

Grant Specifications of the Internal Grant Agency of the Faculty of Engineering – 2022

- (1) The present Grant Specifications for competitions organized by the Internal Grant Agency of the Faculty of Engineering ("IGA FE") have been prepared in accordance with the statutes and policies of the IGA FE. The Grant Specifications comprise an ensemble of data and information necessary for preparing and submitting a grant project proposal.
- (2) The present Grant Specifications employ terminology laid down under Act No. 130/2002 Coll. Where applicable, any explanation of the terms used in the Grant Specifications serves for information and clarification purposes.

1. Competition Announcement

The IGA FE announces a single-round competition for research and experimental development aimed at support for student projects.

2. General Information and Definitions

- (1) **Grant project** in the framework of the IGA FE means a project involving basic research or applied research, where the objectives and solution methods are defined by the applicant.
- (2) **Basic research** means theoretical or experimental work mainly performed for the purpose of obtaining new knowledge of the fundamental principles of phenomena or observable facts. The primary purpose of basic research is not the exploitation or practical application of the results.
- (3) **Grant project proposal** (project proposal) is a comprehensive ensemble of documents containing a proposal for factual, chronological, and financial conditions for tasks necessary to attain the objectives of the grant project formulated by the applicant, which are required for evaluating the scientific contribution, quality, feasibility, and publishability of its results. In addition, the project proposal contains additional data, as required for the award of a grant under the present Grant Specifications and under applicable laws and regulations.
- (4) **Applicant** means a natural person who is responsible for the technical aspects of the project proposal. The applicant must be an employee of or have a similar arrangement with (excluding an arrangement based on work performed on a basis other than employment) the Czech University of Life Sciences Prague, or such an arrangement must be established no later than as of the day on which the execution of the grant project begins. Every project proposal must specify the applicant.
- (5) **Principal researcher** means a natural person (student) whose participation in the grant project is defined in the project proposal. After a

grant is awarded for the execution of the project, an agreement to that effect is entered into with the grantee.

- (6) **Researchers – project team members** are other natural persons specified in the project proposal who will take part in the execution of the grant project.

3. Time Limits for the Submission and Evaluation of Proposals

- (1) The time limit for the submission of project proposals begins on the day following the day of announcement of the competition. It will last 15 days.
- (2) During the time limit for the evaluation of proposals, the IGA FE Grant Committee will assess project proposals, deliver a decision, and announce the results of the IGA FE competition.

4. Terms and Conditions

- (1) The project proposal may not be amended during the evaluation period.
- (2) The applicant may withdraw from the public competition at any time by serving a notice to that effect to the grantor using the same procedure as that for submitting the project proposal.
- (3) The use of texts produced by other authors in the project proposal must be accompanied with a bibliographic citation in a format compliant with ČSN ISO 690.
- (4) The project proposal must specify no more than one applicant and one principal researcher.
- (5) A single person may be the applicant or principal researcher for no more than one project in the framework of the IGA FE in a given calendar year. A violation of this requirement constitutes grounds for rejecting all project proposals submitted by the applicable person.
- (6) Project proposal forms are available exclusively on the IGA FE website at <https://www.tf.czu.cz/cs/r-6970-veda-a-vyzkum/r-11726-iga>
- (7) By submitting a project proposal, the applicant certifies to have read the Grant Specifications and undertakes to comply with the terms and conditions laid down therein, including, without limitation:
- a) The applicant must have an employment arrangement with the Czech University of Life Sciences Prague, or such an arrangement will be established no later than on the day on which the execution of the grant project begins.
 - b) The number of students enrolled in a doctoral or master's study program included in the project team must be equal to or greater than the number of other members of the project team.
 - c) The applicant must ensure the principal researcher's compliance with any and all duties applicable thereto.

