutions.
- d. The IGSSE management office keeps an up-to-date list with the current program pillars and publishes this on the IGSSE website.

§ 4

Bodies

The bodies of the IGSSE are:

- (1) Director and Deputy Director (§ 9),
- (2) The Executive Board (§ 8),
- (3) Spokesperson of the doctoral candidates (§ 10),
- (4) Spokesperson of the coordinating postdocs (§ 11).



Membership

- (1) Doctoral candidates at the IGSSE acquire their membership pursuant to § 5 of the TUM-GS statute: Following conclusion of the IGSSE supervision agreement and its examination by the IGSSE management office for compliance with criteria of the IGSSE, TUM-GS and the TUM Order Governing Doctoral Studies, the doctoral candidate can apply for entry on the doctoral candidacy list. Following successful formal examination by the institution awarding the doctorate pursuant to § 5 of the TUM-GS statute and the provisions of the Order Governing Doctoral Studies, the doctoral candidates become provisional members of the IGSSE. With entry on the doctoral candidacy list, they become members of the IGSSE and thus also members of the TUM-GS. In addition to the IGSSE, there may be no other membership in a TUM graduate center.
- (2) In addition to doctoral candidates pursuant to (1), the following groups of persons are IGSSE members:
 - a. Principal Investigators (PIs): The doctoral supervisors cited in the supervision agreement of IGSSE doctoral candidates who have the right to award doctorates at TUM according to § 10 PromO, as well as other TUM PIs who are part of a research project funded by the IGSSE, especially the coordinators of Innovation Networks.
 - b. Postdocs: Junior researchers with a doctorate or science managers at TUM who are part of a research project funded by the IGSSE, in particular "Coordinating Postdocs" (CPD), who fulfill a coordinating role in an IGSSE doctoral program pillar or one of its substructures.
 - c. Director and Deputy Director according to § 9, as well as members of the Executive Board according to § 8 (1).
 - d. Employees of the management office.
- (3) Other members can be admitted to the IGSSE upon application. The Executive Board examines whether the conditions laid out in (1) have been fulfilled and decides on admission.
- (4) Membership of the IGSSE ends if the respective reason for membership ceases to apply.

§ 6

Associate members

Under the conditions of § 6 of the TUM-GS statute, other persons may be admitted as associate members of the IGSSE following a reasoned request:

- Doctoral candidates from other universities and research institutions who are taking part in an IGSSE program pillar and/or are cooperating with an IGSSE project.
- 2. Doctoral candidates at TUM who are in close cooperation with a funded project.
- 3. Supervisors of IGSSE doctoral candidates from other universities and research institutions.
- 4. Guests



Rights and obligations of members

With regard to the rights and obligations of IGSSE members, the regulations pursuant to § 7 of the TUM-GS statute shall apply accordingly.

The IGSSE also defines the following:

- (1) Members of the IGSSE communicate their research and its significance to society in a way that is high-profile and appropriate to the target group. In doing so, they contribute to dialog with society and a strong external impact of research at TUM.
- (2) Doctoral candidate members of the IGSSE participate in the IGSSE qualification programs on a mandatory basis (§ 15).
- (3) The right and obligations of the doctoral candidates and supervisors are regulated in detail by a supervisory agreement.
- (4) Further details in the program pillars are regulated by the guidelines of the respective round of tenders. This includes, for example, regular reporting obligations such as interim and final reports as well as compliance with general or program pillar-specific regulations and funding guidelines.
- (5) During the course of the project, the members regularly report on their project progress in the context of international conferences, IGSSE events and publications. The Coordinating postdocs pursuant to § 5 (2) b. support the management office in the communication and exchange of information with the project teams.
- (6) Each IGSSE project draws up a project description for the IGSSE website in line with the respective funding guidelines and is responsible for the up-to-dateness of the project's presentation of itself. Each project continuously informs the IGSSE management office about new publications and changes to the project.
- (7) All publications from IGSSE-funded projects bear the reference "Funded by the IGSSE/TUM Graduate School", and are published in appropriate form and taking account of the TUM Publication Guideline.
- (8) The members alone are responsible for compliance with the above-cited points. At the request of the IGSSE management office, they submit an activity report and fulfill their obligations for presentation according to (6).

