

The Romanian Agency for Quality Assurance in Higher Education



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

Higher Education Institution/Education Provider Organization:	"Ștefan cel Mare" University of Suceava (USV)
Doctoral School:	of Applied Sciences and Engineering
Doctoral Domain:	Mechanical 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>Sorin-Ștefan BIRIȘ</i>	Expert Evaluator	
2.	<i>Marian GRIGORE</i>	International Expert	
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I. Introduction

The evaluators panel composed by Prof.univ.dr.eng . Sorin-Ştefan BIRIŞ (National University of Science and Technology POLITEHNICA Bucharest), Prof.dr.eng . Marian GRIGORE (international expert – Technical University of Moldova, Chişinău, Republic of Moldova) and PhD Student Tamara CIOBANU (Babeş-Bolyai University of Cluj-Napoca), approved by the ARACIS Council through Decision no. 152/H/07.05.2026, has participated in period 08-09.06.2026, at the "Ştefan cel Mare" University of Suceava (USV), for external quality assurance for the procedure for obtaining a maintaining accreditation (MAC) of Doctoral Study Domain **Mechanical Engineering**.

The history of higher education in Suceava, southern Bukovina, began in 1963 with the 3-year Pedagogical Institute, comprising two faculties: philology and mathematics-physics. Based on organization, content, structure, and mission, four stages are identified: 1963–1975, the Pedagogical Institute; 1976–1984, the Institute of Mixed Higher Education (pedagogical and technical); 1984–1989, the Institute of Subengineers; and from 1990 to the present, the "Ştefan cel Mare" University of Suceava (USV). University status was conferred by Romanian Government Decision no. 225 of March 7, 1990, establishing USV as a public institution integrated into the national higher education system. USV is a comprehensive, mixed-structure university offering programs across all fundamental fields—mathematics and natural sciences, engineering, biological and biomedical sciences, social sciences, humanities and arts, and sports science and physical education—organized into 11 faculties. The Doctoral School of Applied Sciences and Engineering (ŞDŞAI) is an organizational-administrative unit of the Organizing Institution of Doctoral Studies (IOSUD) at "Ştefan cel Mare" University of Suceava (USV). IOSUD-USV was established in 2005 by Senate Decision and operates within USV without partnerships that would create a separate legal entity. Since 2012, under Senate Decision no. 68 of 15.05.2012, USV has two Doctoral Schools: (1) Applied Sciences and Engineering; (2) Social and Human Sciences. ŞDŞAI supports doctoral studies in seven accredited fields, including Computers and Information Technology; Geography; Mechanical Engineering; Electrical Engineering; Electronic Engineering, Telecommunications and Information Technologies; and Mechanical Engineering and Forestry. Each field has at least three doctoral supervisors under current legislation, with 34 supervisors across the seven fields. PhD supervisors are authorized through IOSUD-USV institutional procedures and are entitled to supervise within IOSUD-USV. The doctoral field in Mechanical Engineering was established at USV in 1990 to support regional/national industrial growth and consolidate advanced research, training highly qualified specialists for scientific progress, innovation, and competitiveness. Driven by the North-East region's economic profile, numerous industry actors, and the need for applied research and knowledge transfer, it targets sustainable development through topics on product quality, local resource valorization, and process optimization. Prof. E.N. Diaconescu was approved to lead the field in 1990 and reconfirmed in 1993 (MO 4794/16.04.1993); the first thesis was defended on 17.03.1995 under his supervision. Over 35 years, 27 theses were completed. In 2010, three new supervisors gained accreditation; since 2021–2022, another joined. The field aligns with economic needs and USV's strategy, advancing doctoral research, competitive human resources, and USV's role as a pole of excellence in mechanical engineering.

II. Methods used

For the external quality evaluation aimed at maintaining the DSUD-IM accreditation, the ARACIS evaluation committee analyzed the Internal Evaluation Report (IER) and its annexes, uploaded on the ARACIS platform, visited the facilities, and met with the leadership of the organizational component, the team that prepared the IER, employers, graduates, doctoral students, PhD supervisors in the field, research center coordinators, members of quality assurance structures, and staff providing secretarial services at the

IOSUD level, according to the visit schedule. The documents analyzed before and during the on-site visit, uploaded on the ARACIS platform, are the following:

[Internal Evaluation Report \(REI\)](#)

[Annex I.1.1. Decisions on appointment to management staff positions](#)

[Annex A.1.2.1.1. Minutes concluded after the organization of events with economic agents](#)

[Annex A.2.1.1.1. List of FIM laboratories](#)

[Annex A.2.1.1.2. List of spaces for doctoral supervisors](#)

[Annex A.2.1.1.3. Research/excellence centers, research laboratories, their endowment](#)

[Annex A.2.1.1.4. Equipping the educational spaces used in the field of study with the computing technique. Software licenses used in the teaching process](#)

[Annex B.3.1.2. PhD student trips in the last 5 years](#)

[Annex B.7.1.1. Registration situation in the last 5 years at DSUD IM](#)

[Annex B.9.1.1.1. Doctoral theses defended in DSUD IM and validated between 2020 – 2025](#)

[Annex B.9.1.1.2. List of scientific papers developed by doctoral students, conferences, symposia and professional competitions in which they have participated](#)

[Annex B.9.2.1.1. Research activity carried out by each teacher](#)

