

The Romanian Agency for Quality Assurance in Higher Education



External Evaluation Report (REE) for the procedure for obtaining a maintaining accreditation (MAC) of Doctoral Study Domain

Higher Education Institution/Education Provider Organization:	"TRANSILVANIA" UNIVERSITY OF BRASOV
Doctoral School:	Interdisciplinary Doctoral School
Doctoral Domain:	Industrial Engineering
The objective of the external evaluation:	Maintaining accreditation (MAC)

Members of the ARACIS Evaluation Panel

No.	Last Name and First Name	Team role	Signature
1.	<i>Cătălin Gheorghe AMZA</i>	Expert evaluator	
2.	<i>Pavel Alexei TOPALĂ</i>	International Expert	
3.	<i>Ana-Maria LUPU</i>	PhD Student Evaluator	

I. Introduction

The evaluation panel made up of Prof.univ.dr.ing. AMZA Cătălin Gheorghe (National University of Science and Technology Politehnica Bucharest), Pavel Alexei TOPALĂ ("Alecus Russo" State University of Balti, Moldova), Ana-Maria LUPU ("GHEORGHE ASACHI" TECHNICAL UNIVERSITY OF IASI) approved by the ARACIS Council by Decision no. **152/H/07.05.2026**, traveled, between 24.06 and 25.06.2026, to the "Transilvania" University of Brasov (UNITBV), for the external quality assessment in order to maintain the accreditation **of the field of doctoral studies in Industrial Engineering (DSUD-II)**.

"Transilvania" University of Brasov is an accredited state higher education institution, operating on the basis of university autonomy, in accordance with the legal framework established by the Romanian Constitution and the Higher Education Law no. 199/2023, by the national regulations on ensuring the quality of education, as well as by the internal decisions.

UNITBV is a comprehensive university, comprising 18 faculties (9 faculties with engineering profile and 9 faculties with various profiles: humanities, sciences, economics, law, medicine, music, etc.). In the academic year 2025–2026, 21,857 students are enrolled at UNITBV, of which 17,522 are undergraduate students, in 98 bachelor's degree programs (90 in Romanian and 8 in foreign languages), 3,738 master's students in 85 programs (59 in Romanian and 26 in foreign languages) and 597 doctoral students in 24 doctoral fields (in Romanian and foreign languages).

Among Romanian universities, UNITBV has consistently ranked in the top 10, regardless of the criteria used by the various ranking systems, reflecting the growing academic and research performance.

Since 2014, UNITBV has received from MRC-OCS the certification of compliance with the Quality Management System implemented in IOSUD-UNITBV with the requirements of the SR EN ISO 9001:2008 standard, for the fields of activity university higher education, research and development in natural sciences and engineering, research and development in social sciences and humanities.

UNITBV organizes doctoral and post-doctoral studies within the Organizing Institution of Doctoral Studies - Transilvania University of Braşov (IOSUD-UNITBV).

The doctoral study programs (including the field of Industrial Engineering) are organized and carried out within IOSUD-UNITBV, through the Interdisciplinary Doctoral School (SDI). Currently, within IOSUD-UNITBV there are 24 doctoral fields, which fall into 6 fundamental fields and 11 branches of science. SDI operates within IOSUD-UNITBV, starting with October 1, 2010, being established by the Decision of the Senate of the Transilvania University of Braşov of July 27, 2010. Previously, according to GD 567/June 15, 2005, the UNITBV Senate Bureau decided on September 9, 2005 (HBS no. 43/09.09.2005) to establish the Doctoral Department. This department's mission was to coordinate all doctoral activities in UNITBV.

The previous evaluation of the PhD field Industrial Engineering took place in 2021, ending with the qualification *Maintaining accreditation* by ARACIS Council Decision no. 147/28.12.2021.

II. Methods used

For the external quality assessment in order to maintain the DSUD-II accreditation, the ARACIS evaluation panel analyzed the Internal Evaluation Report (REI) and the annexes to the REI, uploaded on the ARACIS platform, visited the material base and met with the management of the organizational component, the team that drafted the REI, employers, graduates, doctoral students, doctoral supervisors in the field, heads of research centers, members of the quality assurance structures, the staff who provide secretarial services at IOSUD level, according to the agreed visit schedule. The documents analyzed before the on-site visit and during the visit, uploaded on the ARACIS platform, are the following:

1. Internal Evaluation Report (REI)
2. Annex A.1 – Affiliated Managers and Minimum Standards Centralizer;
3. Annex A.2 – WoS Publications and Visibility – PhD supervisors;
4. Annex A.3 – Relevant activity of graduates (doctors);
5. Annex A.4 – Relevant activity of doctoral students;
6. Annex A.5 – Correspondence, disciplines and reports - competences and learning outcomes;
7. Annex A.6 – CVs and lists of papers – holders of PPUA disciplines.

During the evaluation visit, the panel inspected, according to the established program, the following spaces intended for the research activity:

- ✓ [University Research and Development Institute \(ICDT\)](#)
- ✓ Advanced Manufacturing Technologies and Systems Research Laboratory;
- ✓ Research Laboratory Advanced Metal, Ceramic and Composite Technologies and Materials;
- ✓ Research Laboratory Advanced Eco-Technologies of Welding;

- ✓ Additive Manufacturing Laboratory - Room VII2;
- ✓ CAD/CAM Systems Laboratory - Room VIII5;
- ✓ Numerical Management Laboratory - Room VP21.

III. Judgement on the extent to which the standards and performance indicators are fulfilled

DOMAIN A. Institutional capacity

Criterion A.1. Managerial and administrative structures and processes involving students and other stakeholders

Standard S.A.1.1. Organisational components and institutional processes

The HEI has organisational components in its structure, which function based on adequate competences, responsibilities, processes, and implementation procedures, and ensure an effective management system.

Indicator I.P.A.1.1.1	For delivering the study programme/domain, the HEI has adequate organisational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.
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- ✓ Presentation of the state of facts
- ✓ [Transilvania University of Brasov](#) has a transparent university management system, adapted to the mission and objectives assumed. The choice of the governing bodies is made according to clear regulations, displayed on the university's website.
- ✓ All regulations / methodologies are posted on the institution's website, in the section [University Regulations](#).
- ✓ Transilvania University of Brasov (UNITBV) organizes [Doctoral studies](#) within [Organizing Institution of Doctoral Studies – Transilvania University of Brasov \(IOSUD-UNITBV\)](#). Doctoral degree programs (including DSUD-II) are organized by [Interdisciplinary Doctoral School \(SDI\)](#).
- ✓ The organization and functioning of the SDI are established by [the Regulation of the Interdisciplinary Doctoral School](#), the version brought into line with the provisions of the Higher Education Law 199/2023 and the Framework Regulation on Doctoral Studies, approved by OME no. 3020/2024, with subsequent amendments and completions.
- ✓ The way of organizing and completing doctoral studies in IOSUD-UNITBV is established by the [Regulation for the organization and conduct of doctoral and postdoctoral studies](#)
- ✓ IOSUD-UNITBV is led by [Council for Doctoral Studies \(CSUD\)](#); the director of the CSUD shall be appointed in accordance with the [Methodology for organizing and conducting the public competition for the position of Director of the Council for Doctoral Studies](#); members of the CSUD are elected according to the [Methodology regarding the election of the members of the Council for Doctoral Studies](#).
- ✓ [The Regulation for the organization and conduct of doctoral and postdoctoral studies](#) details the structure and functioning of the administrative structures at the level of IOSUD-UNITBV.
- ✓ Functioning and choosing the management structures at the level of the SDI, i.e. the Director of the SDI and the [Council of the Doctoral School Interdisciplinary \(C-SDI\)](#) is carried out according to [Methodology regarding the election of the members of the Council of the Interdisciplinary Doctoral School](#).
- ✓ Analysis of the state of facts
- ✓ According to the discussions with the representatives of the management of the organizational structure, the CSUD currently has 11 members, of which 3 are doctoral students.
- ✓ C-SDI currently has 17 members, of which 4 are PhD students and 4 representatives of the economic environment.

- ✓ Overall, the state of facts indicates a solid formal compliance: the regulatory framework is complete, up-to-date and publicly accessible, and the management structures are constituted and functional, with representation of doctoral students according to legal requirements.
- ✓ It is noted that the documents governing the functioning of the Interdisciplinary Doctoral School (SDI) have been updated and harmonized with the new national legislative framework, namely the Higher Education Law no. 199/2023 and the Framework Regulation approved by OME no. 3020/2024. Both the SDI Regulation and the Regulation on the organization and conduct of doctoral and postdoctoral studies have the same date of entry into force (30.09.2024), which indicates a coherent and synchronized process of institutional review, carried out shortly after the adoption of the new legislation.
- ✓ **The indicator is: fulfilled**

Standard S.A.1.2. Stakeholder engagement

The HEI proves that it engages the relevant stakeholders in developing methodologies and regulations, as well as implementation procedures.

Indicator I.P.A.1.2.1	The opinions of the faculty and department members, of the subsidiary or extension* and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.
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- ✓ **Presentation of the state of facts**
- ✓ According to REI, page 21, in UNITBV, the regulations and methodologies are adopted and revised in accordance with [the University Charter](#) and the legislation in force, being adopted by the University Senate, usually following proposals received from the Administrative Board; The Administrative Board approves the proposals of the faculties, the doctoral school, etc.
- ✓ The adoption/revision is carried out after their debate in the specialized committees of the Senate that take into account the proposals received from the interested parties.
- ✓ The responsibility for developing/updating the regulations and methodologies regarding doctoral studies belongs to the CSUD, in consultation with the doctoral school.
- ✓ [The Regulation of the Interdisciplinary Doctoral School](#), together with the package of specific instructions, was submitted to the debate of the doctoral supervisors of IOSUD-UNITBV, being subsequently adopted by their universal, direct, secret and equal vote.
- ✓ In UNITBV, periodic meetings of the CSUD are organized, which adopt the regulations/methodologies specific to doctoral studies and send them to the Administrative Board for approval; They are included as annexes in the Decisions of the Administrative Board (HCA), to be communicated to interested parties, by publication on the UNITBV website at [University Charter](#), [Regulations and Decisions](#) - [Administrative Board Decisions](#).

