

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:	University of Craiova
Doctoral School:	"Academician RADU VOINEA"
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-Ştefan BIRIŞ</i>	Expert Evaluator	
2.	<i>Marian GRIGORE</i>	International Expert	
3.	<i>Sorin FURDUI</i>	PhD Student Evaluator	

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 Sorin FURDUI (University of Oradea), approved by the ARACIS Council through Decision no. 180/H/04.06.2026, has participated in period 13-14.07.2026, at the University of Craiova, for external quality assurance for the procedure for obtaining a maintaining accreditation (MAC) of Doctoral Study Domain **Mechanical Engineering**.

The University of Craiova (UCV) is a state higher education institution established by Law No. 138 of April 25, 1947, with a longstanding tradition in doctoral education. Ten of the university's twelve faculties have accredited at least one doctoral field, totaling [24 currently accredited fields](#). The "[Acad. Radu Voinea](#)" [Doctoral School](#) within the Faculty of Mechanics hosts [two accredited fields](#): Mechanical Engineering and Industrial Engineering. The 24 IOSUD-UCV doctoral fields are served by [169 academic staff](#) who act as doctoral supervisors. Additionally, eleven qualified faculty [members from disciplines not yet accredited](#) (e.g., Music, Communication Sciences, Visual Arts, Administrative Sciences, Marketing) have affiliated with the Doctoral Schools. The Faculty of Mechanics launched its first doctoral program in Mechanical Engineering in 2005 with the "Academician Radu Voinea" Doctoral School, building on earlier efforts since 1990 by founding supervisors. New supervisors expanded research into areas such as dynamics of mechanical systems, biomechanics and medical robotics, bioengineering, numerical modelling and optimization, green technologies and energy efficiency, advanced robotics, and modern materials and manufacturing. Together with doctoral candidates, they have produced 139 defended doctoral theses. Currently, the Doctoral School hosts two accredited fields (Mechanical and Industrial Engineering), with 18 doctoral supervisors, 42 supporting faculty members, and 32 enrolled doctoral students at various stages. The program develops advanced professional, cognitive and research skills, equipping students with mastery of research methods, new techniques and solutions, and adherence to scientific research ethics. The doctoral program in Mechanical Engineering, delivered by the "Acad. Radu Voinea" Doctoral School, operates within an academic and technological environment marked by rapid advances in engineering sciences, growing complexity of mechanical and mechatronic systems, deeper integration of numerical modelling, simulation and optimization, and an urgent demand for specialists able to create, validate and transfer advanced engineering knowledge. Mechanical Engineering is a core engineering discipline essential to modern industry, technical infrastructure, transport systems, energy, robotics, advanced manufacturing and emerging technologies. At the doctoral level, the field extends beyond applying existing knowledge to the development of new theories, models, methods and technological solutions with substantial scientific and economic impact. The program is designed and implemented in full compliance with: Higher Education Law no. 199/2023; OM 3020/2024 – Framework Regulation on doctoral studies; ARACIS Standards for DSUD Assessment (2025); National Qualifications Framework – EQF Level 8; ESCO (v1.2) and ISCO-08 classifications relevant to advanced engineering and research occupations.

The PhD program in Mechanical Engineering [aims](#) to educate highly qualified researchers and engineers who can advance engineering knowledge in mechanics, tackle complex tasks in the design, analysis and optimization of mechanical systems, and deliver innovative technological solutions for industry and society. The program develops advanced fundamental and applied research [skills](#), fostering capabilities in modelling, simulation and experimental validation of mechanical systems, and prepares doctoral candidates to integrate research outcomes into industrial applications, emerging technologies and complex systems. Overall, the program seeks to sustain scientific excellence in mechanical engineering and to meet the growing labor-market demand for high-level specialists. The Mechanical Engineering PhD program is structured around [specific objectives aligned with the EQF8 graduate profile](#) and the sector's scientific and occupational needs. Its academic goals develop doctoral candidates' capacity to pose and solve original problems across areas such as solid mechanics, dynamics, vibrations, tribology, heat transfer, fluid mechanics, materials and structures; to master advanced analytical, numerical and experimental methods;

to link theory with experiment; to publish in international venues; and to uphold research ethics and integrity. Professionally, the program prepares specialists for roles including R&D researcher, design, simulation or materials engineer, and engineering consultants, by building advanced skills in design, structural and dynamic analysis, optimization and validation, and readying graduates for R&D in industry, institutes and academia. In addition, the program fosters applied research, technological innovation and technology transfer, aiming to capitalize on results and support sustainable industry through energy-efficient solutions and advanced materials. The program's vision is to become a reference in advanced engineering research, noted for high-quality training, impactful outputs, international visibility and interdisciplinarity at the interface with industrial engineering, mechatronics, robotics, energy and materials science, aligned with trends in digitalization, numerical simulation and intelligent, sustainable systems. Its mission is to provide a coherent academic framework that develops advanced skills and facilitates graduates' integration into the scientific and professional community via a balanced curriculum, alignment of subjects with learning outcomes, scientific mentoring, and access to research infrastructure and specialized laboratories. [Core courses](#) (experimental research fundamentals, advanced research methodology, modelling and simulation, and ethics) and specialized modules support methodological depth and transfer of research to applications. Graduates obtain advanced research, systems-analysis and project-management competencies, together with transversal skills, critical thinking, autonomy, leadership, scientific communication and integrity, directly corresponding to EQF8 occupations. The field underwent ARACIS external evaluation in 2021 and received accreditation.