During the visit, the evaluation committee, following the visit schedule, inspected the following research spaces: University Campus; Research centers and laboratories: Materials Technology Laboratory; Thermal Engineering, Heat Engines and Internal Combustion Engines Laboratory; Machine Elements and Tribology Laboratory; Mechanisms, System Dynamics, Special Mechanical Transmissions and Photoelasticity Laboratory; Fundamentals of Vehicle Engineering and Automotive Transmissions Laboratory; Materials Science and Engineering, Biomaterials Laboratory; Hydropneumatic and Automated Actuation Systems Laboratory; Automotive Mechatronics and Vehicle Diagnostics Laboratory; Advanced Multifunctional Materials Laboratory; Hybrid and Hydrogen Vehicle Architecture Laboratory; Tribology and Contact Mechanics Research Laboratory; CNC Machine Technologies Laboratory; Reverse Engineering, Process Control and Coordinate Metrology Laboratory; Robotics and Flexible Systems Laboratory; Contact Mechanics and Surface Investigations Laboratory; Additive Manufacturing Technologies Laboratory

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

USV operates as a higher education institution with defined [organizational and management structures](#), evidenced by organizational charts for the academic, management, and administrative systems, and the Senate. Its activities are governed by periodically reviewed methodologies, regulations, and procedures: [Senate Rules](#), [Management Board Rules](#), [University Regulations](#), [Framework Regulation](#)

for study programs, [Master's Regulation](#), [Doctoral Regulation](#), [Curriculum Procedure](#), [Internal Evaluation Procedure](#), [Council for Doctoral Studies Regulation](#), and [Doctoral School Regulation](#). These are updated to match current legislation and applied to ensure an environment supporting educational, scientific, and managerial policies. Ongoing compliance monitoring will optimize teaching, research, and administration, preparing students for a dynamic labor market.

✓ **Analysis of the state of facts**

These documents are periodically updated to align with the current legislative framework and the realities of the education sector. They are applied throughout the activities they govern to ensure a supportive environment for implementing educational, scientific, and managerial policies.

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**

The cognitive and professional relevance of the Mechanical Engineering doctoral program (DSUD IM) is shaped by the field's rapid knowledge and technology advances and by labor market demands and qualifications. To design appropriate training, labor market requirements for doctoral graduates are identified through input from employers, doctoral students and graduates, and the doctoral school and its council. Periodic events and consultations with industry are held, with minutes recorded capturing partners' proposals and views; to ensure efficiency and transparency, these proposals are consolidated centrally.

✓ **Analysis of the state of facts**

DSUD IM maintains a systematic commitment to actively engaging all stakeholders in the educational process. Student feedback on faculty and support staff is collected periodically and analyzed to improve teaching and administrative services. Each teacher offers weekly consultation hours, facilitating communication and clarifying uncertainties. Students help design and/or revise procedures. After analysis, with additions from public debate, documents are submitted to the USV Senate for approval and then posted on the Quality website.

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**

The University's assets effectively support its mission and objectives. DSUD IM has dedicated spaces for education, offices for doctoral supervisors, laboratories with appropriate equipment, and areas for administration. The teaching and research facilities align with the current state of technical, practical,

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

and scientific development and are comparable to those of European universities and international best practices; most equipment has been acquired in recent years. Among the existing [research laboratories](#), we mention: Laboratory for advanced research on the characterization of metallic materials and non-metallic; Laboratory for research on magneto-rheological finishing of the materials used in the Optics, Electronics and Ceramic and Composite Materials Industry; Laboratory for Research on Advanced Robot Processing Technologies and flexible systems; Research Laboratory on High-Performance Manufacturing and Management Technologies Integrated; Tribology and Contact Mechanics Laboratory; Micro and Nanochannel Heat Transfer Laboratory; Modeling, Simulation and Optimization Laboratory. The [University Library](#) plays an important role in supporting DSUD IM's teaching and research, with doctoral students having access to its resources. The Library has five reading rooms, an internet room, and a home-loan room. Students and staff access major e-resources—Elsevier ScienceDirect Freedom, SpringerLink, Wiley, Nature, OVID, IEEE, CAB and De Gruyter ebooks, plus SCOPUS, Web of Knowledge, and CABI FSD—via the ANELIS Plus project and USV co-financing. Academic management promotes 24/7 use of online books, journals, tutorials, and simulators. Over 400 student-accessible computers on the university intranet provide broadband across teaching labs and disciplines, and student dormitories are connected to broadband and the intranet via a fiber-optic backbone. DSUD IM has also access to the [Vatra Dornei Continuing Education Center](#).

✓ [Analysis of the state of facts](#)

USV provides didactic, applied, and laboratory spaces equipped for all disciplines in the evaluated doctoral field. Within DSUD IM, infrastructure is managed efficiently and responsibly, emphasizing sustainable use of spaces and equipment. Facilities are dimensioned to suit activity specifics and comply with current technical, safety, and health-hygiene standards. The USV Library supplies the book collection and subscriptions to journals and databases.

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](#)

Educational, research, and administrative spaces, with their facilities, are optimally used and maintained by dedicated staff. In the Mechanical Engineering doctoral field, an auxiliary professor within the faculty, competent in the area, oversees the monitoring and maintenance of heritage assets. Both real estate and movable assets are used responsibly and continuously maintained, ensuring optimal conditions for teaching and research.

✓ [Analysis of the state of facts](#)

Analysis of the material base's use and administration shows that immovable and movable assets are properly managed and maintained, with designated structures and staff for monitoring and upkeep. This ensures optimal conditions for teaching, research, and administrative activities.

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
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	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**

The [Doctoral School of Applied Sciences and Engineering](#) (ȘDȘAI) allocates tenured faculty time according to the number of doctoral students in each field. As organizer of the Mechanical Engineering doctoral field (DSUD IM), ȘDȘAI has staffed the Education Plan subjects with competent [teachers](#). Given the field's multidisciplinary topics, curricula include courses led by USV doctoral supervisors. DSUD IM instructors are university graduates with studies in the evaluated field and hold a PhD/habilitation in the field or related areas. Faculty CVs and publication lists are available on the [Doctorat website](#). DSUD IM's doctoral management is carried out by three faculty members, two of whom are over 65. All doctoral supervisors in the mechanical engineering field meet the minimum standards according to O.M. 6129/20.12.2016.

