

Quality Standards for Doctoral Studies at USB

The aim of doctoral studies at USB is to produce graduates who are early-career independent researchers,¹ equipped to work in academia as well as to apply their knowledge and scientific methodology in various areas of society.

This gives rise to a graduate profile that encompasses a developing **ability to identify, formulate and solve scientific problems in an original manner, and the mastery of scientific skills necessary for high-quality scientific work in the given field.**

The DS standards based on this profile are defined as two levels of degree programme quality

- **Basic quality standard (Q baseline)** – describes the minimum requirements (which reflect the intersection of requirements for students in accredited DS programmes at USB; in isolated cases, some programmes do not yet meet certain standards)
- **Forward-looking Quality Standard (Q Plus)** – describes the requirements that are desirable to achieve within 2–3 years. These standards are based on those commonly used by the European University Association.

Most standards will be incorporated into the DS SER, in some cases explicitly, and in many cases by reference to the faculty's internal regulations. Once the SER have been finalised, the table of standards will be further refined as necessary.

Individual areas of standards:

1. Standard: Programme completion requirements

Completion of doctoral studies must be linked to clearly defined requirements that guarantee that the graduate has attained the profile of an independent researcher.

The basic Q baseline level is based on the intersection of requirements contained in the accreditation of DDP programmes at USB.

The above-standard level (Q Plus) will include a higher publication output, more active participation in international projects, interdisciplinary collaboration, leading student teams, etc.

The requirements also include demonstrating T-competences – for example, the ability to present results, manage a project, and adhere to the principles of open science and research ethics.

Area	Q baseline (minimum requirements)	Q Plus (above-standard, defined interdisciplinarily)	Who/how verifies (monitors) compliance with the standard
Specialist courses	Min. 3 compulsory + 2 compulsory-optional + language	Q requirements + 4 courses from the range of transferable skills (T-competences), ² at least one of which is offered as interdisciplinary ³	Included in the accreditation dossier during re-accreditation, or in the interim via the faculty's internal regulations

¹ The standard described in European documents as 'Early-career researcher' (EU CFR, https://research-and-innovation.ec.europa.eu/system/files/2023-04/ec_rtd_research-competence-presentation.pdf RDF-Vitae, <https://vitae.ac.uk/vitae-researcher-development-framework/>)

² T-competences = transversal skills, transferable skills listed in the European standards referred to in note 1

³ Offered by the School of Doctoral Studies as interdisciplinary, or offered by another faculty

<i>Language proficiency</i>	<i>According to accreditation</i>	<i>90% of students in the given DDP publish in global languages.</i>	<i>Student requirements for Q+ are set out in the accreditation dossier, or in the interim by the faculty's internal regulations + a flag will be created in OBD to identify doctoral students' outputs; the School of Doctoral Studies will monitor them</i>
<i>T-competences/Soft skills</i>	<i>At least 2 T-competences courses/workshops/seminars⁴</i>	<i>At least 4 T-competences courses/workshops/seminars</i>	<i>The Study and Examination Regulations (SER) will set out Q; requirements for students regarding Q+ will be set out in the accreditation dossier, or, in the interim, in the faculty's internal regulations</i>
<i>Publication</i>	<i>Min. 2 outputs according to M25, of which at least 1 as first author</i>	<i>Higher requirements than the Q column; the field board has specified these in the faculty's internal regulations</i>	<i>The Study and Examination Regulations (SER) set out Q; requirements for students regarding Q+ are set out in the accreditation dossier, or in the interim by the faculty's internal regulations, which also clearly prioritise QUALITY over QUANTITY – recognition of Q+ will be subject to assessment by the SDS and the IEB⁵</i>
<i>International experience</i>	<i>Internship for at least 1 month (cumulatively, with the possibility of partially including active co-researcher status on an international project)</i>	<i>Min. 2 months (cumulatively, with the possibility of partially including active co-researcher status on an international project); at least 80% of students must complete an international placement (part-time students will not be included)⁶</i>	<i>The Study and Examination Regulations (SER) set out Q; the requirements for students regarding Q+ are set out in the accreditation dossier, or in the interim by the faculty's internal regulations + Compliance is monitored by the SDS</i>
<i>Presentation of own research – conference</i>	<i>Active participation (poster or presentation) at least once at a conference organised by an international scientific society or a foreign institution</i>	<i>Active participation at least twice at a conference organised by an international scientific society or a foreign institution, at least once in the form of a lecture;⁷ at least 80% of students must meet the requirement.</i>	<i>The Study and Examination Regulations (SER) set out the requirements for Q; the requirements for Q+ are set out in the accreditation dossier, or in the interim by the faculty's internal regulations + Quality compliance is monitored by the OR; the SDS and the International Relations Office monitor mobilities</i>
<i>Further requirements</i>	<i>Preparation for grant application and submission (completion of a course or other form within the ISP)</i>	<i>Submission of an individual GA USB or collaboration on the preparation of a grant project, documented by the supervisor no later than in the second year of studies.</i>	<i>Included in internal regulations; monitored by the SDS</i>