Analysis of the state of facts

- ✓ From the REI analysis, but also from the minutes of the meetings with the representatives of the management, the doctoral supervisors in the field and the doctoral students, it can be seen that the process of consultation of the interested parties is carried out through several institutional mechanisms (SDI Regulation, package of specific instructions, etc.).
- ✓ From the discussions held with the representatives of the management and the doctoral supervisors, it emerged that the interested parties can send proposals to modify the regulations/methodologies through direct discussions with the representatives in the Senate or C-SDI.
- ✓ There are periodic meetings with doctoral supervisors and research teams (seminars, workshops, conferences, etc.).

* The faculty, department, subsidiary, extension - hereinafter "organisational components"

- ✓ On the occasion of the meeting with the doctoral students, they confirmed that they are involved in the decision-making processes through their representatives in [the Council of the Doctoral School](#) and in the [CSUD](#).
- ✓ Doctoral supervisors and doctoral students are informed in a timely manner by electronic means of communication, mainly by e-mail, or through their representatives in the CSUD.
- ✓ At the meeting with the members of the Quality Assurance Office (QAO), they stated that when developing and reviewing methodologies, regulations and procedures, the views of stakeholders are taken into account and included where appropriate.
- ✓ The state of facts reveals a stakeholder consultation process that is multichannel, verifiable through public documents (HCA) and confirmed from multiple primary sources (management, doctoral supervisors, doctoral students, OAC), which constitutes a solid argument for meeting the ARACIS standard concerned.

The indicator is: fulfilled.

Criterion A.2. The material resources and optimisation of the use of the material resources

Standard S.A.2.1. Material resources

The HEI owns adequate movable and immovable assets to enable it to carry out the study programme/domain.

Indicator I.P.A.2.1.1	The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.
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- ✓ [Presentation of the state of facts](#)
- ✓ According to REI, page 21, UNITBV provides teaching and research spaces corresponding to the activity of the doctoral cycle by using the existing resources in the research centers within the Research and Development Institute of the Transylvania University of Braşov - [ICDT](#), but also within the faculties from which the doctoral supervisors come.
- ✓ Students, doctoral students and trainees have access to support services through student dormitories, canteens, recreation spaces, university library, career counseling and guidance centers, as well as medical facilities.
- ✓ DSUD-II has an adequate material base for carrying out doctoral studies, with state-of-the-art facilities.
- ✓ [Analysis of the state of facts](#)
- ✓ From the REI analysis and the visit to the material base, DSUD-II has an extensive research infrastructure made available to doctoral students mainly within the research centers within the Research and Development Institute of the Transylvania University of Braşov - [ICDT](#).
- ✓ DSUD-II doctoral students currently use the infrastructure of research centers [Advanced manufacturing technologies and systems](#), [Advanced welding eco-technologies](#), [Advanced Metal, Ceramic and Composite MMC Technologies and Materials](#), [Virtual Industrial Computing and Robotics](#) and [Renewable energy systems and recycling](#); However, doctoral students can also access the research equipment from the other ICDT research centers based on requests.
- ✓ DSUD-II doctoral students can also use the existing infrastructure within the 5 faculties from which the doctoral supervisors of the field come.
- ✓ UNITBV provides free learning resources (textbooks, treatises, bibliographic references) for each doctoral field, through [the library](#), the [e-learning](#) platform and an [intranet portal](#) with information on doctoral activities.
- ✓ [Aspects that constitute best practice examples](#)
- ✓ Development and endowment of research centers/laboratories with modern equipment, appropriate for carrying out advanced research activities and for training experts in the field of Industrial Engineering (concentrated within the Research and Development Institute).

- ✓ The state of facts reveals an adequate research infrastructure and learning resources, thematically diversified and accessible through flexible mechanisms (direct access, on demand, or through faculties), a finding reinforced by the on-site verification of the material base.

The indicator is: fulfilled.

Standard S.A.2.2. Management of material resources

The organisational components manage the movable and immovable assets used for the evaluated study programme/domain in an optimal, sustainable manner.

Indicator I.P.A.2.2.1	The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.
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- ✓ [Presentation of the state of facts](#)
- ✓ UNITBV shows a constant concern for the maintenance and good management of the spaces, as well as the movable and immovable assets in its endowment, in order to ensure favorable conditions for carrying out study, research, work and university life activities.
- ✓ According to REI, page 22-23, UNITBV has renovated most of the buildings located in the city of Brasov; The student dormitories were also renovated between 2020 and 2024.
- ✓ UNITBV has acquired in the last two years, within a PNRR project, high-performance equipment, which is also used in the research activity, an aspect also highlighted in [the annual reports of the rector](#) and [the dean of the faculty](#).
- ✓ [Analysis of the state of facts](#)
- ✓ At the institutional level, there is a continuous concern for infrastructure improvement for the efficient support of teaching and research activities, an aspect also highlighted in [Annual reports](#) prepared by the rector of the university.
- ✓ During the evaluation visit, the members of the ARACIS team visited the spaces intended for teaching and research activities related to DSUD-II, concluding that both the equipment and the spaces are properly maintained, ensuring the necessary conditions for carrying out in good conditions the activities specific to doctoral studies.
- ✓ The state of facts demonstrates that UNITBV shows a constant and documented institutional concern for the development of the infrastructure for teaching and research activities, materialized by the acquisition of high-performance equipment through PNRR funding, capitalized including in doctoral research. This positive dynamic is convergently confirmed by the annual reports of the rector, by the report of the dean of the ITMI Faculty, as well as by the direct finding of the ARACIS evaluation team, which verified on the spot that the spaces and equipment related to DSUD-II are properly maintained and ensure the necessary conditions for carrying out doctoral studies in good conditions.
- ✓ The indicator is: fulfilled.

Criterion A.3. Adequate human resources and transparent staff recruiting procedures developed according to the law

Standard S.A.3.1. Human resources

The HEI has the required human resources to organise and deliver the evaluated study programme/domain.

Indicator I.P.A.3.1.1	The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.
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- ✓ [Presentation of the state of facts](#)
- ✓ According to REI, page 23, a number of 17 doctoral supervisors work within DSUD-II.
- ✓ Of the 17 doctoral supervisors within DSUD-II, 15 meet the habilitation criteria in force.
- ✓ [Analysis of the state of facts](#)

- ✓ At the time of the on-site visit, the ARACIS panel retained the following information: a number of 17 doctoral supervisors work within DSUD-II, of which 15 are tenured and 2 associate (UNITBV retirees).
- ✓ In the case of DSUD-II, the CNATDCU minimum standards in force, necessary and mandatory for obtaining the habilitation certificate, are met by 15 doctoral supervisors (Annex A.1 – Affiliated supervisors and Minimum Standards Centralizer).
- ✓ Based on the analyzed information – Annex A.1 – Affiliated supervisors and Minimum Standards Centralizer, Annex A.6 - CVs and lists of papers - holders of PPUA I disciplines, the ARACIS external evaluation panel found that the DSUD-II staff (17 doctoral supervisors) have the necessary qualifications and skills to carry out the doctoral students' coordination activities.
- ✓ The teaching and research activities (PPUA and PCS) are provided by tenured teachers and supported by administrative and technical staff, contributing to the smooth running of the doctoral study program.
- ✓ **The indicator is: fulfilled.**

Indicator I.P.A.3.1.2	The HEI ensures professional and personal development for its staff.
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- ✓ **Presentation of the state of facts**
- ✓ UNITBV actively promotes the professional and personal development of teaching, research and administrative staff by supporting participation in various forms of continuing education — postgraduate training and development programmes, refresher programmes and continuing education programmes - as well as by encouraging attendance at other short courses relevant to the work carried out.
- ✓ Teachers are encouraged to participate in scientific conferences and international mobilities (including through the EC's Erasmus+ programme).
- ✓ UNITBV teachers participated in professional and personal development activities organized through the [Center for Continuing Education and Academic Mentoring](#) and foreign language courses through [the Center for Modern Language Learning](#).
- ✓ UNITBV staff are encouraged to participate in Erasmus+ mobilities through the dedicated webpage <https://www.unitbv.ro/studenti/erasmus/erasmus-pentru-personalul-universitar.html>, for both teaching mobilities (STAs) and training mobilities (STTs).
- ✓ UNITBV teaching staff can also participate in courses organised through the international UNITA alliance of which UNITBV is a member (e.g. [November 2025-January 2026](#)).
- ✓ **Analysis of the state of facts**
- ✓ At the meeting with the teaching staff, the doctoral supervisors of DSUD-II confirmed that they benefit from a wide range of post-graduate and non-graduate professional training courses, organized by UNITBV.
- ✓ The representatives of the management of the organizational component said that UNITBV has decided that from the academic year 2026-2027, each doctoral student will have to participate in at least one mobility internship during the doctoral studies.
- ✓ UNITBV has an institutionalized and diversified system of continuous professional development of teaching staff, which includes pedagogical training and academic mentoring, language courses, Erasmus+ mobilities (both teaching and training) and participation in courses organized through the international alliance UNITA. This varied offer was confirmed directly by the doctoral supervisors of DSUD-II during the meeting with the evaluation team, which attests to the real, not just declarative, functionality of the professional training mechanisms. In addition, the institutional decision that, starting with the academic year 2026-2027, each doctoral student should participate in at least one mobility internship during their doctoral studies, reflects a strategic orientation towards internationalization and strengthening the academic mobility dimension at the level of the doctoral program. The standard for the professional development of staff can be considered met.
- ✓ **The indicator is: fulfilled.**

Standard S.A.3.2. Recruitment procedures

Teaching staff recruitment procedures compliant with the provisions of the law.