✓ **Analysis of the state of facts**

The current faculty composition balances expertise and professional dynamism, ensuring both academic stability and innovation capacity. DSUD IM continually renews and augments its teaching staff with academics of recognized scholarly and professional value, diversifying available skills and increasing the IM field's scientific visibility. However, it is noted that two of the three doctoral supervisors are over 65 years old.

✓ **Recommendations**

It is recommended to intensify efforts to attract new doctoral supervisors in the field of mechanical engineering and to encourage valuable tenured faculty to qualify to become doctoral supervisors in the field of mechanical engineering.

✓ **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**

USV consistently supports the professional and personal development of doctoral coordinators through continuing education, research, and teaching innovation. DSUD IM faculty have actively joined Institutional Development Fund (FDI) projects to modernize education, digitize resources, and stimulate applied mechanical engineering research. The university also ran training and upskilling under the [COACH project](#), offering practical preparation in modern university teaching, digital technologies, and transversal skills. Faculty participation underscores USV's commitment to continuous staff development and high teaching quality.

✓ **Analysis of the state of facts**

Collaboration with diverse research institutions and partner universities creates opportunities for faculty career development. Faculty participation in FDI projects and COACH activities demonstrates the institution's commitment to continuous staff training and to maintaining high teaching quality.

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 teaching staff who teach in DSUD IM were recruited in accordance with legal provisions and USV regulations: [the Regulation on Filling Vacant Teaching Positions](#), [the Regulation on Filling Vacant or Temporarily Vacant Fixed-Term Teaching and Research Posts](#), and [the Regulation on the Organisation and Conduct of the Habilitation Certification Process](#), meeting all legal requirements. IOSUD-USV organizes competitions for permanent teaching positions according to the staffing plan, enabling the

tenure of new faculty. Since the last evaluation, within ȘDȘAI, a [full professor position](#) has been opened for competition.

✓ **Analysis of the state of facts**

At DSUD IM, recruitment procedures comply with the legal framework, ensuring a transparent, standardized process for filling teaching and research positions, based on nationally established criteria.

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**

The Communications and Information Technologies Service (SCTI) configures, administers, and maintains the university Internet/Intranet, ensuring optimal traffic and secure data transfers, under [regulation](#). Its [activities and reports](#) are available. The intranet, including Wi-Fi, is free for all students, and the service issues periodic system operation reports. Course and application materials are delivered via Google Classroom and Google Forms. ȘDȘAI maintains an up-to-date [webpage](#) for PhD students, faculty, and prospective candidates. Through USV's digitization projects, a new platform is planned to improve collection and organization of student activity. Each teacher's doctoral [teaching and coordination timetable](#) is online. USV has secured digitization projects—[USV DIGITAL – Digitized University, Students Connected to Emerging Professions, Sustainable Future](#) (over 22 million lei) and [Pedagogy-Education-Digitalization](#) (over 14 million lei).

✓ **Analysis of the state of facts**

Through the digital solutions outlined above, DSUD IM significantly enhances the quality of its education and research. Plans include strengthening the digital skills of faculty, doctoral students, and administrative staff, as well as integrating new interactive educational tools.

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**

* 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.

The DSUD IM [curriculum](#) complies with current [regulations](#) and ARACIS criteria to train specialists for labor market demands. It is built on: (1) the doctoral school's self-assessment (resources, mission, objectives); (2) compatibility with national/EU doctoral schools; (3) adaptation to the field's evolving activities. In semester 1, year 1, 30 ECTS are allocated to compulsory and optional courses per ECTS requirements. Courses follow a logical sequence, targeting learning outcomes and clearly defined general/specialized competences aligned with doctoral standards and comparable programs. [Discipline sheets](#)—drafted by the course holder and approved by the Field Manager, Doctoral School Director, and CSUD Director—cover program/discipline data, hours and workload, professional/transversal skills, learning outcomes, objectives, content, bibliography, stakeholder alignment, and assessment. They are [available to students](#); the [doctoral questionnaire](#) includes items on their awareness, usefulness, and content. Organizational information is provided via the [Student Guide](#) and the [SDSAI website](#).

✓ [Analysis of the state of facts](#)

DSUD IM is structured around expected learning outcomes and equips graduates with polyvalent competences. The doctoral curriculum includes Ethics and Academic Integrity as a compulsory school-wide discipline. Going forward, curricula will be continuously updated by integrating feedback from doctoral students and employers and by strengthening research components and experimental data processing, enhancing the field's relevance and the applicability of acquired skills.

[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](#)

The learning outcomes are aligned with the specific competencies of each subject in [the advanced university training program curriculum for DSUD IM](#).

✓ [Analysis of the state of facts](#)

The DSUD IM content and learning outcomes are designed by aligning curricula with targeted occupations, preparing specialists in accordance with Level 8 of the National Qualifications Framework and labor market requirements. To ensure full alignment between learning outcomes and occupational skills, the curriculum will be continuously harmonized, incorporating feedback from doctoral students, faculty, graduates, and employers.

[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](#)

The [Head of Doctoral Studies](#) monitors strategy implementation to ensure effective, student-centered learning, supported by supervisors who advise students during teaching/research. CSUD develops evaluation methodologies that yield recommendations for updating teaching and research.

Coordinators use web resources and electronic materials via the university's Google Classroom platform, maintain public professional emails for rapid communication, and offer [consultation timetables](#). The university also provides Microsoft 365/Teams. The DSUD IM curriculum includes [optional subjects](#) to tailor professional and transversal skills. Each subject's evaluation methods are detailed in its [sheet](#). Within one to two years of the ARACIS decision, the field lead submits an interim report to ARACIS detailing implementation of the External Evaluation Report's recommendations.