⁴ Responsibility for the scope and focus will lie with the subject councils (or faculties); the inclusion of 2 or 4 different courses/workshops/seminars will ensure greater variety and breadth of transferable skills in which students will be trained.

⁵ The SDS and IEB will expect realistic yet ambitious standards for the outcomes of students' creative work, on a par with the requirements of leading institutions of a similar nature that train students in the given field. The School of Doctoral Studies and IEB may request an assessment by independent experts.

⁶ This is assessed cumulatively for the given DDP among graduates over the last 3 years

⁷ This standard may be adjusted following an assessment of the financial implications and available resources for supporting mobilities; it is assessed as in Note 6.

<i>Teaching activities</i>	<i>Min. 42 hours over 4 years of studies (instruction and other teaching activities. Teaching load must not exceed 4 hours per week)</i>	<i>Min. 100 hours over 4 years (instruction and other teaching activities. The teaching load must not exceed 4 hours per week)</i>	<i>The SER specify Q; and generally Q+ Details for Q+ are contained in the accreditation dossier, or in interim in the faculty's internal regulations</i>
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2. **Standard: Transferable competences (T-competences)**

The development of transferable (transversal T-competences) competences is a key element of the quality of doctoral studies, as graduates must not only be experts in their academic discipline but must also acquire skills that enable effective communication, collaboration and the application of knowledge in a broader context. T-competences include methodological knowledge, critical thinking, presentation and publication skills, project management, digital competency and an understanding of research ethics.

These skills are to be developed not only within specialised courses but also through interdisciplinary courses and activities organised by the SDS – for example, joint courses, workshops, and conferences open to students across faculties. Interdisciplinary T-competences strengthen graduates' ability to work in teams comprising members from different disciplines, which is essential for tackling the complex problems of contemporary science and practice.

<i>Area</i>	<i>Q baseline (minimum requirements)</i>	<i>Q Plus (above-standard requirements defined interdisciplinary)</i>	<i>Who/how verifies (monitors) compliance with the standard</i>
<i>Expertise in the studied field of study</i>	<i>According to accreditation</i>	<i>Not defined⁸</i>	<i>SDS will prepare a record of activities aimed at broadening expertise (particularly those open to PhD students from other faculties) with the assistance of faculty coordinators and will monitor it.</i>
<i>Transferable skills and career development (in the form of courses, documented workshops, seminars, etc.; the faculty shall specify their minimum scope in internal regulations)</i>	<i>The student studies at least two of the topics listed in the adjacent field through courses/workshops/seminars (this is included in their ISP)</i>	<i>Through courses/workshops/seminars, the student studies at least 4 of the listed topics⁹ (according to their ISP):</i> <ul style="list-style-type: none"> - <i>good start (introductory training for PhD students)</i> - <i>research ethics and integrity</i> - <i>open science</i> - <i>data management</i> - <i>societal impact and science exposure</i> - <i>academic writing</i> - <i>preparation of grant applications</i> - <i>academic teaching al competences</i> - <i>methodologies of other disciplines (for interdisciplinary collaboration)</i> - <i>AI in scientific work</i> 	<i>The Study Regulations set out the requirements for Q; the requirements for Q+ are set out in the accreditation dossier or, in the interim, in the faculty's internal regulations</i> + <i>The SDS monitors:</i> <ul style="list-style-type: none"> - <i>faculty-wide open courses offered by faculties</i> - <i>student participation in University-wide doctoral education</i> - <i>may randomly monitor compliance with the standard in STAG (inclusion of T-competences courses in the ISP)</i>