II. Methods used

For the external quality evaluation to maintain DSUD-IM accreditation, the ARACIS evaluation committee reviewed the Internal Evaluation Report (IER) and its annexes uploaded to the ARACIS platform, visited the facilities, and met - per the visit schedule - with the organizational leadership, the IER preparation team, employers, graduates, doctoral students, PhD supervisors in the field, research center coordinators, quality assurance members, and IOSUD secretarial staff. The documents analyzed before and during the on-site visit, as uploaded to the ARACIS platform, are the following:

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

[Annex_0](#) - IOSUD_UCv

[Annex_1](#) - Results of the questionnaires for doctoral students. List of doctoral students 2020-2025

[Annex_2](#) - Structure of human resources operating in the field of Mechanical Engineering. Visibility Doctoral supervisors and doctoral students. Awards

[Annex_3](#) - CNATDCU Standards Compliance Verification Sheets, Mechanical Engineering Field

[Annex_4](#) - Professional development of personnel, research contracts

[Annex_5](#) - Financial support for doctoral students and doctoral supervisors

[Annex_6](#) - Research and Scientific Activity of doctoral supervisors (2020-2025).

[Annex_7](#) - Research and Scientific Activity of doctoral students

[Annex_8](#) - ESCO Occupations and Competences, Learner-Centred Learning Strategy Elements

[Annex_9](#) - Stages of completion of doctoral studies

During the site visit, in accordance with the evaluation schedule, the evaluation panel inspected the following research facilities:

- **Mechanical Engineering Research Centre (INCESA)**, including the following laboratories:
 - Mechanics and Bioengineering Laboratory;
 - Civil Engineering Laboratory;
 - Road Vehicles and Transportation Laboratory;
 - Industrial Engineering and Management Laboratory;
 - Materials Science Laboratory;
 - Technological Systems Engineering and Management Laboratory.
- **CAMPUS Research Institute**, including the following laboratories:
 - Microtechnologies and Medical Engineering Laboratory;

- Advanced Engineering in Automotive and Transportation Engineering Laboratory;
- Biomechanics Laboratory;
- Innovative Technologies and Methods for Materials Testing Laboratory.
- **Faculty of Mechanical Engineering**, including the following laboratories:
 - Machine Elements and Structural Integrity Laboratory;
 - Materials Science Laboratory;
 - Modern Road Vehicle Propulsion Systems Laboratory;
 - Intelligent Transportation Systems 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**

[IOSUD-UCV](#) is an academic entity structured into [organizational components](#) (IOSUD → Doctoral Schools → doctoral fields) that administers doctoral programs and functions under [a comprehensive management system](#) (decision-making chain, assigned responsibilities). This system includes [methodologies, regulations and procedures](#) that are periodically or ad hoc reviewed in response to national legislative developments and operates in compliance with the applicable legal framework (Law 199/2023, Methodology GD 962/2024 and related framework regulations). The responsible bodies are the [Council of Doctoral Studies \(CSUD\)](#), the [Doctoral School Council \(CSD\)](#), the [Director of the Doctoral School](#), [Field Managers](#) and the [Doctoral Supervisors](#). The [CSUD Director](#), the [CSD Director](#) and CSD members (faculty and students) are elected by secret ballot. CSUD members (faculty and students) are appointed according to the Council's own methodology. The Director of the "Acad. Radu Voinea" Doctoral School conducts an annual review of the [Doctoral School Regulations](#). The CSD approves proposed revisions in progress, and the CSUD gives final approval to the revised Regulations. The Doctoral School Director submits for CSD approval specific procedures derived from the Doctoral School Regulations or proposes non-periodic revisions of existing procedures to align with legislative changes and the university's quality system evolution. The CSD approves such procedures or their revisions by vote.

✓ **Analysis of the state of facts**

IOSUD-UCV maintains organizational components and a management system fit for conducting doctoral studies, operating under regulations and methodologies that are periodically revised in accordance with applicable law. Core processes at the Doctoral School level—doctoral supervision, doctoral internships, and thesis defenses—are governed by specific instructions that are regularly updated to reflect legal requirements and the university's strategic orientation. Planned adaptations include aligning the structure of IOSUD-UCV's organizational components (CSUD, CSD) and periodically updating the internal regulatory framework (regulations, methodologies, instructions, forms) to remain compliant with legislative changes in doctoral education. University representatives have also indicated an intention to increase transparency and improve access to information by reorganizing the Doctoral School website so that all documents are available in a unified, current, bilingual format (Romanian and English).