✓ **Analysis of the state of facts**

DSUD IM integrates modern, adaptable teaching and assessment methods with research activities to support interdisciplinary training. It aims to continually update course content in line with advances in the specialization and the use of smart technologies. DSUD IM will also develop a digitized academic management system to streamline students' access to information.

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**

ŞDŞAI collaborates with European universities through ERASMUS+ and the NEOLAiA consortium, strengthening an international educational network via [extensive mobility programs for students and staff](#). For PhD students, these partnerships offer study and research in diverse academic settings, exposure to new teaching methods, and deeper intercultural understanding. By promoting international exchanges, ŞDŞAI aims to enhance learning and teaching, foster intercultural dialogue, build sustainable partnerships with prestigious universities, and create an educational environment that prepares doctoral students and faculty for a globalized professional context.

✓ **Analysis of the state of facts**

By promoting these international exchanges, DSUD IM aims to strengthen intercultural dialogue, develop lasting partnerships with prestigious universities, and create an educational environment that prepares doctoral students and faculty for the challenges of a globalized professional context. It will expand international partnerships to maximize mobility opportunities for doctoral students and develop hybrid (physical and virtual) mobility programs to broaden access.

✓ **Recommendations**

Encouraging doctoral students in the field of mechanical engineering to participate in international mobilities.

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**

USV—and, by extension, IOSUD-USV and ŞDŞAI—ensures fair opportunities for doctoral students through an integrated approach to diverse learning styles and individual abilities. Within ŞDŞAI's DSUD IM, varied teaching methods are used—experiential and active learning, case studies, and interactive activities—while guaranteeing equal access to modern resources, including online platforms. Inclusion is supported through concrete policies and measures such as [support for PhD students with special needs](#), [scholarships for social cases](#), and [advisory services](#). Through ongoing dialogue with doctoral students, periodic meetings, and dedicated projects, the institution aims to optimize each student's academic experience according to individual potential and aspirations.

✓ **Analysis of the state of facts**

DSUD IM provides an impartial, inclusive educational framework, with a curriculum continuously adapted to students' needs and personalized skills development. In the future, personalized support will be strengthened through academic and vocational counseling services and the increasingly active involvement of steering committee members.

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

The University Library plays a key role in supporting DSUD IM's education and research. It offers five reading rooms, an internet room, and a [home-loan room](#) with [convenient hours](#). Holdings include 245,817 volumes, 44,842 periodical titles, 12,900+ rare books, 550+ CD books, and 500+ maps, AV materials, and databases, growing by 2,300+ new titles annually over the last five years. For DSUD IM doctoral students, there is a specialized collection aligned with the curriculum and subscriptions to relevant periodicals. Ample Romanian and foreign journals are available in print and [online](#) (via ANELIS+), including Elsevier ScienceDirect Freedom, SpringerLink, Wiley, Nature, OVID, IEEE, CAB eBooks, De Gruyter, and abstracting databases such as SCOPUS, Web of Knowledge, and CABI FSD. Faculty have produced teaching manuals (print/electronic) accessible via Google Classroom, updated continuously to reflect current literature. The University has also optimized access to educational spaces (ramps, elevators) to ensure [accessibility for people with disabilities](#).

✓ Analysis of the state of facts

In-depth documentation and high-quality research are encouraged and supported within DSUD IM through services such as the USV Library, subscriptions to field-specific publications and periodicals, and access to international scientific databases, complemented by the work of doctoral guidance committees. The Faculty runs programs to motivate high-performing students (scholarships, awards) and recovery programs for those with learning difficulties (remedial courses, tutoring). Future directions include optimizing and promoting digital platforms to improve student access to information and services, and enhancing visibility and effectiveness through coordinated guidance by committee members to better support students in managing their educational paths. Equitable access to resources for students with special needs will also continue to be ensured.

✓ Aspects that constitute best practice examples

The University supports doctoral students' scientific publishing by covering 8000 lei for a Q1 article and 6000 lei for a Q2 article, pays participation fees for national and international conferences, and covers the purchase of consumables necessary for research activities.

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**

Learning outcomes are a [curriculum component](#) reflecting instructors' expectations for each DSUD IM subject regarding doctoral students' activity and preparation. They aim to develop skills for professions in the evaluated field, aligned with current labor market needs. Integrated into subject sheets, they are correlated with each subject's objectives and evaluation criteria, formulated clearly and measurably, and aligned with overall curriculum goals. Outcomes are communicated at semester start to clarify expected competencies and assessment. Subject sheets follow a unified format; faculty receive training to write/update outcomes. Outcomes align with teaching and assessment methods, and their quality is regularly monitored by the doctoral school council.

✓ **Analysis of the state of facts**

The learning outcomes are aligned with the professional and transversal competencies for DSUD IM, fully consistent with the curriculum's coherent structure and the subject sheets. DSUD IM provides diverse opportunities for professional insertion in research and education. At DSUD IM, outcomes are tailored to the field's specifics and current professional requirements. Alongside ongoing monitoring of the alignment between targeted competencies and learning outcomes, continuous student support is planned to ensure effective completion of the doctoral program.

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**

Examination and grading of doctoral students follow the [university's regulations](#). Exams are [scheduled](#) by doctoral students in collaboration with the teacher. Learning outcomes are assessed through evaluations conducted during the semester and in the exam session. Both the learning outcomes and the documents governing the educational and examination processes are regularly updated to meet internal requirements and national standards.

✓ **Analysis of the state of facts**

Evaluation of learning outcomes in DSUD IM is conducted continuously: during exam sessions, through presentations of scientific research reports, and by meeting the thesis defense conditions set in IOSUD's internal regulations and relevant legislation. Going forward, the program will strengthen the assessment system by diversifying examination methods, integrating formative assessment, and using digital tools to ensure a clear correlation between targeted competencies and assessment tasks.