Indicator I.P.A.3.2.1	Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.
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- ✓ **Presentation of the state of facts**
- ✓ The recruitment of teaching staff is done in compliance with the legislation, through a competition organized for vacant positions, based on a procedure that is public and can be found on the UNITBV website.
- ✓ In the case of personnel recruitment, competence criteria are applied, based on [methodology](#) approved by the University Senate.
- ✓ For the recruitment of teaching and research staff, UNITBV applies a [Methodology regarding the occupation of teaching positions](#) approved by the university's Senate, based on competence criteria and which strictly comply with the legal provisions in force.
- ✓ All information regarding the Teaching and Research Staff Recruitment Competitions is available on [the UNITBV website](#).
- ✓ SDI applies an [enabling procedure](#) that is carried out in accordance with [the regulation on obtaining the habilitation certificate](#) regarding the certification of a person's quality to supervise doctoral theses, including in DSUD-II; the process of affiliation to SDI is carried out according [to the IS 1-1 instruction](#), and the disaffiliation to the SDI according [to the IS 1/2 instruction](#).
- ✓ **Analysis of the state of facts**
- ✓ The processes of recruitment, empowerment and affiliation/disaffiliation of teaching and research staff at the level of UNITBV and SDI/DSUD-II are rigorously regulated by formal methodologies and procedures, approved by the University Senate and transparently published on the institutional website. The recruitment of teaching staff is carried out on the basis of competence criteria, in strict compliance with the legislation in force, while the certification of the quality of doctoral supervisor is carried out through a distinctly regulated enabling procedure, and the affiliation and disaffiliation to SDI are governed by specific instructions (IS 1-1 and IS 1/2), which ensure procedural clarity and documentary traceability.

The indicator is: fulfilled.

Criterion A.4. Digitalisation of institutional processes

Standard S.A.4.1. Digital transformation

The digital transformation process in the organisational component seeks to achieve administrative simplification and improve the quality of the services provided to the members of its own community, as well as to third parties.

Indicator I.P.A.4.1.1	The organisational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.
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- ✓ **Presentation of the state of facts**
- ✓ UNITBV actively and transparently integrates digital tools into all its activities, in order to facilitate access to information and to ensure quality educational and administrative services for all stakeholders based on a [University Digital Transformation Strategies](#) (REI, page 26).
- ✓ UNITBV provides stakeholders with a variety of academic and administrative platforms.
- ✓ UNITBV provides teachers and students with the [e-learning](#), the [Practice](#), the mobility portal [Erasmus](#), [file transfer, document storage and editing service](#) and the [E-mail](#).
- ✓ **Analysis of the state of facts**
- ✓ During the visit, the members of the Evaluators panel noted the use of digital tools within the teaching and administrative activity of UNITBV and SDI, in accordance with the [university's digital transformation strategy](#).

- ✓ During the visit, the evaluation panel found that, based on username and password, the teaching staff have access to electronic resources available on the [intranet](#) platform of UNITBV; a special section dedicated to SDI contains the information of interest for doctoral students, the timetable and disciplines of PPUA-I, forms specific to doctoral studies, the model of doctoral studies contract and possible addenda, etc.
- ✓ In order to optimally report the results of the research activity, UNITBV is implementing the platform [Academics](#) (with the special section for [Interdisciplinary Doctoral School](#), which was not populated with data at the time of the visit).
- ✓ The management of doctoral students is carried out through the platform <https://doctorat.unitbv.ro/>;
- ✓ On the occasion of the meeting with the administrative staff responsible for the IOSUD-SDI secretariat, the participants mentioned that in carrying out their current administrative activities they use the digital platforms of UNITBV, as well as the electronic means of communication in relation to doctoral students and doctoral supervisors.
- ✓ UNITBV has a large and diversified digital infrastructure, developed in accordance with the institutional digital transformation strategy, which supports both the teaching and administrative activity specific to doctoral studies. The findings of the ARACIS evaluation team confirm the effective use of these tools: secure access to intranet resources (with dedicated SDI section), e-learning, practice, Erasmus mobilities, document storage/editing and e-mail platforms, as well as the platform dedicated to the management of doctoral students (doctorat.unitbv.ro).
- ✓ [Recommendations](#)
- ✓ Uploading and periodically updating the SDI and DSUD-II specific data in the [Academics](#) platform for reporting the results of the research activity.

The indicator is: fulfilled.

DOMAIN B. Educational efficacy

Criterion B.1. Content and relevance of study programmes

Standard S.B.1.1. Content of study programme/s*

The study programme is based on a curriculum designed so that students can acquire the expected learning outcomes.

Indicator I.P.B.1.1.1	The study programme is developed and structured according to the expected learning outcomes, and organised based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.
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- ✓ [Presentation of the state of facts](#)
- ✓ DSUD-II, organized within SDI, is designed in accordance with the expected learning outcomes and the requirements of the national and European framework of doctoral studies. The programme is organised on the basis of transferable study credits (ECTS) and includes learning, research and assessment activities leading to the achievement of the EQF level 8 university qualification.
- ✓ [Analysis of the state of facts](#)
- ✓ In IOSUD-UNITBV, specific activities are carried out according [to the Regulation for the organization and conduct of doctoral and postdoctoral studies](#) and the Advanced University Training Program (PPUA) ([IS-7-Instructiune privind structura si continutul PPUA v2.pdf](#)).
- ✓ In the curricula related to PPUA ([TRANSYLVANIA UNIVERSITY OF BRASOV](#)) and in the discipline sheets/research sheets (unitbv.ro/documente/cercetare/doctorat-postdoctorat/Planuri_si_fise/Fise_disciplina_PPUA-I_Inginerie.pdf) are included the activities of:

* The term “programmes” concerns the external quality evaluation for the study programmes contained in a master/doctoral domain. The term “programme” shall be used hereinafter.

doctoral level courses, research seminars, specialized laboratories, individual mentoring activities, complemented by internships. mobility and participation in conferences.

- ✓ At UNITBV, [the doctoral internship](#) is structured as follows: advanced training activities, individual research activities; guidance and monitoring. Each doctoral student is provided with the individualized guidance of a doctoral supervisor and a steering committee, thus guaranteeing a doctoral path adapted to the requirements and specificity of his or her research project;
- ✓ The doctoral study program in the field of Industrial Engineering has a PPUA with a duration of 1 year (60 ECTS) and a PCS with a duration of 3 years (180 ECTS).
- ✓ Curriculum ([Transilvania University of Brasov](#)) allows doctoral students to choose flexible learning/research paths by selecting optional subjects from the first semester based on transferable study credits, and for the second semester and the following years of studies (II-IV) the disciplines and research reports are established with the consultation of the doctoral student, depending on the research topic.
- ✓ The methods for assessing learning outcomes are calibrated to the requirements of level 8 of the European Qualifications Framework (EQF) and include: exams, projects, problem-solving, reports on practical or research activities, complemented by dissemination activities - presentations at international and national conferences and publication of papers in high-impact scientific journals.
- ✓ [Recommendations](#)
- ✓ Periodic updating of the package of documents - curriculum, subject sheets - describing DSUD-II, taking into account the recommendations of the parties involved (graduates, doctoral supervisors, doctoral students).

[The indicator is: fulfilled.](#)

Criterion B.2. Alignment of the curriculum with the qualification

Standard S.B.2.1. Alignment with the qualification level and the intended competences

In the curriculum design and development process, the organisational component seeks to ensure the qualification level, as well as correlation with the envisaged occupations.

Indicator I.P.B.2.1.2	The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).
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- ✓ [Presentation of the state of facts](#)
- ✓ In DSUD-II, the learning outcomes, presented in the preamble [curriculum](#), are correlated with the purpose of the doctoral studies and the professional/scientific and transversal competences formulated in accordance with the Ministerial Order [No. 3020/2024](#) for the approval of the Framework Regulation on doctoral studies.
- ✓ [Analysis of the state of facts](#)
- ✓ The concordance with the competences required by the corresponding occupations is evidenced primarily by the importance given to the ability of doctoral students to produce original knowledge and to contribute to technological and industrial advancement. The content and structure of the curriculum supports the gradual acquisition of these competences by coherently highlighting the theoretical training, research and evaluation activities. Under these circumstances, it can be concluded that DSUD-II meets the requirements of the analyzed indicator, ensuring the alignment of learning outcomes with the competence profile necessary for the occupations associated with the qualification obtained.
- ✓ The teaching and learning methods are appropriate to the demands of the doctoral level and support the formation of the skills of analysis, synthesis and autonomous research. The documents submitted for analysis attest to the coherence between the applied teaching strategies and the assumed objectives of the DSUD-II (REI, pages 29–30).

[The indicator is: fulfilled.](#)

Criterion B.3. Student-centred learning, teaching and evaluation

Standard S.B.3.1 Principles

The organisational component implements the principles of student-centred learning.

Indicator I.P.B.3.1.1	The organisational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.
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- ✓ **Presentation of the state of facts**
- ✓ SDI provides students with permanent support through the IOSUD/SDI secretariat, and the field coordinators appointed by the Administrative Board and doctoral supervisors ensure the development of personalized counseling/tutoring activities, at individual level. PhD students have access to the material base of the ICDT research centers and faculties, access to the [library](#), as the case may be, they are provided [with counseling and guidance](#).
- ✓ The endowment [of the research centers](#) offers students the opportunity to carry out research activities specific to the topic of the doctoral thesis. Throughout the doctoral studies, the guidance and academic integrity committees provide personalized support to the doctoral student.
- ✓ DSUD-II, organized within SDI, is designed in accordance with the principles of student-centered learning, according to national regulations, institutional policies, principles reflected in [the Regulation for the organization and conduct of doctoral studies](#) and the [Advanced University Training Program \(PPUA\), curriculum, discipline sheets/research sheets](#), public documents available on the institution's website.
- ✓ **Analysis of the state of facts**
- ✓ The analysis of the available documents and information (REI, [Regulation for the organization and conduct of doctoral studies](#) and the [Advanced University Training Program \(PPUA\), curriculum, discipline sheets/research sheets](#)) reveals the coherent integration of the principles of student-centered learning both in the curricular architecture and in the teaching, learning and assessment strategies implemented within DSUD-II. The teaching and research approach places the doctoral student in the position of active agent of their own training process, with emphasis on the systematic development of research skills and on adapting the activities to the individual profile of needs and objectives of each doctoral student.
- ✓ The flexible curriculum allows the adaptation of the doctoral path to the specifics of the theme and research directions of each doctoral student, combining a wide variety of teaching and research activities: interactive courses, thematic seminars, individual and team research, scientific projects, academic mobility and participation in research grants and contracts and specialized scientific events. The assessment of competences and learning outcomes is carried out through continuous forms of verification, research projects, scientific presentations and progress reports, calibrated to the requirements of doctoral level EQF 8 and oriented towards cultivating intellectual autonomy, critical thinking and individual evolution in research.
- ✓ From discussions with doctoral students and doctoral supervisors, the external evaluation committee found that the doctoral path is individualized according to the research topic and the profile of the doctoral student, maintaining his/her active role in the research activities and in the learning process (PCS being personalized to the research theme of each doctoral student).
- ✓ In relation to the requirements of the I.P.B.3.1.1 indicator and based on the examined documents, it is found that the student-centered approach is systematically and efficiently implemented at the level of DSUD-II.