⁸ Faculties are expected to offer students opportunities to broaden their subject-specific competence (e.g. through international seminars or discussions on interpersonal topics) beyond the scope of the obligations defined by accreditation

⁹ Within the Q Plus framework, faculties may choose which areas they wish to strengthen with the support and (co-)funding of the SDS; at the same time, they are expected to present their own expanded range of courses and activities that they may open up to students from other faculties (with the organisational and financial support of the SDS).

<i>Presentation of science and research results</i>	<i>1 international conference with an active contribution + 1 doctoral conference + 1 intra-faculty conference</i>	<i>Presentations at more forums than specified in the Q baseline column; international conferences must be held abroad (excluding Slovakia)</i>	<i>The SER generally stipulate the obligation for students to prepare for the presentation of science and research results</i> <i>Requirements for students regarding Q+ are set out in the accreditation dossier, or in the interim by internal faculty regulations, which also clearly prioritise QUALITY over QUANTITY – assessment by the SDS and IEB¹⁰</i>
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3. Standard: Requirements for dissertations

A dissertation must reflect both the scientific quality and the societal significance of the research, or the doctoral student’s ability to defend their research in terms of its contribution (insight, relevance).

The above-standard level (Q Plus) will include clearer and stricter requirements regarding the synthetic nature of the work and a broader discussion of the applicability of the dissertation research results. Q Plus may be understood as a requirement that the dissertation (including supplementary materials) demonstrates the graduate’s scientific maturity and ability to contribute to solving complex problems.

<i>Area</i>	<i>Q baseline (minimum requirements)</i>	<i>Q Plus (interdisciplinary standard)</i>	<i>Who/how verifies (monitors) compliance with the standard</i>
<i>Originality of the topic and demonstrable contribution to knowledge</i>	<i>Explicitly stated as a requirement for the DDP in accreditation materials or faculty regulations</i>	<i>The text of the dissertation includes a section <u>explicitly</u> addressing the originality and contribution of the research carried out.¹¹</i>	<i>The SER generally stipulate the obligation to comment in the dissertation on the contribution of the research carried out</i> <i>+</i> <i>The requirements for students regarding Q+ are set out in the accreditation dossier, or, in the interim, in the faculty’s internal regulations</i>
<i>Correct methodological procedures, transparent analyses</i>	<i>As above</i>	<i>Adherence to research ethics and scientific integrity is enshrined in the faculty’s internal regulations and student handbooks.</i>	<i>Student requirements for Q+ are set out in the accreditation dossier or, in the interim, in the faculty’s internal regulations</i>
<i>High-quality text</i>	<i>Clearly formulated requirements for the DDP (monographic and cumulative in nature), clearly formulated research question by the end of the first year</i>	<i>Cumulative work: at least 3 publications, of which at least 1 as first author or at least 2 outputs with first authorship. Clearly defined requirements regarding the scope and quality of the synthesis and discussion of the applicability or contribution of the results.</i>	<i>Requirements for students regarding Q+ are set out in the accreditation dossier, or, in the interim, in the faculty’s internal regulations</i>

¹⁰ See note 5

¹¹ These sections of the work will be used to promote doctoral studies at USB (and on the SDS website for the interdisciplinary orientation of students)