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.
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✓ **Presentation of the state of facts**

Admission to DSUD IM is conducted in accordance with the [Regulation on the organization and conduct of admission exams](#), approved by the Council of Doctoral Studies and the USV Senate, and based on the annually issued Framework Methodology of the relevant ministry. It is proposed that the maximum number of doctoral students enrolled starting in the 2026–2027 academic year be 7 in total. In setting this maximum, the [allocation of admission places by category](#) and enrollment figures from the past five years in Mechanical Engineering were considered.

✓ **Analysis of the state of facts**

IOSUD-USV's admission policy, including that specific to DSUD IM, aligns with the national framework methodology and USV regulations, and is clear, predictable, transparent, and publicly communicated in a timely manner on the faculty/university website and through the media. DSUD IM aims to enhance the field's attractiveness by strengthening partnerships with pre-university institutions and improving promotion of the doctoral program among master's graduates.

✓ **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 on the admission competition and its uniform application at the level of the ȘDȘAI.

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 establishment of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.
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✓ **Presentation of the state of facts**

The [admission regulations](#) and internal methodology include provisions upholding equity and equal opportunity. Distinct admission places are allocated for candidates from socially and educationally at-risk backgrounds.

✓ **Analysis of the state of facts**

By implementing clear support measures for candidates in special situations, IOSUD-USV and DSUD IM aim to promote equity and equal access to higher education. A future priority is continued support for candidates with financial or social vulnerabilities, complemented by extensive information campaigns to increase the visibility of support measures for vulnerable groups.

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**

To facilitate and regulate doctoral students' professional activities, [the Framework Regulation on the Professional Activity of Students](#) was developed. It defines rights and obligations, supervision and evaluation procedures, workload and scheduling norms, and ethical and quality-assurance requirements, ensuring transparency and consistency across programs.

✓ **Analysis of the state of facts**

Each doctoral student enrolled in the program signs a university study contract with USV, in accordance with the regulations governing the organization and conduct of study programs and in compliance with applicable legislation. Greater emphasis will be placed on monitoring doctoral students' academic and professional trajectories by expanding digitization at the USV level, enabling efficient management of academic activities and the continuous development of feedback mechanisms through which students can report academic and administrative difficulties, thereby supporting the ongoing improvement of educational processes.

✓ **Aspects that constitute best practice examples**

A clear, coherent regulatory framework for doctoral students' professional activity, combined with periodic monitoring of progress via monthly evaluations and activity reports, active supervisor support and assessment, and thorough communication of students' rights and obligations, constitutes good practice.

The indicator is: fulfilled.

Criterion B.8. Process internationalization

Standard S.B.8.1. Internationalization

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

ȘDȘAI partners with European universities through ERASMUS+, the NEOLAI consortium, and other institutions, strengthening an international educational network. Doctoral and staff exchanges diversify educational experiences and reinforce research and training. For PhD students, these collaborations provide study opportunities in varied academic settings, access to new teaching methods, and deeper intercultural understanding. Faculty benefit from continuous development via teaching, workshops, and international research projects, enhancing educational quality and expertise. Outgoing study mobilities are organized under the [operational procedures Selection of students carrying out mobilities under the Erasmus+ programme](#), and [Organisation and conduct of Erasmus+ mobilities carried out by Erasmus+ outgoing students](#). By promoting international exchanges, ȘDȘAI aims to optimize learning and teaching, strengthen intercultural dialogue, build sustainable partnerships with prestigious universities, and prepare students and staff for a globalized professional context.

✓ Analysis of the state of facts

USV's clear internationalization strategy facilitates academic mobility for both students and faculty. The university participates in international networks and supports mobility for all members of the academic community. Future actions include intensifying the promotion of international mobility among doctoral students and increasing the number of international agreements for doctoral and faculty mobilities, thereby diversifying study and research opportunities.

✓ Recommendations

Intensify international collaboration to increase the number of interinstitutional partnerships for scientific research, international co-tutelle doctorates, and the inclusion of foreign professors in the supervisory teams of DUSD IM doctoral students.

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.
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✓ Presentation of the state of facts

Doctoral theses on program-specific topics are archived electronically by the Doctoral Secretariat, with printed copies in the university library. They exhibit high originality, aligned with the Faculty of Mechanical Engineering, Automotive and Robotics' research directions. DSUD IM strengthens education through research-based learning: PhD students develop theses on current, applicable mechanical engineering topics, deepening knowledge and investigation skills. They participate in USV-organized or partner conferences and are encouraged to attend national and international events, expanding horizons and communication skills. Outputs include scientific publications, conference contributions, and the quality of completed theses. PhD supervisors and doctoral students engage in [research projects at the Faculty of Mechanical Engineering, Automotive and Robotics](#) and [university levels](#). Doctoral research gains national/international visibility through student participation in conferences, symposia, summer schools, competitions, and [mobilities](#), and through supervisors' roles in scientific committees, [academic boards](#), professional associations, doctoral committees, expertise,

and international citations. USV ensures a successful doctoral path via rigorous, transparent selection and annual review of the [admission methodology](#), with all updates publicly posted. Beyond national minima, USV sets higher scientific standards: while Mechanical Engineering requires at least three papers (two as main author; at least two in WoS/SCOPUS/IEEE Xplore—Order no. 3018/2025), USV mandates at least five publications ([Regulation](#)), at least three as first or sole author, emphasizing indexing in elite databases (minimum three WoS/SCOPUS-indexed for technical fields). To promote quality over quantity, USV applies merit equivalence: publications in Q1/Q2 journals or in top venues (e.g., Nature, Science) may count as multiple standard articles, incentivizing high-impact outputs.