The indicator is: fulfilled

Indicator I.P. B.3.1.2	The organisational component ensures opportunities for students to participate in academic mobility programmes organised in person and/or virtually.
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- ✓ **Presentation of the state of facts**
- ✓ IOSUD-UNITBV and the Interdisciplinary Doctoral School (SDI) provide doctoral students with access to physical and/or virtual academic mobility, in order to integrate them into international academic environments, capitalize on diversified scientific resources and develop interdisciplinary

collaborations. These mechanisms support the principles of student-centered learning, academic autonomy, and membership in international research networks.

- ✓ PhD students have the possibility to opt for long-term or short-term mobility internships within the [Erasmus+](#), [UNITA](#) or [CEEPUS programs](#), as well as short-term [Erasmus+ mobilities](#). Periods of study or traineeship carried out abroad are recognised in accordance with the provisions of the [Methodology for the recognition of periods of study carried out abroad](#).
- ✓ PhD students benefit from financial support for international mobility in the form of [scholarships](#) for university study internships abroad, as well as training and professional training or specialization internships. At the same time, IOSUD-UNITBV allocates funds from doctoral grants for the participation of doctoral students in international scientific events, especially conferences indexed in the Clarivate-WoS databases, doctoral students benefiting from these funding in a documented manner (Annex A.3, Annex A.4).
- ✓ At the institutional level, there is a [Methodology for the recognition of study periods carried out abroad](#), both for the study periods, but also for the internship carried out by the students.
- ✓ [Analysis of the state of facts](#)
- ✓ The analysis of the documents and the organizational framework confirms the existence of a functional state of facts regarding ensuring the access of doctoral students to academic mobility, in accordance with the requirements of the performance indicator I.P.B.3.1.2, the mobilities being integrated into the doctoral training process and contributing to the development of research skills, the internationalization of studies and the strengthening of academic networks, according to the analyzed documentary provisions.
- ✓ According to the discussion with the representatives of the management of the organizational structure, starting from the current academic year, doctoral students must participate in at least one mobility during the doctoral internship (for example through [the Erasmus+ program](#)).
- ✓ During the meetings with doctoral students, they mentioned that they benefit from training mobility, financially supported by the university or through various funding programs (e.g. Erasmus+).

The indicator is: fulfilled.

Standard S.B.3.2. Fairness

The organisational component provides fair opportunities for students.

Indicator I.P.B.3.2.1	The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities
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- ✓ [Presentation of the state of facts](#)
- ✓ According to REI, page 31-32, the doctoral support offered to doctoral students is personalized, the doctoral supervisors and the members of the steering committees offering the doctoral students permanent advice for the development of the scientific path, in accordance with their potential and with the leading research directions at international level.
- ✓ SDI, within which DSUD-II is organized, operates on the basis of a set of institutional regulations that enshrine the principles of equity, non-discrimination and equal opportunities for doctoral students, these being provided for in [the University Code of Student Rights and Obligations](#) and the [Regulation on the Organization and Functioning of Doctoral Studies](#).
- ✓ PhD students benefit from equitable access to the institution's academic and research resources, available infrastructure, mobility opportunities and scientific activities organised within doctoral programmes.
- ✓ At the institutional level, there are instruments to ensure fairness: [the Plan on ensuring gender equality](#), [the Methodology for admission to doctoral studies](#), [the University Code of Student Rights and Obligations](#), [the Regulation on the organization and functioning of doctoral studies](#), [the Regulations on the schooling of Romanians abroad](#) and [Regulations on the granting of doctoral scholarships](#).
- ✓ [Analysis of the state of facts](#)

- ✓ From the analysis of the documents and during the meetings held during the on-site visit, the ARACIS evaluation panel found that the principles of fairness and equal treatment are assumed at institutional level and are generally applied in the organization of DSUD-II.
- ✓ DSUD-II guarantees doctoral students equitable access to the institution's research resources and infrastructure, while ensuring the necessary flexibility to adapt the research topic and doctoral activities to individual scientific interests and objectives. Personalized support is provided through the mentoring relationship between the doctoral supervisor and the doctoral student, in accordance with the principles of non-discrimination and equal opportunities applied at institutional level.

The indicator is: fulfilled

Criterion B.4. Accessibility and efficiency of the resources and support services, adequate for learning

Standard S.B.4.1. Access to resources and services

The organisational component provides access to adequate resources and support services, according to the needs of the students.

Indicator I.P.B.4.1.1	The organisational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organisation of the study programme.
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- ✓ Presentation of the state of facts
- ✓ DSUD-II, organized within SDI, has an academic and research infrastructure corresponding to the requirements of the doctoral level and the particularities of the field. PhD students have access to research laboratories, university libraries, international scientific databases, electronic training platforms and all the educational resources made available by the university.
- ✓ The University also offers a comprehensive set of support services for students, which includes academic advice, administrative assistance and access to the digital infrastructure necessary to carry out learning and research activities. For doctoral students with special educational needs or disabilities, the institutional framework establishes appropriate support and adaptation measures, in accordance with the provisions of national legislation and institutional policies on inclusion and accessibility. Through all these measures, educational inclusion, respect for diversity and the student-centered approach are promoted. PhD students within UNITBV also benefit from scholarships and other financial support instruments, designed to facilitate the development of doctoral research in optimal conditions. UNITBV also provides advisory services within the [Centre for Career Counselling and Guidance \(CCOC\)](#);
- ✓ Analysis of the state of facts
- ✓ The analysis of the available documents and information highlights the fact that the material, digital and human resources, as well as the support services offered by the organizational component are adequate and accessible for PhD students in the field of Industrial Engineering.
- ✓ PhD students are provided with free and equal access to research infrastructure and laboratories appropriate to the field of Industrial Engineering ([University Research and Development Institute \(ICDT\)](#), with a total area of 14,850 sqm, in which most of the teaching and research activities from the doctorate are carried out, within the 31 [Research centers](#) which includes all doctoral fields in the university, including II), digital resources and relevant scientific databases ([University Library](#), [platforma e-learning](#), the portal [Intranet](#) and [Portal](#) specific to doctoral studies), academic, administrative and counselling support services, as well as institutional inclusion and accessibility measures for students with special educational needs or disabilities ([students with disabilities](#)).

The indicator is: fulfilled.

Criterion B.5. Learning outcomes

Standard S.B.5.1. Definition and evaluation

Learning outcomes are adequately defined and evaluated.

Indicator I.P.B.5.1.1	Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.
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- ✓ **Presentation of the state of facts**
 - ✓ The learning outcomes are formulated in a clear and coherent manner, highlighting the knowledge, competences and abilities that doctoral students are to acquire at the end of each discipline or training activities within the doctoral programme. These are presented in the curricula, the subject sheets and the regulations of the doctoral studies ([the curriculum](#) and [the subject sheets](#)), all available on [the institution's website](#) (Annex A.5 - Correspondence between subjects and reports - competences and learning outcomes).
 - ✓ **Analysis of the state of facts**
 - ✓ The ARACIS evaluation panel analyzed the content [Curriculum](#) and [Discipline sheets](#) for DSUD-II and found that learning outcomes are clearly formulated, coherent and correlated with disciplines and scientific reports (Annex A.5 - Correspondence between disciplines and reports - competences and learning outcomes), supporting the understanding of training objectives, transparency of the educational process and the planning of teaching and research activities. They allow doctoral students to optimally structure their academic path.
 - ✓ The ARACIS evaluation team found that the titles of the subjects in [the curriculum](#) are in English, although the entire curriculum is written in Romanian.
 - ✓ **Recommendations**
 - ✓ It is recommended to post on the website the Curriculum, and the Discipline Sheets in Romanian, but also in an international language.
- The indicator is: fulfilled**

Indicator I.P.B.5.1.2	Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.
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- ✓ **Presentation of the state of facts**
- ✓ The assessment of the achievement of learning outcomes within DSUD-II is regulated by [the curriculum](#) and [discipline sheets](#), [the Regulation on the organization and conduct of doctoral and postdoctoral studies](#) and the [Regulation of the Interdisciplinary Doctoral School](#)
- ✓ The evaluation is carried out both through continuous evaluation (research projects, reports, presentations, applied activities) and through periodic and final evaluations, including the exams related to the disciplines and the stages of completion of doctoral studies (scientific reports, progress reports, defense of the doctoral thesis). The evaluation activity of the specialized exams in the first year, the first and second semesters is completed with a grade, and the research reports in the second and fourth years are evaluated with qualification (very good, good, satisfactory, unsatisfactory).
- ✓ The completion of the studies is achieved by developing and defending the doctoral thesis according to [the Regulation of the Interdisciplinary Doctoral School](#), in compliance with [the Instruction on the completion and public defense of the doctoral thesis](#).
- ✓ **Analysis of the state of facts**
- ✓ The analysis of the state of facts shows that the evaluation of learning outcomes is carried out in a systematic and coherent manner, using methods appropriate to the doctoral cycle according to [the Regulation on the organization and conduct of doctoral and postdoctoral studies](#) and [the Regulation of the Interdisciplinary Doctoral School](#).
- ✓ The correlation between learning outcomes, assessment activities and stages of completion of studies is evident in the documents analysed (e.g. in [the subject sheets](#) and Annex A.5 - Correspondence between subjects and reports - competences and learning outcomes). In this

context, it is found that there are functional mechanisms for verifying the achievement of learning outcomes.