§ 8

Executive Board

- (1) The IGSSE Executive Board consists of:
 - a. Five to eight full-time professors at TUM, including Director and Deputy Director of the IGSSE, Graduate Dean and Director of the TUM Institute for Advanced Study (IAS). The selection takes account of diversity aspects;
 - b. Spokesperson of the doctoral candidates and the 1st Deputy (both with voting rights) and the 2nd Deputy;
 - c. The Spokesperson of the postdocs (with voting rights) and the Deputy;
 - d. The Managing Director of the IGSSE (without voting rights).
- (2) Members of the Executive Board according to § 8 (1) a. and the Director as well as his/her Deputy according to § 9 are appointed by the President of TUM on recommendation of the



incumbent Executive Board by resolution of the Board of Management. The term of office of the Executive Board members according to § 8 (1) a. and of the Director and his/her Deputy is three years. Re-appointment is possible.

- (3) The election and term of office of the Executive Board members in accordance with § 8 (1) b. and § 8 (1) c. is governed by § 10 and § 11.
- (4) The Executive Board decides on the strategic direction of the IGSSE, examines the implementation of its objectives according to § 2 and provides initiatives for its further development. Additionally, it is responsible for the following tasks:
 - a. Development of the program pillars and the modular qualification program as well as its coordination with the Board of Management and TUM-GS,
 - b. Preparation of the IGSSE work report for the Board of Management and the TUM-GS Executive Board,
 - c. Consultation on budgetary matters, implementation and quality assurance of internal resource allocation procedures,
 - d. Implementation of the TUM Diversity Code of Conduct in the framework of the doctoral qualification process,
 - e. Proposal to the Board of Management on the admission and termination of program pillars at the IGSSE,
 - f. Evaluation and, if necessary, selection of project proposals in program pillars for which the IGSSE is involved in project selection, and, depending on the program pillars, the interim evaluation of ongoing projects,
 - g. Nominations for the subsequent Executive Board in accordance with § 8 (1) a,
 - h. Coordination of cooperation with other TUM graduate centers, other universities and non-university partners,
 - i. Development of proposed amendments to the current Statute.
- (5) The Executive Board internally appoints persons responsible for the above-mentioned responsibilities from its own ranks. In all other respects, the Director bears overall responsibility.
- (6) The Executive Board convenes at least twice a year. The meetings are convened and chaired by the Director or his/her Deputy. Unless stipulated otherwise in the rules of procedure issued by the Executive Board, the Director shall convene further meetings at the request of at least two members of the Executive Board. The notice period is one week. Upon request, guests may be admitted by the Director.

§ 9

Director of the IGSSE

- (1) The Director heads the IGSSE. He/she is responsible for the tasks set out in § 11 of the TUM-GS statute.
- (2) The Director of the IGSSE and his/her Deputy must be full-time, tenured professors at TUM. They are appointed pursuant to § 8 (2). In particular, the tasks include:
 - a. Overall coordination of the IGSSE,
 - b. Distribution and evidence of funds as well as responsibility towards the Board of Management for the appropriate distribution of funds and for compliance with the IGSSE's overall budget,



- c. Personnel matters of the management office,
- d. Convening of Executive Board meetings (§ 8 (6)),
- e. Report on his/her decisions to the IGSSE Executive Board,
- f. Information for members and employees,
- g. Coordination of important matters with the Board of Management and Graduate Dean and submission of IGSSE reports to the TUM-GS and the Board of Management, or submission of accounting reports to other donors,
- h. Representation of the IGSSE both internally and externally, taking account of the overall interests of the university,
- i. Participation in the Graduate Dean's nomination proposal for the Scientific Advisory Board according to § 13 of the TUM-GS statute,
- j. Effective public presentation of the IGSSE and its research projects.
- (3) The Director has a structural fund at his/her disposal, the use of which he/she reports to the Executive Board.
- (4) The Director is supported by the Managing Director as well as the IGSSE management office (§ 12).
- (5) If the Executive Board cannot be convened in good time, the Director takes decisions on matters relevant to the Executive Board on an urgent basis. This is to be reported on at the next Executive Board meeting.