- d) All of the data stated in the project proposal must be accurate, complete, and free of misrepresentation, and the project proposal must be prepared in accordance with the Grant Specifications.
- e) All of the persons referred to in the project proposal must be informed of the factual content of the project proposal, financial requirements stated therein, and the Grant Specifications.
- f) Prior to submitting the project proposal, the applicant must secure the consent of the aforesaid persons to participation in the grant project referred to in the project proposal.
- g) The applicant must consent to data stated in the project proposal being used in the IGA FE internal information system.
- h) The project proposal must be written in Czech or English.

5. Project Proposal

- (1) The execution of the grant project will take place during one calendar year.
- (2) The project proposal must contain:
 - a) General identification data on the applicant, the principal researcher, and other persons taking part in the execution of the grant project.
 - b) The title of the grant project stated in the form intended for publication. The title must be specific, understandable, and to-the-point, free of abbreviations and special symbols, and no longer than 150 characters, including spaces.
 - c) Keywords in English.
 - d) Abstract and objectives of the project, describing the essential aspects of the proposed grant project. The abstract must not exceed 500 characters, including spaces. Likewise, the objectives must not exceed 500 characters, including spaces.
 - e) Current state of knowledge (literature research) summarizing the current state of knowledge of the technical issues pertaining to applicable scientific field; the text must not exceed 1,800 characters, including spaces.
 - f) Methodology describing the proposed conceptual and methodological processes necessary for executing the grant project and achieving the anticipated results. The description of the methodology must not exceed 2,000 characters, including spaces.
 - g) Explanation of the participation of the applicant, the principal researcher, and identified team members, definition of their share in the execution of the project, and the specification of their roles in achieving the anticipated results.
 - h) References to cited literature.
 - i) Expected total quantity of deliverables to be achieved during the execution of the project, structured based on the deliverable types defined in the current version of the Result Evaluation Methodology.

- j) The applicant's bibliography containing complete bibliographic data in a format compliant with ČSN ISO 690 pertaining to the results of the applicant's five major scientific and research activities (such as articles in journals, monographies, information on granted patents where the applicant is the originator, etc.) considered of fundamental importance by the applicant. The total quantity of results achieved in the last five years, structured based on the result types defined in the current version of the Result Evaluation Methodology. H-index as per the Web of Knowledge and H-index as per Scopus.

6. Specification of Cost Items

- (1) A grant may only be disbursed for activities defined in the project proposal.
- (2) The amount of grant applied for per year of project execution must be lower than or equal to CZK 1,000,000.
- (3) All cost items specified in the project proposal must be substantiated, and it must follow from the project proposal that such cost items are required for the execution of the grant project.
- (4) The grant may be used for investment purposes – capital investments classified in Depreciation Class I or II as per Annex 1 to Act No. 586/1992 Coll.
- (5) If the grant is awarded for capital investments, granted funds may be used for purchasing tangible and intangible assets. Eligible costs may include only the part of acquisition costs corresponding to the anticipated use of the purchased asset for research and development. Thus, if the useful life (depreciation period) of an acquired asset exceeds the time during which the asset is expected to be used for research and development, the part of the cost exceeding the period during which the asset will be thus used may not be paid for using IGA FE funds.
- (6) The grant may not be used to pay salaries and bonuses.
- (7) The cost of scholarships may be claimed in the framework of staff costs.
- (8) Travel expenses of students may be covered under scholarships based on a travel request.
- (9) The cost of services may account for no more than 20% of the total project costs.

7. Methodology and Criteria for Evaluating Grant Project Proposals

Every project proposal will be assessed by means of two reviews prepared in the framework of the public competition. The reviewers will evaluate the factual aspects of the project (novelty, originality of results and deliverables, objectives, benefits, etc.). In evaluating project proposals, each of the reviewers will use a scale (see Paragraph 7.2) to rate each of the sub-criteria as well as conformity to the binary criteria. The review report will include a final assessment of the project proposal with the final recommendation either for grant disbursement or for the rejection of the proposal.

The IGA FE Grant Committee may adjust the rating assigned to project proposals and to reduce proposed total costs. Such a decision must be substantiated in writing. The grant award decision will be made by the IGA FE Grant Committee.