- ✓ The existence of functional mechanisms for continuous monitoring of the doctoral student's progress, correlated with the final evaluations that certify the level of competence acquired, as well as the documented correspondence between the disciplines/research reports and the competences/learning outcomes (according to the discipline sheets and Annex A.5), demonstrate a rigorous and traceable approach to the evaluation process. The active involvement of the doctoral supervisor and the steering and academic integrity committee in the evaluation of individual progress reinforces the personalized and responsible nature of this process.

The indicator is: fulfilled

Criterion B.7. Procedures and practices regarding the admission competition, the journey, recognition and equivalence of studies, and result certification

Standard S.B.7.1. Admission

The admission procedures and principles ensure access to higher education.

Indicator
I.P.B.7.1.1

The organisational component applies the admission procedures.

- ✓ Presentation of the state of facts
- ✓ The admission procedures for DSUD-II are regulated and applied in accordance with the [Methodology for admission to doctoral studies](#), which ensures a transparent and non-discriminatory selection process, based on research skills and the availability of budgeted places (including special places for disadvantaged categories or Romanians everywhere)
- ✓ For the academic year 2026-2027 (September 2026 admission session), the admission methodology was approved by the Senate in the meeting of 25.02.2026, being posted on [University website](#).
- ✓ Analysis of the state of facts
- ✓ From the analysis of the documents and information presented in the REI (page 35-36), but also from the discussions during the meetings scheduled during the on-site visit, the evaluation panel confirms that the [admission procedures](#) are applied consistently and according to the regulatory framework in force. Hence, the application of admission procedures contributes to ensuring a predictable and transparent process, in line with the requirements of the I.P.B.7.1.1 indicator.
- ✓ From the discussions held with the representatives of the management of the organizational structures, but also with the representatives of the doctoral supervisors, the evaluation panel found that at admission there is both a direct competition between the candidates for a doctoral degree program within DSUD-II, but also a simultaneous competition with all the other fields in the SDI (the allocation of places to the budget is made on the entire doctoral school and not on fields).
- ✓ Aspects that constitute best practice examples
- ✓ The existence of clear, formalized and public admission procedures, correlated with national and institutional regulations, ensuring the transparency of information regarding the admission competition and their unitary application at the level of the Interdisciplinary Doctoral School for all doctoral fields.

The indicator is: fulfilled.

Indicator
I.P.B.7.1.2

Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.

- ✓ Presentation of the state of facts
- ✓ Admission to DSUD-II adheres to the principles of fairness and equal opportunities, ensuring support for vulnerable groups, including candidates with special educational needs or disabilities. The specialized exam for admission to the doctorate evaluates the research capacity, theoretical

- skills and motivation of the candidates. The research topics (or themes, as the case may be) are proposed by the doctoral supervisors, taking into account the number of places available.
- ✓ The tests for the specialized exam and the corresponding bibliography are publicly communicated, by posting on the SDI website, in the [Admission - Doctoral fields and topics section](#), and the selection criteria are clear and objective, in compliance with the principles of fairness and equal opportunities.
 - ✓ The admission methodology is accessible to interested parties on the web platform of UNITBV, [Methodology for admission to doctoral studies](#).
 - ✓ [Analysis of the state of facts](#)
 - ✓ The examination of the available documents and the information contained in the REI (page 36) validates that the admission procedures are implemented in a coherent and transparent manner. The existence of a well-defined, publicly accessible and annually reviewed procedural framework guarantees the predictability of the admission process, as well as compliance with the legal and institutional requirements in force.
 - ✓ In relation to the requirements of the indicator, the effective implementation of the admission procedures at the level of the targeted organizational component is highlighted. The institution explicitly promotes the principles of fairness, non-discrimination and equal opportunities in its official documents, organizes the admission process based on clear and uniformly applied criteria, [makes relevant information available to the public](#) in order to ensure equal access to information, and aligns admission procedures with the university's general inclusion policies.
- The indicator is: fulfilled.**

Standard S.B.7.2. Academic journey of students

The organisational component carries out actions supporting the students' academic journey.

Indicator I.P.B.7.2.1	The organisational component applies the regulations concerning the students' professional activity.
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- ✓ [Presentation of the state of facts](#)
- ✓ The organizational component of the students' professional activity within DSUD-II is regulated by a set of norms that provide a set of rules regarding the organization, conduct and completion of studies at Transilvania University of Braşov, being governed by the national legislation and the institutional regulations in force, respectively the Higher Education Law no. 199/2023, OME no. 3020/2024 on the Framework Regulation for Doctoral University Studies and [Regulation on the professional activity of students](#) and [the University Code of Student Rights and Obligations](#), [Regulation on the organization and conduct of doctoral and postdoctoral studies](#); [Instructions of the doctoral school](#); [Methodology regarding the evaluation of the activity of doctoral students in order to reallocate doctoral grants financed from the state budget](#); [Methodology for the recognition of periods of study carried out abroad](#); [Regulation on the recognition of periods of study or internship carried out within the framework of mobilities through the Erasmus+ programme](#).
- ✓ [Analysis of the state of facts](#)
- ✓ The evaluators' panel notes that at the institutional level there is and is applied [the Regulation on the organization and conduct of doctoral and postdoctoral studies](#), a document that also governs the activity of doctoral students, in complementarity with the national legislative framework and with [the Instructions of the doctoral school](#).
- ✓ Based on the analyzed documents, a systematic and unitary implementation of the regulations regarding the professional activity of doctoral students is highlighted. Mechanisms for monitoring progress and evaluating academic and research activity are in place, which support the doctoral path and guarantee the fulfillment of the requirements of the study program.
- ✓ From the discussions with both doctoral supervisors and doctoral students, it appears that they are aware of the requirements regarding professional and academic activity, and their evolution is regularly monitored through activity reports, annual evaluations and other formal instruments stipulated by the [regulation](#).

The indicator is: fulfilled.

Criterion B.8. Internationalisation process

Standard S.B.8.1. Internationalisation

Improving the quality of education and research through internationalisation actions.

Indicator I.P.B.8.1.1	The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.
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- ✓ **Presentation of the state of facts**
- ✓ IOSUD-UNITBV supports national, international and intersectoral cooperation through an organizational framework based on the UNITBV Internationalization Strategy, which also promotes the mobility of doctoral students and academic and research collaboration.
- ✓ PhD students benefit from international mobilities through programs such as Erasmus+ and institutional partnerships, which facilitate research internships, participation in courses and conferences in universities in the country.
- ✓ UNITBV carries out various international programmes and projects and has concluded [collaboration agreements](#) (framework agreements, ERASMUS+ and CEEPUS) with over 700 partner institutions from over 90 countries.
- ✓ The Erasmus+ programme, type KA131 and KA171 is accessible to doctoral students for [study mobilities](#) or both short and long-term internships/research, as well as blended intensive programmes (BIP).
- ✓ IOSUD-UNITBV implements methodologies that support [Mobilities](#) study or internships/research internships, both short and long-term, as well as blended intensive programs (BIP).
- ✓ UNITBV is a member of [UNITA Alliance](#) – Universitas Montium, along with 11 other universities, from 7 European countries; within UNITA, co-supervised doctorates are organized, including within the Horizon Europe MSCA-Cofund project [CHORAL](#) PhD.
- ✓ The doctoral supervisors of DSUD are involved in bilateral collaboration projects with countries outside the European area within which mobility for research and participation in scientific events is provided (<https://jixie.sjzu.edu.cn/info/1045/11581.htm>, https://smeet.unitbv.ro/wp-content/uploads/2023/10/SisMeet_program-Version5.htm) or Erasmus+ projects such as Capacity Building projects in which specific [themes](#) are tackled.
- ✓ **Analysis of the state of facts**
- ✓ The analysis of the documents and information submitted confirms that the I.P.B.8.1.1 indicator is adequately met. The existence of a [UNITBV Internationalization Strategy](#) that encourages international mobility (including Erasmus+).
- ✓ The analysis of the state of facts highlights a solid and diversified international dimension of DSUD-II activities, supported by concrete institutional mechanisms of mobility and cooperation. IOSUD-UNITBV facilitates short and long-term mobilities, internships/research placements and blended intensive programmes (PIPs), and UNITBV's membership in the UNITA Alliance allows the organisation of co-supervised doctorates, including through Horizon Europe projects such as CHORAL PhD.
- ✓ Following discussions with the representatives of the doctoral supervisors, it emerged that based on the [UNITBV Internationalization Strategy](#), PhD supervisors benefit from financial support from the institution for annual participation in at least one scientific or professional training event.

The indicator is: fulfilled.

Criterion B.9. Scientific research results

Standard S.B.9.1 Scientific research in the education process

Scientific research activities support students in achieving the learning outcomes.

Indicator I.P.B.9.1.1	Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.
✓ Presentation of the state of facts ✓ In UNITBV, research is carried out on the basis of Strategic Plan transposed into Strategy of Transilvania University of Brasov on scientific research, development and innovation in the period 2024-2029 and in the annual operational plans published on the Website university. ✓ DSUD-II is focused on advanced scientific research activities, which constitute the core of the learning process at doctoral level. In the Internal Evaluation Report (REI), page 39, it highlights the systematic integration of scientific research into the educational process. ✓ PhD students are involved in research projects, experimental and analytical activities, the elaboration of scientific articles, participation in conferences and the dissemination of research results and the completion of doctoral studies. ✓ PhD students can participate in the implementation teams of research projects won through national/international competition or with third parties (e.g. the participation of 2 DSUD-II PhD students in an innovative technological project). ✓ UNITBV annually organizes the AFCO event Graduates in front of companies, which gives doctoral students the opportunity to present the results of their research carried out during their doctoral studies, in a special section (section XI); For example, at the 2024 edition, two doctoral students of DSUD-II obtained the prize of section XI, doctorate. ✓ The scientific results obtained are capitalized on during teaching activities, periodic evaluations ✓ Analysis of the state of facts ✓ At the visit, the heads of the research centers and the doctoral supervisors said that in general, the capitalization of the research results in the learning outcomes is done including by including them in the disciplines of the PPUA of DSUD-II. ✓ The PhD students stated that they are involved in the research activities by participating in the research teams of the research projects carried out by the centers (through employment) and can present their scientific research results in DoCo International Conference of PhD Students organized by SDI, which during the visit was undergoing. ✓ The analysis of the state of facts shows that learning based on scientific investigation is implemented coherently and consistently within the doctoral program. The research activities directly support the achievement of learning outcomes, corresponding to EQF level 8. ✓ The integration of research results in the learning and evaluation process demonstrates an effective capitalization of scientific activity in doctoral training. The involvement of doctoral supervisors in the orientation and monitoring of research contributes to the quality and relevance of the results obtained (Annex A.2 – WoS publications and visibility - doctoral supervisors and Annex A.3 – Relevant activity of doctoral students). ✓ Aspects that constitute best practice examples ✓ UNITBV and SDI ensure a good dissemination of the results of the research carried out during the doctoral studies by organizing two scientific events DoCo International Conference of PhD Students and AFCO – Graduates in front of companies . The indicator is: fulfilled.	