<i>Reflection on the research, including its societal impact</i>	<i>The accreditation document or internal regulations state that the thesis should include a discussion of the contribution of the research carried out</i>	<i>The DDP includes a section <u>explicitly</u> addressing the applicability and societal significance of the research conducted.</i>	<i>The SER generally stipulate the obligation to include a discussion of the applicability of the work's results in the dissertation</i>
<i>Compliance with the principles of open science and research ethics</i>	<i>Stated as a requirement for DDP students in accreditation materials or faculty regulations</i>	<i>Compliance with the principles of open science in a manner relevant to the discipline is explicitly stated as a requirement for DDP in the faculty's internal regulations and student handbooks.¹²</i>	<i>The SER generally stipulate the obligation to adhere to the principles of open science</i>

4. **Standard: Requirements for a dissertation defence**

The defence of a doctoral thesis must be structured in such a way as to verify not only the quality of the scientific work carried out, but also the graduate's ability to communicate the results and defend their significance.

Basic level (Q baseline) – currently, we have not defined this beyond the application for the defence and the composition of the committee.

The above-standard level (Q Plus) will include, for example, a greater representation of international committee members (where this enhances the quality of the defence and the visibility of the results), or experts from industry in the case of applied research.

Verification of the student's ability to defend their results and their contribution in a broader academic or public context can be addressed separately from the current format of the defence, e.g. in the form of a public lecture.

<i>Area</i>	<i>Q baseline (minimum requirements)</i>	<i>Q Plus (interdisciplinary standards)</i>	<i>Who/how verifies (monitors) compliance with the standard</i>
<i>Public lecture for the wider public</i>	<i>No</i>	<i>Yes – popularisation of dissertations aimed at a wider interdisciplinary community and the public¹³</i>	<i>Monitored by the SDS (which also organises or co-organises)</i>
<i>Composition of the committee</i>	<i>In accordance with the SER</i>	<i>Foreign members or experts from industry for applied dissertation topics in the majority of defences in a given year</i>	<i>Requirements for students regarding Q+ are set out in the accreditation dossier, or, in the interim, in the faculty's internal regulations</i>

5. **Standard: quality of the supervisor's guidance of the student**

There is the USB supervisor standard¹⁴ (see), which sets out a number of obligations (e.g. by when the ISP must be submitted, in which areas the supervisor should support the student, etc.). These can be specified in terms of 'measurable/verifiable' parameters.

¹² As part of the student handbooks to be produced by the SDS, a proposed structure for the DDP is also expected, which will include these elements.

¹³ Lectures and other forms of presenting the results of doctoral research (in the form of conferences, seminars, presentation days, podcasts, etc.) will be organised primarily by the SDS.

¹⁴ <https://www.jcu.cz/images/veda-a-vyzkum/skola-doktorskych-studii/standard-of-supervisor-at-usb.pdf>