Project proposals will be evaluated based on evaluation criteria and binary criteria. The evaluation criteria are further broken down to sub-criteria. Each of the sub-criteria will be assessed by the reviewers using a four-point scale (0; 3; 7; 10). If the reviewers assign a zero rating to any of the following sub-criteria, the project proposal cannot be recommended for grant disbursement. Likewise, the project proposal cannot be recommended for grant disbursement by the reviewers in case that three or more of the sub-criteria are rated as conformed to with serious reservations (three points). A failure to fulfill any of the binary criteria will constitute a reason for not recommending the project proposal for grant disbursement in the IGA FE competition by the reviewers, the IGA FE Grant Committee, regardless of the rating awarded to the project proposal.

Rating scale for the rated criteria:

10 – Fulfilled with no reservations
7 – Fulfilled with minor deficiencies
3 – Fulfilled with major deficiencies
0 – Unfulfilled

Rated criteria

1	Quality, up-to-dateness, novelty, and feasibility of the grant project
1.1	Suitability of the proposed activities, methods, and procedures for attaining the objectives of the project
1.2	Suitability of and need for the results and up-to-dateness and novelty of the proposed project solution
1.3	Sufficiency of the trustworthiness of the risk analysis performed for the project and extent to which project risks are taken into consideration
2	Anticipated benefits of the project

	2.1	Overall quality and complexity of the proposed solution
	2.2	Benefits of the project
3	Technical resources, human resources, and organization securing the project	
	3.1	Demonstration of the ability to secure appropriate material and technical resources for the execution of the project throughout the project term (technical resources, premises, materials, supporting technical and service staff, production and laboratory facilities where applicable, etc.)
	3.2	Demonstration of the technical competences of the project team to attain the objectives of the proposed project
	3.3	Suitability of the proposed project management and project organization methods, timely identification of problems relating to project execution (such as delays in the performance of individual activities, deviations from set targets, etc.)
4	Adequacy of the project budget and timetable	
	4.1	Timetable adequacy
	4.2	Adequacy of the proposed total eligible costs of project execution.

Binary criteria

1	The proposed project must be a student project
2	The essence of the project proposal, in part or in full, must not be known and must not have been the subject of another IGA FE project
3	The applicant must demonstrate that the project will generate at least one result from a set of supported results, which will be put into use within two years after the completion of the project

- (1) The evaluation of project proposals will begin no earlier than on the day following the last day of the time limit for the submission of proposals.
- (2) The evaluation of project proposals will consist of an evaluation of the truthfulness, completeness, and accuracy of data in project proposals, where a failure to fulfill the requirements will constitute grounds for rejecting the grant project proposal from the competition; an evaluation of proposed costs – a check of the relevance and applicability of costs proposed in the project proposal.
- (3) Evaluation of the applicant's and the principal researcher's ability to execute the grant project in consideration of past achievements in research and experimental development.

- (4) Evaluation of the quality and level of the proposed grant project, the adequacy of financial costs in consideration of the claimed objectives of the grant project, and the claimed deliverables of the grant project.
- (5) The evaluation of project proposals will be completed by the announcement of the results of the public competition.
- (6) A list of financed projects will be published after the publication of the amount of awarded grants for specific university research in 2022.

8. Duties of the Beneficiary

- (1) The grant must be drawn and used in accordance with the grant disbursement rules and the Binding Project Execution Parameters.
- (2) All of the results declared in the Binding Project Execution Parameters must be achieved within two years after the completion of the project.
- (3) The execution of the project must begin at the time stated in the Binding Project Execution Parameters.
- (4) Tasks employed in the execution of the project must deliver results in accordance with the time limits stated in the Binding Project Execution Parameters.
- (5) The Chairman of the IGA FE Grant Committee must be informed in writing through the FE Research and Science Office of any and all changes pertaining to the beneficiary, changes in any and all facts stated in the Binding Project Execution Parameters, and any other changes and facts liable to have an impact on the execution and objectives of the project.
- (6) The beneficiary must refrain from providing confusing information and must ensure that any and all information stated in reports and other submitted documents corresponds to the actual state of affairs. In particular, the financial settlement provided in the final report must correspond to the actual amount of disbursed grant.