Standard S.B.9.2. Scientific research pertaining to the objectives of the study programme
The organisational component carries out scientific research activities aligned with the objectives of the evaluated study programme.

Indicator I.P.B.9.2.1	The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.
✓ Presentation of the state of facts ✓ SDI, which coordinates DSUD-II, carries out research activities aligned with the objectives of the program and the thematic areas assumed, within specific themes and/or the themes of doctoral	

theses, including based on contracts/grants won through competitions or carried out at the request of industrial companies. The results of the research are visible at international level, being disseminated through publications in Clarivate – Web of Science or BDI journals, especially those in the Q1 and Q2 categories, chapters published in research books and patents/proposals published in the Official Bulletin of Industrial Property – BOPI.

- ✓ At the institutional level, the scientific research activity is carried out according to the [strategic plan](#), on the basis of which UNITBV has developed [Strategy of Transilvania University of Brasov on scientific research, development and innovation in the period 2024-2029](#).
- ✓ The scientific research activities carried out in the university and the results obtained are reflected in a separate chapter of the [Annual Report on the State of the University](#).
- ✓ In UNITBV there is a [differentiated salary system according to scientific performance](#) which has as its main component the publications in top journals, which encourage the dissemination of research results for the doctoral supervisors of DSUD-II.
- ✓ [Analysis of the state of facts](#)
- ✓ The analysis of the state of facts highlights an appropriate alignment between the research activities carried out and the objectives of DSUD-II. The scientific results obtained demonstrate relevance and visibility at national and international level, contributing to the development of the field and to the consolidation of the academic profile of the Doctoral School (Annex A.2 – WoS publications and visibility - doctoral supervisors and Annex A.3 – Relevant activity of doctoral students).
- ✓ [Aspects that constitute best practice examples](#)
- ✓ The existence of a [differentiated salary system based on scientific performance](#), which stimulates the performance of cutting-edge research, including in DSUD-II.
- ✓ Dissemination of research results in a large number of scientific articles, published in recognized journals and specialized volumes, at the same time as the active and direct involvement of doctoral students in this process of dissemination of scientific results.

The indicator is: fulfilled.

DOMAIN C. Quality management

Criterion C.1. Quality assurance strategies and procedures, including in the field of academic ethics and conduct, which involve students, employers and other stakeholders and are applied in a consistent, transparent manner

Standard S.C.1.1. Application

Adequately implemented strategic directions, actions, and procedures

Indicator I.P.C.1.1.1	The organisational component consistently carries out actions and applies procedures, proving their impact on improving the quality of education at the level of the study programme
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- ✓ [Presentation of the state of facts](#)
- ✓ According to REI, page 41, at the institutional level of UNITBV, the internal quality assurance system comprises [Strategy](#), [Action plans](#), [Regulations](#) and [Procedures](#).
- ✓ UNITBV has a [Quality Assurance Strategy](#), approved by the Senate, with a strategic objective of strengthening the quality culture in the University, as a premise for the continuous improvement of teaching, scientific and administrative research processes, in order to increase and maintain them at high standards, in order to comply with the Standards and guidelines for quality assurance in the European Higher Education Area (ESG) and continuous quality improvement.
- ✓ [Quality assurance procedures](#) are developed by [the Quality Assurance Office](#) (OAC) in collaboration with process managers and approved by the Management Board .
- ✓ In UNITBV operates the [Commission for Quality Assessment and Assurance \(CEAC\)](#) within [Quality Assurance Office](#) (OAC); on the OAC website, there are also [List of Internal Quality Assurance System \(SIAC\) documents](#).

- ✓ UNITBV displays all information, external or external regulations, procedures, etc. related to the quality assurance process on a [Dedicated website](#).
 - ✓ At the SDI level there is a quality management system based on a package of specific instructions (annexes to the [Regulation of the Interdisciplinary Doctoral School](#)), developed / periodically reviewed by C-SDI and approved by the CSUD.
 - ✓ Within DSUD-II, there is a specific mechanism for collecting feedback from PhD students (also in English since 2022), regarding the PPUA.
 - ✓ All stakeholders are actively involved in the decision-making and evaluation process.
 - ✓ [Analysis of the state of facts](#)
 - ✓ UNITBV has an institutionalized and multi-level quality assurance system, structured on clear lines of responsibility. At the central level, the Commission for Quality Assurance and Evaluation (CEAC), integrated into the Office of Quality Assurance (OAC), manages the documentation of the internal quality assurance system, published transparently on dedicated websites. At the SDI level, a specific quality management system operates, based on instructions developed/revised by C-SDI and approved by CSUD, complemented by a dedicated mechanism for collecting feedback from doctoral students on the PPUA, also available in English since 2022, which reflects a concern for the inclusion of international doctoral students. The discussions with the representatives of the management and the OAC clarified that a significant part of the quality assurance attributions for the doctoral fields, including DSUD-II, falls to the institutional level IOSUD-UNITBV/CSUD, which ensures coherence and uniformity of quality standards at the level of the entire doctoral school.
- The indicator is: fulfilled.**

Standard S.C.1.2. Stakeholder engagement

The HEI proves that it engages the stakeholders who have relevant activity in applying the procedures.

Indicator	The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.
I.P.C.1.2.1	

- ✓ [Presentation of the state of facts](#)
- ✓ According to the REI, page 42, there are periodic internal evaluation methodologies [the Methodology for periodic internal evaluation of doctoral fields](#), [the Methodology for periodic internal evaluation of the activity of doctoral supervisors](#) and [the Methodology for the evaluation of the activity of doctoral students in order to reallocate doctoral grants financed from the state budget](#).
- ✓ In order to improve the quality of education, a specific mechanism for collecting feedback from doctoral students (also in English since 2022) is applied on PPUA I and the consultation of graduates on the entire doctoral internship takes place, based on the procedure Communication with graduates (PS8.2-02).
- ✓ At the institutional level, there are also debates in the internal bodies of the university: C-SDI, CSUD, specialized committees in the Senate, the Administrative Board, the Ethics Commission, etc., to which are added consultations with employers, representatives of the economic environment and partner institutions.
- ✓ A specific mechanism for collecting feedback from doctoral students (also in English since 2022) is applied on PPUA I and the alumni are consulted on the entire doctoral internship, based on the Communication with Alumni procedure (PS8.2-02, procedure available on the Intranet platform, according to discussions with the REI drafting team).
- ✓ [Analysis of the state of fact](#)
- ✓ During the on-site visit, the ARACIS Evaluators Committee found that stakeholders - scientific supervisors and doctoral students are generally involved in the development and implementation of regulations, procedures and methodologies, through their representatives in the [Council of the Doctoral School](#) and from [Council for Doctoral Studies](#).
- ✓ From the discussions with the doctoral students and with the doctoral supervisors, it emerges that the feedback of the doctoral students is collected periodically in order to continuously improve the

quality of the teaching activities and the research program/learning outcomes; The Panel also noted the low percentage of response from doctoral students.

- ✓ The members of the OAC (Office for Quality Assurance) stated that the students, through their representatives in [Council of the Doctoral School](#) and from [Council for Doctoral Studies](#), The Faculty Council and the University Senate are involved in the development and implementation of procedures related to the activity of doctoral students.
- ✓ The doctoral students stated that they are consulted in the elaboration of regulations, procedures and methodologies through their representatives in the Council of the Doctoral School, CSUD and in the University Senate.
- ✓ [Recommendations](#)
- ✓ Encouraging doctoral students to participate in as many numbers as possible in the evaluation process of the teaching staff involved in the teaching and research activities within the doctoral studies.

[The indicator is: fulfilled.](#)

Criterion C.2. Functionality of education quality assurance structures, including in the field of academic ethics and conduct, according to the law

Standard S.C.2.2. Operation

Quality assurance and academic ethics and conduct organisational structures adequately perform their specific role and functions.

Indicator I.P.C.2.2.2.	The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.
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- ✓ [Presentation of the state of facts](#)
- ✓ According to REI, page 43, the University [Ethics Commission](#) (CEU) operates in the university, a deliberative structure, independent in the exercise of its duties from any other structure or person within the university.
- ✓ The CEU aims to comply with the norms of university ethics and deontology, including through the analysis of complaints, according to [the Code of University Ethics and Deontology](#) (an integral part of the University Charter) and the [Regulations on the organization and functioning of the commission](#).
- ✓ At the level of UNITBV activates [University Ethics Commission](#) (CEU), based on a [Organization and Functioning Regulations](#); Article 45 of the UNITBV Charter states "*The composition of the University Ethics Commission is proposed by the Administrative Board, endorsed by the Senate and approved by the rector's decision. The composition of the members of the Ethics Commission is a maximum of 75% teaching and research staff and a minimum of 25% students*"; currently the CEU has 15 full members, of which 4 members are students.
- ✓ All [decisions](#) and [annual reports](#) of the CEU are public.
- ✓ The evaluators team found the existence of a [Code of Ethics and University Deontology](#), which according to art.2 "*The Code of Ethics and University Deontology (hereinafter referred to as the "Code") is meant to support the members of the UNITBV community in identifying and solving ethical problems, to morally guide the relations between the members of the UNITBV community, their relations with the university institution, with institutional partners, as well as with the local, national and international community and to contribute to creating a climate of trust and respect inside and outside the UNITBV community.*"
- ✓ [Analysis of the state of facts](#)
- ✓ The analysis of the state of facts highlights the existence of a solid and transparent institutional framework for ensuring university integrity and ethics, applicable also to doctoral students.
- ✓ According to the discussions with the representatives of the management, and of the doctoral supervisors, there were and are no problems of university ethics regarding the activity of doctoral students.