<i>Area</i>	<i>Q baseline (minimum requirements)</i>	<i>Q Plus (above-standard requirements defined on an interdisciplinary basis)</i>	<i>Who/how verifies (monitors) compliance with the standard</i>
<i>Number of supervisors</i>	<i>One principal supervisor</i>	<i>Principal supervisor + another expert (co-supervisor, consultant, mentor). The maximum number of doctoral students supervised and co-supervised is 5 plus 5; for new supervisors, the subject area board will ensure a lighter workload for the supervisor.</i>	<i>The SER generally define the roles of co-supervisors (consultants, TAC) and the numbers of students supervised + monitored by the SDS</i>
<i>Clear requirements for students, clear requirements for supervisors</i>	<i>Basic ISP with review deadlines</i>	<i>The faculty provides students with detailed information on expectations for students and supervisors (roles, feedback, frequency of consultations). It has established a framework for handling feedback from students.</i>	<i>Internal faculty regulations</i>
<i>Communication</i>	<i>Consultations according to the ISP</i>	<i>Regular monthly meetings (on average at least 1 hour every 2 weeks) + online consultations</i>	<i>Included in the evaluation of OR supervisors (to be set in the SER) Monitored by the SDS based on student feedback</i>
<i>Professional development of supervisors</i>	<i>The Faculty expects supervisors to undertake training and develop the skills necessary for supervising PhD students (included in internal regulations)</i>	<ul style="list-style-type: none"> – <i>The faculty considers supervisor training to be a prerequisite for supervision and requires it as part of career development</i> – <i>An introductory course on supervising doctoral students is compulsory for new supervisors; workshop sessions are offered for more experienced supervisors.</i> – <i>At least one-third of supervisors participate in cross-faculty activities dedicated to professional development (courses, workshops, experience-sharing)</i> 	<i>Faculty Internal Regulations + Monitored by the SDS</i>
<i>Assessment of the quality of student supervision</i>	<i>Basic review of ISP compliance by the programme board</i>	<ul style="list-style-type: none"> – <i>Basic monitoring of ISP compliance by the programme board also includes an assessment of the quality of student supervision by the supervisor</i> – <i>The field board and the faculty utilise anonymous feedback from students (collection at University-wide level is organised by the SDS)</i> – <i>Providing feedback on studies is enshrined as a student's obligation in the SER</i> – <i>The faculty has established clear rules for monitoring the quality of supervisors' work (+ a system to support its improvement)</i> 	<i>The SER will enshrine the student's obligation to provide anonymous feedback on their studies + Introduction of a representative for PhD students through the existing DDP Student Council + Internal faculty regulations (monitoring the quality of supervisors' work and a system to support its improvement)</i>
<i>Reward and recognition</i>	<i>Recognition within the EAS</i>	<i>Faculties use financial and non-financial tools to reward supervisors' work</i>	<i>Monitored by the SDS</i>

<i>Conflict resolution</i>	<i>Option to change supervisor</i>	<ul style="list-style-type: none"> - <i>The faculty has a clearly defined procedure for de-escalating problematic situations.</i> - <i>The faculty actively supports the training of supervisors in resolving problematic situations</i> 	<i>Internal Faculty Regulations</i> <i>(may be based on the university-wide methodology (to be prepared by the SDS in collaboration with the DDP Student Council), but sets out specific conditions for implementation at the faculty in question)</i> + <i>The training of supervisors in de-escalation is monitored by the SDS</i>
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6. **Standard: Monitoring the quality of doctoral studies**

Using a study data corpus and in conjunction with the activities of the IEB.

<i>Area</i>	<i>Q baseline (minimum requirements)</i>	<i>Q Plus (interdisciplinary definition of above-standard requirements)</i>	<i>Who/how verifies (monitors) compliance with the standard</i>
<i>Study success rate</i>	<i>Faculties are aware of the failure rate in their programmes and its causes</i>	<i>Faculties have carried out an analysis of study failure rates, have compared these with similar programmes in the CR, have set targets based on the data to increase success rates, and have a strategy for achieving them</i>	<i>Self-evaluation reports during re-accreditation (currently DS development strategies)</i> + <i>assessed by the SDS and IEB</i>
<i>Feedback from students</i>	<i>Explicitly stated as a requirement for the DDP in accreditation materials or faculty regulations</i>	<i>The field board has established criteria for how to work with feedback.</i> <i>The field board compares the student's self-assessment of academic progress with the supervisor's assessment of the student's progress, going beyond a simple pass/fail decision on the ISP¹⁵</i>	<i>Internal faculty regulations</i>
<i>Monitoring of graduates' career outcomes</i>	<i>No</i>	<i>Yes, at least over a 5-year period, with support from the School of Doctoral Studies</i>	<i>Monitored by the SDS</i>
<i>Evaluation and reflection on comments from the IEB evaluation</i>	<i>Responses to IEB comments include strategic steps to address issues.</i>	<i>IEB approval without comments on quality.</i> <i>Transition to a credit system.</i>	<i>IEB + SDS</i>

¹⁵ *In the event of a student experiencing difficulties, the field board's assessment is formative in nature and proposes specific steps to support academic success. In the event of serious failure to meet academic requirements, this is clearly stated in the field board's assessment.*

The SDS will prepare an assessment form, which will be quick to complete, as a tool for a targeted evaluation of the student's strengths and weaknesses.