Doctoral representation

- (1) The IGSSE delegates three doctoral candidates, one spokesperson and two deputies as members of the Graduate Council according to § 12 TUM-GS statute.
- (2) The doctoral candidate representatives are elected by doctoral candidates at the IGSSE in a secret ballot using ballot boxes, suitable software or postal vote. All doctoral candidates who are members of the IGSSE at the time when candidates are announced are eligible to vote and to stand for election. The election takes place annually and re-election is possible.
- (3) Elections are held on the basis of a list. This means that the names of all candidates are on the ballot paper and all persons can be individually elected. The candidate who receives the most votes with a simple majority is elected as spokesperson, and the candidate with the second most and third most votes is elected as first and second deputy spokesperson. In the event of a tie vote, a new election is required.
- (4) The election is organized by the IGSSE management office.

§ 11

Spokesperson of the postdocs

- (1) The postdocs elect a spokesperson and a deputy from their ranks by secret ballot. All postdocs according to § 15 (2) b., who are members of the IGSSE 35 days prior to the 1st election day are entitled to vote and to stand for election.
- (2) Elections are held on the basis of a list. The candidate who receives the most votes will be elected. In the event of a tie vote, a new election is required. The candidate with the second



- most votes will become deputy spokesperson. The election takes place annually and reelection is possible.
- (3) If the spokesperson withdraws from office prematurely, a successor must be elected for the remaining term. Until the election, the deputy spokesperson takes over the office.
- (4) The spokesperson and their deputy represent the interests of postdocs from all IGSSE program pillars. The election is organized by the IGSSE management office.

Management office

- (1) The IGSSE management office is managed by a Managing Director. The appointment to Managing Director is made by the Director of the IGSSE in consultation with the University Presidium and Graduate Dean.
- (2) In addition to the Director, the management office represents the IGSSE vis-à-vis its members. The regulations of the TUM-GS statute, the Order Governing Doctoral Studies and this statute are taken into account.
- (3) The management office is responsible in particular for:
 - a. Organization and execution of tasks of the IGSSE (§ 2),
 - b. Support of the Director and Executive Board,
 - c. Cooperation with the TUM-GS management office,
 - d. Human resources, reporting and finance,
 - e. Organization of elections in accordance with § 10 and 11,
 - f. Membership and benefits administration,
 - g. Public relations and event management,
 - h. Support and advice for members.
- (4) The management office is responsible for the operational running of the program pillars and the modular qualification program of the IGSSE. Depending on the program pillar, this may include
 - a. Content, financial and organizational conception and planning,
 - b. Coordinated development of the respective application and assessment rules and funding guidelines,
 - c. Organization of tenders, evaluation and project selection on the basis of these rules,
 - d. Admission of applicants as IGSSE members for the doctoral positions to be filled on the basis of the TUM Order Governing Doctoral Studies, as well as the TUM-GS and IGSSE statutes and the program pillar-dependent guidelines in cooperation with the TUM doctoral institutions,
 - e. Provision of scholarship or employment contracts for the members to be supported, taking all legal aspects into account,
 - f. Administration of approved funding according to § 13 subject to the relevant financial rules and tender guidelines, unless this is done by another TUM department,
 - g. Content and financial development and implementation of the IGSSE modular qualification program in accordance with § 15.



Selection and funding of projects

- (1) In the program pillars according to § 3 (3) a. and b. as well as in some of the program pillars pursuant to § 3 (3) c, the inclusion of projects is accompanied by financial support by or via the IGSSE. These funded projects are usually selected in the following steps:
 - a. Tender.
 - b. Assessment of the applications received with the involvement of external experts and members of the IGSSE Executive Board.
 - c. Selection and approval of projects.

Owing to differences between the program pillars, the respective steps may be designed differently and the responsibilities for steps a. to c. may be distributed differently between the IGSSE and any TUM-internal or TUM-external partner institutions involved.

- (2) The inclusion of approved projects in the IGSSE and the start of funding is carried out by the IGSSE management office after having determined compliance with the IGSSE objectives and regulations, and on the basis of the TUM-GS statutes and the TUM Order Governing Doctoral Studies.
- (3) Details and regulations on the establishment, composition, cooperation and funding of the approved projects can be found in the guidelines of the respective call for tender.
- (4) Ongoing funding requires that, even after the projects have been approved, the relevant regulations, including the Order Governing Doctoral Studies, the TUM-GS statute, the IGSSE statute and funding guidelines are adhered to. If these regulations are still not complied with even after notification by the IGSSE to the project manager, the IGSSE shall reserve the right to cancel any outstanding funds, and in particularly serious cases, to reclaim part or all of the funds already paid out.