The indicator is: fulfilled.

Criterion C.3. Procedures for the initiation, monitoring and periodic review of the study programmes and domains and of the performed activities, involving students, employers and other stakeholders

Standard S.C.3.1. Procedures and implementation of procedures

The HEI has procedures for initiating, monitoring, and periodically reviewing the study programmes and domains and the performed activities, and applies them systematically.

Indicator I.P.C.3.1.1	The organisational component consistently applies the procedures, and proves their impact on quality assurance.
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- ✓ Presentation of the state of facts
- ✓ According to REI, page 44, UNITBV ensures the quality of education in doctoral study programs through the periodic internal evaluation of doctoral fields, the activity of doctoral supervisors and the activity of doctoral students in order to reallocate doctoral grants financed from the state budget.
- ✓ At DSUD-II level, the data collected following the preparation of internal evaluation reports are used in the process of preparing an [Annual Report at SDI level](#).
- ✓ In UNITBV and SDI, the following periodic internal evaluation methodologies exist and are applied: [Methodology for periodic internal evaluation of doctoral fields](#) (developed in 2022, last updated in 2024), [Methodology for periodic internal evaluation of the activity of doctoral supervisors](#) (updated in 2024), [Methodology for evaluating the activity of doctoral students in order to reallocate doctoral grants financed from the state budget](#) (developed in 2025).
- ✓ The data collected is used for the elaboration of an [Annual Report at SDI level](#).
- ✓ Analysis of the state of facts
- ✓ The analysis of the state of facts shows that UNITBV/SDI have a complete and updated set of periodic internal evaluation methodologies, covering the three relevant levels: doctoral fields, the activity of doctoral supervisors and the activity of students. The methodologies were successively updated (2022, 2024, respectively recently developed in 2025), indicating a dynamic revision process, adapted to the needs of the system and the changing legislative regulations. The results of these evaluations are capitalized by developing an Annual Report at the level of SDI, which ensures the aggregation, synthesis and possibility of institutional monitoring of quality over time.

The indicator is: fulfilled.

Indicator I.P.C.3.1.2	Members of its own community and other stakeholders are involved in the procedure implementation process.
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- ✓ Presentation of the state of facts
- ✓ According to REI, page 44-45, members of the academic community and stakeholders actively participate in the implementation of the internal procedures of UNITBV and SDI.
- ✓ Students have representatives in the management structures of UNITBV (Faculty Councils, Senate, Boards of Directors, Quality Commissions).
- ✓ At the SDI level, there is [the Council of the Doctoral School](#), which informs the interested parties and ensures the implementation of all the procedures developed at institutional level.
- ✓ Employers' representatives from C-SDI participate in the approval and application of regulations/procedures.
- ✓ Analysis of the state of facts
- ✓ The members of the OAC stated, at the meeting with the members of the ARACIS evaluation panel, that the procedures and regulations are subject to public consultation, through the representatives of the SDI Council, CSUD and the University Senate and, finally, approved by the University Senate (after their approval in the Administrative Board, but also in the specialized commissions of the Senate).
- ✓ The analysis of the state of facts confirms that the implementation of the internal procedures of UNITBV/SDI involves the active participation of the academic community and stakeholders, through

structured mechanisms of representation at several levels. Students benefit from formal representation in the management structures (Faculty Councils, Senate, Boards of Directors, Quality Commissions), and at the level of SDI, the Council of the Doctoral School ensures the dissemination and implementation of institutional procedures. Also relevant is the presence of employers' representatives in C-SDI, who effectively participate in the approval and application of regulations, thus bringing a perspective of the economic environment in the decision-making process.

The indicator is: fulfilled.

Criterion C.4. Procedures for the periodic evaluation of the quality of the activities of teaching staff, auxiliary teaching staff, and administrative staff

Standard S.C.4.1. Procedures

Applying the methodologies and procedures contributes to improving the quality of the staff's activities.

Indicator I.P.C.4.1.1	The organisational component analyses the results of the students' biannual evaluation of teachers.
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- ✓ [Presentation of the state of facts](#)
- ✓ From the REI analysis, page 43, it can be seen that at the level of IOSUD-UNITBV, respectively of the Interdisciplinary Doctoral School, a specific mechanism for collecting feedback from doctoral students (also in English since 2022) has been implemented since 2017, regarding PPUA I. The consultation of doctoral students (under the protection of anonymity) was carried out annually, online, and during the reporting period, Thus: 2022 (31 respondents), 2023 (52 respondents), 2024 (46 respondents), 2025 (42 respondents).
- ✓ Also, after graduation, the consultation of former doctoral students on the entire doctoral internship takes place based on the Specific Procedure: Communication with graduates (PS8.2-02); The data collected is used to improve the quality of education.
- ✓ [Analysis of the state of facts](#)
- ✓ The analysis of the state of facts shows that UNITBV/SDI have functional mechanisms for collecting feedback both during the doctoral studies (questionnaire on PPUA I, available on the intranet) and at their completion (questionnaire for graduates, applied to the entire doctoral internship, [mechanism for collecting feedback from graduates over the entire doctoral internship](#)), thus ensuring both a formative and summative evaluation of the doctoral students' experience. The fact that the feedback collected is analysed at the level of the SDI, and on the basis of which corrective or improvement measures are proposed, demonstrates that the mechanism is not a purely formal one, but one with a practical effect on the quality of the programme.

The indicator is: fulfilled.

Criterion C.5. Systematically updated databases on internal quality assurance

Standard S.C.5.1. Databases

The HEI uses databases to support internal quality assurance activities.

Indicator I.P.C.5.1.1	The organisational component systematically collects and analyses data required for the internal quality assurance process.
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- ✓ [Presentation of the state of facts](#)
- ✓ UNITBV systematically collects, processes and analyzes data and information regarding the processes carried out and their quality, in order to continuously improve the performance of the information system through the introduction of information technologies.
- ✓ UNITBV has a [Strategy for digital transformation in the field of education, research and administration](#), developed in accordance with the national and European strategic documents on the digitization of education.
- ✓ SDI applies an internal evaluation methodology for the preparation of the annual reports of the doctoral school.

- ✓ Analysis of the state of facts
- ✓ The analysis of the state of facts highlights the fact that UNITBV systematically collects, processes and analyzes data on processes and their quality, for the purpose of continuous improvement, an approach institutionally supported by the Digital Transformation Strategy, aligned with national and European strategic documents. The ARACIS Evaluation Panel found that SDI systematically applies [Methodology for periodic internal evaluation of doctoral fields](#), [Methodology for periodic internal evaluation of the activity of doctoral supervisors](#) to draw up a [Annual report at SDI level](#) which is public on the institution's website.
The indicator is: fulfilled.

Criterion C.6. Transparency of information of public interest, including those regarding the study programmes and domains offered, and transparency regarding the related certificates, diplomas and qualifications

Standard S.C.6.1. Transparency

The organisational component ensures transparency of information, as required by the law.

Indicator I.P.C.6.1.1	The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.
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- ✓ Presentation of the state of facts
 - ✓ UNITBV provides all the useful information on DSUD-II on the website of the [IOSUD/SDI](#): the regulations of the doctoral school; the methodology for admission to doctoral studies; [Doctoral Studies Contract](#); instruction on the completion and public defense of the doctoral thesis; the content of the study programs; the scientific profile and thematic areas/research themes of the doctoral supervisors in the school, as well as their institutional contact details; links to the abstracts of the doctoral theses to be defended publicly, as well as the date, time, location where they will be defended.
 - ✓ Analysis of the state of facts
 - ✓ The analysis of the facts shows that UNITBV/SDI ensures public and transparent access to an extensive and complete volume of information on DSUD-II, through the dedicated web page [IOSUD/FDI](#); (information on the curriculum, the list of doctoral supervisors and related research areas, as well as procedures and regulations: [Regulations for the organization and conduct of doctoral and postdoctoral studies \(30.09.2024\)](#), [Regulations of the Interdisciplinary Doctoral School](#), [Specific instructions](#), [Methodology regarding the recognition in UNITBV of the doctoral degree and the title of doctor of science or in a professional field, obtained abroad](#), [Methodology regarding the internal evaluation of the Interdisciplinary Doctoral School \(SDI\)](#), [Methodology for annual internal evaluation of doctoral fields](#), [Methodology regarding the evaluation of the activity of doctoral students in order to reallocate doctoral grants financed by the state budget](#)).
- The indicator is: fulfilled.

Indicator I.P.C.6.1.2	The organisational component ensures transparent decision-making processes.
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- ✓ Presentation of the state of facts
- ✓ The IOSUD-UNITBV website provides transparent access to information about: the Council for Doctoral Studies (CSUD), the election of the CSUD director, the election of CSUD members, elections at the level of the SDI, the admission process, etc.
- ✓ UNITBV ensures the transparency of decision-making processes in a normative and functional framework, regulated by the University Charter, the Organization and Functioning Regulation and other regulations approved by the Senate, the Faculty Council and/or IOSUD or the Council of the Doctoral School.
- ✓ All [Senate decisions](#) and [Decisions of the Administrative Board](#), but [CSUD](#) are public and archived on the [UNITBV](#) site.
- ✓ Analysis of the state of facts

- ✓ The analysis of the state of facts confirms that UNITBV/SDI ensures the transparency of decision-making processes through a well-defined normative and functional framework, regulated by the University Charter and the regulations approved at the level of the Senate, the Faculty Council and IOSUD/the Council of the Doctoral School.
- ✓ Transparency is concretely manifested by the publication and archiving on the institution's website of all relevant decisions (Senate, Administrative Board, CSUD), which allows the external verification of decisions taken at different levels of management.
- ✓ At the SDI level, communication is also made on the group e-mail addresses of doctoral supervisors (condstdrd@unitbv.ro) and doctoral students (doctoranzi-stagiu@unitbv.ro).

The indicator is: fulfilled.

Criterion C.8. Participation in external evaluation processes, according to the law

Standard S.C.8.1. Compliance with the external evaluation obligation

The HEI undergoes external quality evaluation as required by the law.