✓ [Analysis of the state of facts](#)

Research activity in DSUD IM, reported annually, is supported by a clear, well-organized institutional framework aligned with USV's research strategy. Future actions include increasing the visibility of doctoral research via institutional channels, social media, and dedicated conferences.

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.
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✓ [Presentation of the state of facts](#)

Scientific research is one of the fundamental missions stated in the University Charter. The main directions of fundamental and applied research within DSUD IM are integrated into the strategic plans of IOSUD and the University. DSUD IM's own research plan, highlighting [specific topics](#). Each doctoral supervisor's research activity is reflected in [publications in high-impact journals](#), with their Mechanical Engineering outputs. All PhD supervisors in Mechanical Engineering have conducted intensive research over the past five years, as evidenced by their number of Web of Science publications.

✓ [Analysis of the state of facts](#)

The research and creative activities of DSUD IM faculty and doctoral students are supported and leveraged through a wide range of editorial and scientific initiatives, aligned with USV's research strategy.

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](#)

Education quality assurance is a constant priority for both University management and IOSUD. The institutional QA structure, organized per legal provisions, operates continuously under the [Quality Code](#), [Quality Policy and Authority Statement](#), [Regulations](#), and [Quality Procedures](#). At CSUD level, an annual internal quality report is compiled and included in the [Rector's Report](#), informing strategic and operational decisions. IOSUD has its own quality policy and strategies aligned with the [CEAC-USV operational plan](#), promoting a quality culture and active engagement of faculty, doctoral coordinators, researchers, and students. Within this framework: the IOSUD quality strategy is defined; quality

objectives aligned with the mission are set; the teaching/research activity plan is developed; and the curriculum is analyzed and adapted to labor-market needs and national quality standards.

✓ **Analysis of the state of facts**

USV and IOSUD-USV have implemented and maintain a coherent quality assurance system aligned with European standards. Within USV, organizational structures, policies, strategies, and documented procedures ensure the quality of teaching, learning, research, and student services. The system fosters a quality culture grounded in values, norms, and practices that support the initiation, approval, evaluation, and continuous monitoring of academic and research processes, all oriented toward continuous improvement.

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 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.
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✓ **Presentation of the state of facts**

Members of the academic community and other stakeholders are informed, via email or [online announcements](#), about the implementation of procedures and about public-interest documents under debate, for which modification/updating proposals may be submitted. Internal satisfaction and evaluation questionnaires are periodically applied among stakeholders

✓ **Analysis of the state of fact**

Quality assurance procedures are applied uniformly across all USV structures, engaging both the academic community and external stakeholders. Efforts will focus on increasing the visibility of evaluation results and stimulating stakeholder involvement. It is also planned to raise the participation of employers and graduates in consultation processes regarding the quality of the field of study. During the on-site visit, the ARACIS Evaluation Commission found that stakeholders—scientific supervisors and doctoral students—are generally involved in developing and implementing regulations, procedures, and methodologies via their representatives in the Doctoral School Council. Discussions with doctoral students and supervisors indicate that student feedback is collected periodically to continuously improve teaching quality and the research program/learning outcomes. CEAC members stated that students, through their representatives in the Doctoral School Council, Council for Doctoral Studies, Faculty Council, and University Senate, are involved in developing and implementing procedures related to doctoral activities.

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**

The activity of the University Ethics Commission is regulated by the [University Charter](#) and by the [Regulation on its organization and functioning](#), and it operates independently of any other USV structure or individual, in accordance with the academic organizational chart. The [Committee's annual Report on Ethics and Academic Integrity](#) is published on the university website.

✓ **Analysis of the state of facts**

Quality assurance structures operate in accordance with institutional regulations. At the DSUD IM level, the Domain Manager plays a central role in quality monitoring, supported by the institutional

infrastructure. Efforts will focus on strengthening collaboration between CEAC structures and the person responsible for the field of study.

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**

The initiation, monitoring, and periodic review of curricula and fields of study are regulated by the [Procedure for the Elaboration, Review, and Approval of Curricula](#) and the [Framework Regulation on the Initiation, Approval, Monitoring, and Periodic Evaluation of Curricula](#). These provisions are applied consistently when a new study program is initiated and during authorization and periodic evaluation. In the 2021 periodic evaluation of the Doctoral School of Applied Sciences and Engineering, specifically DSUD IM, the [ARACIS Council Decision](#) of 16.12.2021 issued a verdict of Maintenance of Accreditation.

✓ **Analysis of the state of facts**

The IM doctoral field is organized and monitored in accordance with the institutional regulations and internal procedures of ȘDȘAI, IOSUD, and USV. Within ȘDȘAI, the IM field has a designated field manager. A detailed analysis of the strengths—and especially the vulnerabilities—identified in DSUD IM's functioning will be conducted, with clear corrective measures to be proposed.

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**

USV and CSUD ensure a participatory, transparent implementation of [quality assurance procedures](#), actively involving doctoral students, faculty, administrative staff, employers, and other stakeholders as part of the university's continuous improvement strategy and doctoral skills development.

Academic community contributions: Periodic evaluation of study programs, Tutoring and academic/professional support for PhD students.

Doctoral student contributions: Representation in university governance, CSUD, and the [doctoral school council](#), Evaluation of teachers and courses, Input on curriculum review to align with labor market needs.

Employer and partner engagement (via CSUD): Regular consultations to update curricula, Research internships for doctoral students, Career fairs and workshops connecting PhD students with the labor market.

✓ **Analysis of the state of facts**

The team preparing the internal evaluation report for the IM doctoral field, together with ȘDȘAI members, is directly involved in implementing the procedures. CEAC members stated, during their meeting with the ARACIS evaluation commission, that procedures and regulations undergo public consultation through the Faculty Council, CSUD, and the University Senate, and are ultimately approved by the University Senate. At ȘDȘAI level, periodic consultations are held with representatives of the economic sector and relevant research centers to update research topics.