§ 14

Passing resolutions, elections, recording of minutes

The regulation according to § 15 TUM-GS statute dated 23/08/2021 on resolutions, elections and the recording of minutes shall apply.

In addition, the following will be defined within the framework of the IGSSE:

- (1) In the IGSSE Executive Board, each of its members is entitled to vote with a simple vote in accordance with § 8 (1) a. Representatives of the postdocs (spokesperson and deputy spokesperson), have a total of one vote for members of the Executive Board according to § 8 (1) b. and c., and representatives of the doctoral students have two votes.
- (2) Resolutions in the bodies of the IGSSE are passed with a majority of votes cast in favor or against (simple majority). Abstentions count as votes not cast. In the event of a tie vote, the Chairperson's vote is decisive. Personnel votes are conducted in a secret ballot. Resolutions can also be passed by way of circulation (e.g. electronically).
- (3) Minutes will be taken on meetings of the IGSSE bodies, which shall be made available to all members of the body at the latest with the invitation to the next meeting.



Qualification program

(1) The regulations in accordance with § 16 TUM-GS statute dated 23/08/2021 on the qualification program as well as regulations according to § 8 No. 1 of the TUM Order Governing Doctoral Studies dated 23/08/2021 shall apply.

As part of the qualification program, the following elements must be fulfilled and evidenced prior to submitting the dissertation:

- a. At least two years of membership in the TUM-GS.
- b. Participation in a kick-off seminar of the TUM-GS.
- c. Participation in subject-specific courses amounting to at least six semester hours (SWS) per week, which can be spread over the entire duration of the doctorate. Within the framework of the IGSSE program pillars, the special interdisciplinary focus will be taken into account, for example through the crediting of program-specific interdisciplinary courses such as within innovation frameworks, provided they are conducive to the individual doctoral project as a whole.
- d. The doctoral candidate's active involvement in the academic environment of TUM, which is appropriate for the academic qualification.
- e. A feedback discussion to be documented with the supervisor about the doctoral project, which takes place at the latest two years after joining the TUM-GS. If this is expressly stipulated in the program-specific funding guidelines of an IGSSE program pillar, the feedback discussion can be combined with the request for a project report.
- f. Discussion of the research project in the international expert community.
- (2) Moreover, the following additional mandatory modular elements are defined within the framework of the specific IGSSE qualification program:
 - a. Two-time participation in the "IGSSE Forum",
 - b. Conceptual and practical contribution to science communication,
 - c. In order to take account of the IGSSE's international focus, external research phases abroad are generally mandatory in all IGSSE program pillars, whereby the minimum duration of three months can be extended and the location can be determined for specific program pillars; in the case of Innovation Networks, a three-month external research phase in Germany is also accepted.
 - d. Participation in the "Project Team Toolbox" (or program-specific equivalent),
 - e. Participation in the "I3-Workshop" (or program-specific equivalent),
 - f. Additional elements will be defined for specific program pillars and appropriately communicated, including as part of the IGSSE supervision agreements.
- (3) In justified exceptional cases, the Director of the IGSSE may waive individual training elements of the IGSSE qualification program according to § 2 upon request of the doctoral candidate.
- (4) Following completion of the program, the doctoral candidates will receive an additional IGSSE certificate upon receipt of confirmation that they have passed the doctoral examination.



Cases of conflict

The regulations on cases of conflict pursuant to § 18 TUM-GS statute dated 23/08/2021 shall apply.

§ 17

Final provisions and entry into force

- (1) Supplements or amendments to this statute require the approval of the TUM Graduate School Executive Board and the TUM Board of Management pursuant to § 3 (2) TUM-GS statute.
- (2) ¹This statute entered into force on 24/09/2024. ²At the same time, the previous statute of the IGSSE (dated 25/03/2021) ceased to apply. ³Anyone who was already a member of the IGSSE as of 24/09/2024, fulfills the qualification program of the previously valid statute. ⁴If this is no longer possible, the IGSSE shall define a corresponding regulation, taking the protection of the doctoral candidate's legitimate expectations into account. ⁵Upon request to the IGSSE, existing members may switch to the new statute without the deviating regulation stipulated in sentence 3. ⁶The declaration is binding.
- (3) The German version of this document is the only legally binding version. This English translation is for your convenience only.

Barbara Wohlmuth, IGSSE Director