Indicator I.P.C.8.1.1	The organisational component carries out the procedures pertaining to the external quality evaluation process, aiming to organise the evaluated study programme as provided by the law.
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- ✓ Presentation of the state of facts
- ✓ UNITBV organizes the external evaluation of bachelor's, master's and doctoral study programs, periodically, every 5 years, according to the regulations in force, with the approval of the University Senate. The process is carried out according to the planning of activities, a document approved by the Administrative Board. The external evaluation is carried out by the Romanian Agency for Quality Assurance in Higher Education (ARACIS).
- ✓ Analysis of the state of facts
- ✓ The analysis of the state of facts shows that the process of periodic external evaluation of doctoral programs, including DSUD-II, is carried out according to a regulated and institutionally planned framework, with evaluations organized every 5 years by ARACIS, approved by the Senate and planned by the Administrative Board (in the case of DSUD-II, the process is carried out according to the planning of activities carried out by CSUD through CSUD [Decision no. 198. of 19.01.2026](#)).
- ✓ The last external evaluation of DSUD-II took place in 2021, ending with the qualification *Maintaining accreditation* by [Council Decision 147/28.12.2021](#); On the occasion of the mid-term evaluation, the external evaluation committee noted in [the Evaluation Report](#) of 07.08.2024 that all the recommendations made during the previous external evaluation visit were fully implemented.

The indicator is: fulfilled.

IV. SWOT Analysis

✓ The existence of a qualified human resource with high pedagogical and research qualities ✓ Researchers' skills and expertise are continuously updated by maintaining close contact with recent developments and advancements in their areas of specialization. ✓ The institution benefits from an academic and research community that enjoys visibility and recognition both nationally and internationally. ✓ The organization provides appropriate infrastructure that supports research,	INTERNAL FACTORS 	Weaknesses: ✓ A comparatively limited capacity to attract applicants from European and non-European higher education institutions. ✓ Low number of Master graduates joining the PhD studies within UNITBV ✓ Low involvement of the PhD students into research contracts/grants coordinated by the PhD supervisors
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development, and innovation activities under suitable conditions and in accordance with current standards.		
✓ Encouraging research and dissemination of the results obtained through incentive salary policies		
SWOT analysis		
Opportunities: ✓ Inviting renowned experts and prestigious scientific personalities to give lectures, seminars and workshops for doctoral students, thus giving them access to the latest scientific and technological developments. ✓ Capitalise more effectively on the comprehensiveness of UNITBV and interdisciplinarity within DSUD-II. ✓ Attracting international doctoral students from EU third countries, which can partially compensate for the internal demographic decline and which also contributes to strengthening the internationalisation profile of the programme.	 EXTERNAL FACTORS	Threats: ✓ A potential decrease in public funding allocated to research and doctoral education (for example the relatively low number of competition for research grants at National level); ✓ An unfavorable economic environment that may negatively influence investments in research and doctoral programs. ✓ Budgetary instability that can affect the predictability of allocated resources and the strategic planning of doctoral programs. ✓ Legislative instability in the higher education sector, which may impact the regulatory framework governing doctoral studies. ✓ A decline in the number of masters graduates, influenced by demographic decrease, external migration, or the preference for doctoral programs offered in other European countries.

V. Extent to which the standards and performance indicators are fulfilled, and recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
DOMAIN A. Institutional capacity			
1.	I.P.A.1.1.1 For delivering the study programme/domain, the HEI has adequate organisational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.	F	
2.	I.P.A.1.2.1 The opinions of the faculty and department members, of the subsidiary or extension and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.	F	
3.	I.P.A.2.1.1 The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including	F	

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
	for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.		
4.	I.P.A.2.2.1 The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.	F	
5.	I.P.A.3.1.1 The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.	F	
6.	I.P.A.3.1.2 The HEI ensures professional and personal development for its staff.	F	
7.	I.P.A.3.2.1 Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.	F	
8.	I.P.A.4.1.1 The organisational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.	F	Uploading and periodically updating SDI and DSUD-II data in the platform Academics reporting of the results of the research activity.
DOMAIN B. Educational efficacy			
9.	I.P.B.1.1.1 The study programme is developed and structured according to the expected learning outcomes, and organised based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.	F	Periodic updating of the package of documents - curriculum, subject sheets - describing DSUD-II, taking into account the recommendations of the parties involved (graduates, doctoral supervisors, doctoral students)
10.	I.P.B.2.1.2 The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).	F	
11.	I.P.B.3.1.1 The organisational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.	F	
12.	I.P.B.3.1.2 The organisational component ensures opportunities for students to participate in academic mobility programmes organised in person and/or virtually.	F	
13.	I.P.B.3.2.1 The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities.	F	

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
14.	I.P.B.4.1.1 The organisational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organisation of the study programme.	F	
15.	I.P.B.5.1.1 Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.	F	It is recommended to post on the website the Education Plan, and the Discipline Sheets in Romanian, but also in an international language
16.	I.P.B.5.1.2 Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.	F	
17.	I.P.B.7.1.1 The organisational component applies the admission procedures.	F	
18.	I.P.B.7.1.2 Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.	F	
19.	I.P.B.7.2.1 The organisational component applies the regulations concerning the students' professional activity.	F	
20.	I.P.B.8.1.1 The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.	F	
21.	I.P.B.9.1.1 Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.	F	
22.	I.P.B.9.2.1 The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.	F	
DOMAIN C. Quality management			
23.	I.P.C.1.1.1 The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	
24.	I.P.C.1.2.1 The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.	F	Encouraging doctoral students to participate in as many numbers as possible in the evaluation process of the teaching staff involved in the teaching and research activities within the doctoral internships.

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
25.	I.P.C.2.2.2. The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.	F	
26.	I.P.C.3.1.1 The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	
27.	I.P.C.3.1.2 Members of its own community and other stakeholders are involved in the procedure implementation process.	F	
28.	I.P.C.4.1.1 The organisational component analyses the results of the students' biannual evaluation of teachers.	F	
29.	I.P.C.5.1.1 The organisational component systematically collects and analyses data required for the internal quality assurance process.	F	
30.	I.P.C.6.1.1 The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.	F	
31.	I.P.C.6.1.2 The organisational component ensures transparent decision-making processes.	F	
32.	I.P.C.8.1.1 The organisational component carries out the procedures pertaining to the external quality evaluation process, aiming to organise the evaluated study programme as provided by the law.	F	

Summary Table of Performance Indicators – Degree of Fulfillment

Evaluation Domain	Number of Performance Indicators		
	Fulfilled	Partially fulfilled	Unfulfilled
Domain A. Institutional capacity	8		
Domain B. Educational efficacy	14		
Domain C. Quality management	10		
Total	32		

VI. Conclusions

The main conclusions and recommendations that emerged from the periodic evaluation visit of the PhD study program in Industrial Engineering, Interdisciplinary Doctoral School, Transilvania University of Brasov are summarized as follows:

- ✓ The previous evaluation of the doctoral field of Industrial Engineering took place in 2021, finalizing the issuance by the ARACIS Council of the decision no. 147/28.12.2021 by which it was decided to *Maintain the accreditation* of the "Transilvania" University of Brasov in order to organize the doctoral study programs in DSUD-II; on the occasion of the mid-term evaluation, the external evaluation

committee noted in [the Evaluation Report](#) of 07.08.2024 that all the recommendations made during the previous external evaluation visit were fully implemented.

- ✓ Based on the analyzed information - Annex A.1 - Affiliated Managers and Minimum Standards Centralizer, Annex A.6 - CVs and lists of works - holders of PPUA I disciplines, the ARACIS external evaluation panel found that the DSUD-II staff meets the legal requirements for occupying the positions provided in the list of functions.
- ✓ At the time of the on-site visit, the ARACIS panel retained the following information: a number of 218 doctoral supervisors work within SDI, of which 17 (15 tenured and 2 associates) who work in the field of Industrial Engineering; In the case of DSUD-II, the CNATDCU minimum standards in force, necessary and mandatory for obtaining the habilitation certificate, are met by 15 doctoral supervisors (Annex A.1 – Affiliated supervisors and Minimum Standards Centralizer);
- ✓ DSUD-II, organized within SDI, is designed in accordance with the expected learning outcomes and the requirements of the national and European framework of doctoral studies. The programme is organised on the basis of transferable study credits (ECTS) and includes learning, research and assessment activities leading to the achievement of the EQF level 8 university qualification.
- ✓ In DSUD-II, the learning outcomes, presented in the preamble [curriculum](#), are correlated with the purpose of the doctoral studies and the professional/scientific and transversal competences formulated in accordance with the Ministerial Order [No. 3020/2024](#) for the approval of the Framework Regulation on doctoral studies.
- ✓ The admission procedures for DSUD-II are regulated and applied in accordance with the [Methodology for admission to doctoral studies](#), which ensures a transparent and non-discriminatory selection process, based on research skills and the availability of budgeted places (including special places for disadvantaged categories or Romanians from abroad).
- ✓ Within the competition for admission to SDI, there is both a direct competition between candidates who opt for the same field (e.g. DSUD-II) and a simultaneous competition with candidates from all other fields of SDI, since the allocation of places financed from the state budget is made at the level of the entire doctoral school, and not on individual fields.
- ✓ DSUD-II has an extensive research infrastructure made available to doctoral students within the research centers of the Research and Development Institute of the Transylvania University of Braşov - [ICDI](#); DSUD-II octorandes currently use the infrastructure of the research centers [Advanced Technologies and Manufacturing Systems](#), [Advanced Welding Eco-technologies](#), [Advanced Metal, Ceramic and Composite Technologies and Materials MMC](#), [Virtual Industrial Informatics and Robotics](#) and [Renewable Energy Systems and Recycling](#); PhD students, based on requests, can also access the research equipment from the other ICDT research centers.

Following the completion of the maintaining accreditation procedure, the decision of the evaluation panel is the following:

maintaining accreditation (MAC)

VII. Annexes

1. Program of the visit of the ARACIS evaluation team
2. SDI's PhD student management platform
3. 2nd year doctoral student file, SDI, DSUD-II
4. Graduate file, 2025, DSUD-II
5. Report on the collection of feedback from doctoral students for the evaluation of teaching and research activities from 2025