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	The organisational component analyses the results of the students' biannual evaluation of teachers.
I.P.C.4.1.1	

✓ Presentation of the state of facts

CSUD members manage the evaluation of teaching staff by doctoral students, applying the [Staff Performance Appraisal Regulation](#) and the [Procedure for the Evaluation of Teachers by Students](#). The results are [published on the university website](#) and communicated to professors/doctoral supervisors at semester meetings. At the institutional level, [a regulation governs the performance evaluation of auxiliary and non-teaching staff](#), and the results are publicly available.

✓ Analysis of the state of facts

In USV and ȘDȘAI performance evaluation is conducted periodically through multiple mechanisms—self, peer, student, and managerial assessments—and the resulting feedback informs improvement measures.

From discussions, the evaluators' committee found that ȘDȘAI periodically collects feedback from doctoral students on supervisors' activity and student satisfaction via an internal evaluation questionnaire. Feedback is analyzed within ȘDȘAI, with corrective or improvement measures proposed as appropriate. The ȘDȘAI Doctoral School's annual report is public and includes analysis of data collected through the feedback mechanism ([Rapoarte anuale asupra calității - Comisia pentru Evaluarea și Asigurarea Calității](#)).

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	The organisational component systematically collects and analyses data required for the internal quality assurance process.
I.P.C.5.1.1	

✓ Presentation of the state of facts

USV operates an integrated information system that periodically collects essential management data for Ministry reporting and for assessing the university's evolution via regular indicator-based analyses. The CEAC-USV website is continuously updated and serves to monitor educational and administrative quality, prepare self-assessment reports for study programs, provide quality legislation and policy documentation via institutional platforms/databases. USV uses electronic mailing lists for public debate on academic and quality issues. Proposed or revised curricula are emailed to doctoral coordinators and students in the doctoral school council; key information is also sent to PhD students via allstud@usv.ro to ensure transparent communication. [CEAC-USV](#), [CCOC](#), and the Rectorate continuously collect, process, and analyze data on institutional quality and student life to inform strategic decisions and improve campus conditions. At [CSUD](#) level, [annual quality assessment reports](#) are posted on the [website](#), and ongoing forums/surveys gather perceptions from doctoral students and faculty on education quality, research, and student life, reinforcing a participatory quality culture.

✓ Analysis of the state of facts

The integrated digital system implemented by USV for managing educational, administrative, and research processes significantly supports quality monitoring and improvement. Discussions with university representatives indicated plans to continue modernizing the IT infrastructure by expanding digital platform functionalities to enable in-depth analyses of academic performance and the impact of educational strategies.

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

Essential information on the evaluated doctoral programs—curriculum, course syllabi, qualification competencies, and teaching timetables—is publicly available online on the USV website, CSUD at [Doctorate section](#). Via the institutional site aligned with the CSUD page, USV provides up-to-date public information for current doctoral students and external candidates/beneficiaries, including: IOSUD's organization into two Doctoral Schools: Applied Sciences and Engineering; Socio-Human Sciences; Accredited doctoral fields; Academic year structure and timetables; Services and facilities for doctoral students; Professional development and academic mobility opportunities. CSUD ensures transparency by publishing data on doctoral qualifications and programs electronically (and in print on request), with continuous updating, accuracy, and validation per national regulations and international best practices. CSUD also runs public promotional campaigns for doctoral fields, involving doctoral students and addressing both the student body and the wider community.

✓ Analysis of the state of facts

CSUD and ȘDȘAI ensure transparent access to relevant information on the field of study, facilities, and academic activities through their official websites. From discussions with university representatives, it emerged that the information on the CSUD and ȘDȘAI websites will be periodically updated and standardized.

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

Transparency of decision-making is ensured via the university website, where all decisions of the [Board of Directors](#) and the [USV Senate](#) are published. The IOSUD website offers transparent access to information on IOSUD's executive management; the [Council for Doctoral Studies](#) (CSUD); elections for the CSUD director and CSUD members; elections within the doctoral schools; the admission process; and more.

✓ Analysis of the state of facts

Analysis of institutional communication mechanisms shows that decision-making is conducted transparently through the systematic publication of governing bodies' decisions on the university website. Open access enables the academic community and the public to stay informed, enhancing accountability and trust in decision-making. The university will continue to keep institutional decision information on the website continuously updated and to develop digital tools that provide swift, transparent access for the academic community and interested public.

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

The IOSUD website provides transparent access to information on the Doctoral School of Applied Sciences and Engineering—which includes the Mechanical Engineering doctoral field—its part-time/part-time education, and the [outcome of the 2021 periodic evaluation](#): Maintenance of Accreditation, approved by the ARACIS Council on 16.12.2021.

✓ Analysis of the state of facts

The external evaluation of IOSUD and DSUD IM is organized periodically in accordance with the legal framework and approved by USV's management structures. To strengthen public accountability and increase transparency, efforts will focus on more effectively integrating reporting results into educational strategies to optimize curricula and academic resources.

The indicator is: fulfilled.