9. Main Results/Deliverables of the IGA FE

The sum of ratings awarded for binding deliverables must be no lower than one point per every CZK 10,000. The delivery of the anticipated binding deliverables will be monitored until two years after the completion of the project. In the event the binding deliverables are not complied with, the principal researcher's department will be required to return funds in the amount of the difference between the disbursed grant and the number of attained points multiplied by CZK 10,000.

One of the anticipated binding deliverables is a published article registered in the WoS database. The publication must be achieved within two years after the completion of the project. The applicant must be the first author of one publication.

If the publication is dedicated to more than one IGA project, a proportionate number of points will be taken into account, determined based on the number of projects to which the publication is dedicated. The other projects to which the publication is dedicated will be disregarded.

Table 1. Values for individual types of results IGA 2022

Type of result	Value
Jimp - Q1 JCR	50
Jimp - Q2 JCR	30
Jimp - Q3 JCR	10
Jimp - Q4 JCR	6
Jsc	4

JCR¹ – Journal Citation Reports, if the journal is included to more category than is chosen better quartile.

$$point = A \cdot \frac{1}{D} \cdot \frac{n}{N}$$

Where, A is the value of the result, D is the number of dedicated projects, n is the number of applicants person, N is the number of co-authors.

Example of the rating process:

The rating for an article constituting an IGA project deliverable is, for example, 50 points as per the RVVI methodology.

Situation 1: The team of authors includes four co-authors, all of whom are members of the IGA project team, and the publication is dedicated to one IGA project. The publication is awarded 100% of the rating, specifically 50 points.

¹ Available <https://jcr.clarivate.com/jcr/home> .

Situation 2: The team of authors includes four co-authors, two of whom are members of the IGA project team, and the publication is dedicated to one IGA project. The publication is awarded 50 % of the rating, specifically 25 points.

Situation 3: The team of authors includes four co-authors, all of whom are members of the IGA project team, and the publication is dedicated to two different projects IGA. The publication is awarded 50 % of the rating, specifically 25 points.

Situation 4: The team of authors includes four co-authors, two of whom are members of the IGA project team, and the publication is dedicated to two different projects IGA. The publication is awarded 25 % of the rating, specifically 12,5 points.

10. Methodology for Submitting Grant Project Proposals

The responsibility for administrative tasks pertaining to IGA FE operations lies with the Research and Science Office of the Faculty of Engineering of the Czech University of Life Sciences Prague. The Research and Science Office of the Faculty of Engineering of the Czech University of Life Sciences Prague will generate a Proposal System Code for every submitted project proposal.

One copy of a complete project proposal must be delivered within the time limit for the submission of proposals to the Research and Science Office of the Faculty of Engineering of the Czech University of Life Sciences Prague, attention to Mgr. Dana Skrbková (+4202 2438 4220), in an envelope addressed to the Research and Science Office of the Faculty of Engineering of the Czech University of Life Sciences Prague, attention to Mgr. Dana Skrbková. The printed copy of the project proposal must be signed by all of the persons taking part in the execution of the project.

The project proposal must be sent in electronic form in the .doc or .docx format by electronic mail to the chairman of the IGA FE Grant Committee (choteborsky@tf.czu.cz). The project proposal in electronic form must coincide with the project proposal in paper form.

The time limit for the delivery of project proposals in printed and electronic form is 28 April 2022, 12:00 noon. The timely delivery of the complete project proposal in accordance with the terms and conditions of the IGA FE competition is the responsibility of the principal researcher. No enclosures are to be submitted together with the project proposal for the IGA FE competition, with the exception of official offers documenting investments, where applicable.