IV. SWOT Analysis

Strengths: ✓ The teaching process is student-centered and continuously adapted to students' needs and feedback. ✓ The modern teaching and research infrastructure enables the gradual integration of theory and practice and supports research in the evaluated field. ✓ Opportunities for deepening through scientific activities are provided: student circles, conferences, scholarships, and mobility programs. ✓ DSUD IM's international relations support collaboration in education and research. ✓ Students benefit from scholarships, modern dormitory accommodation, sports and cultural activities, and medical services. ✓ An institutional strategy for developing Mechanical Engineering is in place, reflected in the expansion of teaching spaces and human resources. ✓ The field has high-performance research infrastructures with national and international visibility, accessible to students. ✓ Research activity is stimulated through differentiated salaries, alignment of teaching loads with scientific performance, and financial support for publications and participation in scientific events. ✓ CSUD promotes an institutional culture of quality in training, research, and education. ✓ Active collaborations with institutions and partners in Mechanical Engineering support PhD students' research activities.	INTERNAL FACTORS	Weaknesses: ✓ Salary motivation remains low for certain teaching positions and auxiliary staff, potentially affecting the retention and attraction of highly qualified specialists. ✓ Funding is insufficient for the continuous maintenance and modernization of the material base needed for education and research. ✓ Collaboration with local and national businesses is developing but not fully leveraged, particularly for integrating PhD students into applied research. ✓ The heavy workload on academic staff—overlapping teaching, research, and administrative duties—can affect the efficiency and quality of the educational process.
SWOT analysis		
Opportunities: ✓ A modernized university campus with all necessary facilities for education and research, undergoing continuous expansion	EXTERNAL FACTORS	Threats: ✓ Regional demographic decline, directly reducing the potential pool of candidates for the

and modernization. ✓ Consistent, significant institutional support from university management for developing the Mechanical Engineering field. ✓ Active support from the local community, including partner authorities and institutions. ✓ Well-trained faculty with academic and practical experience, capable of meeting current needs in Mechanical Engineering education. ✓ Ongoing modernization of teaching and research infrastructure, enabling innovative methods and expanded practical training capacity. ✓ Access to external funding sources through research projects, institutional development, and continuous professional training. ✓ High adaptability to labor market dynamics, supported by the teaching staff's mixed and interdisciplinary structure.		assessed field of study. ✓ Decreased interest among master's graduates in pursuing doctoral studies, with a shift toward larger or international universities perceived to offer broader development opportunities. ✓ Insufficient public support for promoting academic values and motivating young people to pursue intellectual careers. ✓ Migration of young faculty to sectors in Romania and abroad that provide more attractive salary packages and promotion prospects. ✓ Difficulties in applying research results, particularly regarding technology transfer and achieving tangible economic impact.
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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 for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.	F	-

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
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 22 rganizational 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	It is recommended to intensify efforts to attract new doctoral supervisors in the field of mechanical engineering and to encourage valuable tenured faculty to qualify to become doctoral supervisors in the field of mechanical engineering.
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 22rganizational 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	-
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	-
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 22 rganizational 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	Encouraging doctoral students in the field of mechanical engineering to participate in international mobilities.
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	-
14.	I.P.B.4.1.1 The 22 rganization 22I component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the	F	-

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
	learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organization of the study programme.		
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	-
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 organizational 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 establishment 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 organizational 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	Intensify international collaboration to increase the number of interinstitutional partnerships for scientific research, international co-tutelle doctorates, and the inclusion of foreign professors in the supervisory teams of DUSD IM doctoral students.
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 capitalized 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	-
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	F	-

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
	any other structure or person in the higher education institution.		
26.	I.P.C.3.1.1 The 24 rganizational 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 24 rganizational 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 24 rganizational 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 24 rganize 24 ional component carries out the procedures pertaining to the external quality evaluation process, aiming to 24 rganize the evaluated study programme as provided by the law.	F	-

Summary Table of Performance Indicators – Degree of Fulfillment

Domain Rating	Number of Performance Indicators		
	Fulfilled	Partially fulfilled	Unfulfilled
Domain A. Institutional capacity	8	0	0
Domain B. Educational efficacy	14	0	0
Domain C. Quality management	10	0	0
Total	32	0	0

VI. Conclusions

The main conclusions and recommendations from the periodic evaluation visit of the Mechanical Engineering doctoral program, Doctoral School of Applied Sciences and Engineering, "Ștefan cel Mare" University of Suceava, are as follows:

- ✓ The ARACIS Council issued Decision 121 / 16.12.2021 stating that for IOSUD USV and the doctoral fields Mechanical Engineering, accreditation is maintained.
- ✓ Based on the analyzed information (CVs, ORCID), the ARACIS external evaluation commission found that DSUD-IM doctoral supervisors meet the legal requirements for the positions in the staffing plan; teaching and research activities are supported by administrative and technical staff, ensuring proper program development.
- ✓ At the on-site visit, 34 doctoral supervisors were active in ȘDȘAI, of whom 3 tenured work in Mechanical Engineering. For DSUD-IM, CNATDCU minimum standards in force for habilitation are 100% met.

- ✓ At the on-site visit, 13 doctoral students were enrolled in DSUD-IM (8 scholarship, 5 non-scholarship).
- ✓ The Mechanical Engineering PhD program (DSUD-IM), within ȘDȘAI, is designed according to expected learning outcomes; it is organized on ECTS and includes learning, research, and assessment activities leading to EQF Level 8 qualification.
- ✓ DSUD-IM has modern research infrastructure and offers research services (<https://usv.ro/academic/csud/doctorat-2/programe-de-pregatire-universitara-avansata/scoala-doctorala-de-stiinte-aplicate-si-ingineresti/>).
- ✓ Research centers/laboratories are appropriately developed and equipped for advanced research and training experts in DSUD-IM.
- ✓ During the visit, recommendations were made to update the curriculum and standardize the formulation of learning outcomes in line with ARACIS standards (developed in 2025) and stakeholder feedback (doctoral students, supervisors).

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

Maintaining accreditation (MAC)

VII. Annexes

The external evaluation procedure consisted of analyzing the Internal Evaluation Report and its annexes, followed by a two-day on-site visit to the university. Laboratories and teaching spaces were visited, the provided documents were reviewed, and meetings were held with representatives of stakeholders involved in the educational process.

The Internal Evaluation Report submitted to ARACIS was supplemented with the following annexes:

1. Visit schedule
2. Minutes of the meetings