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 adoption and revision of [methodologies](#), [regulations](#) and [procedures](#) at IOSUD-UCV and the “Acad. Radu Voinea” Doctoral School pursue three goals: to regulate and clarify implementation of institutional processes, to align them with national legislation, and to meet the needs of internal and external partners. Clear, coherent descriptions of doctoral-school processes are central to this regulatory framework, which is developed in line with the institution’s strategic and quality documents ([Doctoral School Regulations](#)) and with the ARACIS external-assessment methodology and related standards. Stakeholder involvement is integral: internally, faculty and research staff, doctoral supervisors and students, management bodies (CSUD, CSD, Faculty Council) and quality/ethics units; externally, employers and industry partners in Mechanical and Industrial Engineering, doctoral alumni and relevant professional and research organizations.

✓ Analysis of the state of facts

In line with the ESG and ARACIS requirements, the adoption and revision of doctoral regulations and procedures at the “Acad. Radu Voinea” Doctoral School are preceded by formal consultations with faculty and stakeholders. Draft methodologies affecting teaching and research are first examined by the Faculty Council, whose comments are recorded in the minutes and incorporated or explained in documents submitted to the Doctoral School. The CSD then reviews these drafts, with doctoral supervisors and the Field Manager reporting feedback collected from faculty and doctoral students. Documents with cross-school impact are discussed in CSUD, whose recommendations are integrated into the final version presented to the University Senate. These consultation steps are embedded in institutional procedures and aligned with ARACIS standards on stakeholder involvement. Doctoral students participate via evaluation questionnaires and self-assessment forms deployed at IOSUD-UCV level; results are analyzed by the CSD and CSUD to identify needed regulatory changes (for example, clarifying responsibilities, adjusting progress reporting, or optimizing the advanced training plan). Employers, external partners and program alumni also contribute through research projects, collaboration agreements and advisory committees, providing feedback on targeted competences and research relevance. Proposals arising from these collaborations are considered by the CSD and can prompt updates to procedures on topic assignment, applied research internships and the advanced study plan.

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

In line with ESG principles, in 2020 the Faculty of Mechanics opened a dedicated [teaching and research space](#) in Building A to support the “Acad. Radu Voinea” Doctoral School’s curriculum. The room,

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

equipped with computers, printer and furniture (total investment 62,700 lei funded by the Doctoral School and IOSUD), is used for research work, thesis defenses, steering-committee meetings, collaborations with other doctoral schools and scientific events. Research contracts (2020–2025) coordinated or involving doctoral supervisors supplied [additional laboratory](#) equipment for teacher–student research teams. Doctoral students have unrestricted access to the [university library's resources](#) via the campus network; the Library holds roughly 1,000,000 volumes (27,999 special collections), offers over 3,000 periodical titles, and cooperates with more than 85 international and 45 national interlibrary partners. Its [online portal](#) provides database access, program information and interactive services. Administrative support is provided from the [Doctoral School Secretariat](#) and offices (Director's office BA205; Field Manager BA211 in Craiova and A12 in Drobeta-Turnu Severin) and the meeting room BA215 for CSD and committee sessions. Facilities comply with accessibility requirements: ramps, elevators, adapted toilets, clear signage and accessible IT equipment.

✓ **Analysis of the state of facts**

IOSUD-UCV legally holds the necessary premises for delivering doctoral programmes, including in Mechanical Engineering, through ownership, administration or authorized use as established by applicable legal instruments (Senate decisions, land registry extracts, administration/lease contracts). All premises are recorded in the University Heritage Register and are managed in compliance with national legislation and internal regulations, in accordance with Law no. 199/2023 and the ARACIS Methodology.

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**

IOSUD–UCV operates a rigorous institutional system for the upkeep of immovable and movable assets, administered by the [General Administrative Directorate](#) and the [Technical Service](#), in compliance with Law no. 199/2023 and the ARACIS Methodology (GD no. 962/2024). The system encompasses preventive maintenance planned annually, corrective maintenance executed promptly upon user notification, periodic technical inspections (covering electrical installations, ventilation, occupational safety and health), and sanitation procedures carried out by in-house teams or contracted service providers.

✓ **Analysis of the state of facts**

The rooms used by the “Acad. Radu Voinea” Doctoral School are maintained through a regular program of daily cleaning and periodic sanitation, routine checks of lighting, electrical installations and air-conditioning systems, and ongoing repairs and gradual replacement of floors and furniture. IT equipment (projectors, audio systems, Wi-Fi routers, PCs) is monitored by the IT Service, which performs software updates and handles rapid interventions. Laboratory infrastructure is maintained via preventive measures (quarterly equipment checks, periodic calibration, and HSE/PSI inspections), corrective maintenance by laboratory technicians or authorized contractors, replacement of worn parts and annual technical overhauls for complex devices. Between 2021 and 2025, the field acquired advanced equipment (universal mechanical testing systems, nanoindentation devices, Lloyd LD5 testing machine and a Ford Ranger laboratory platform). Renovation and new-facility projects are underway. Student and doctoral living spaces (dormitories, reading rooms, libraries) follow an annual refurbishment program (repainting, sanitation, furniture repairs) alongside periodic sanitary checks and outdoor maintenance. The University enforces OSH and fire-safety requirements through regular training, technical inspections (electrical systems, extinguishers, smoke detectors), displayed safety information and record keeping, ensuring compliance with ventilation, thermal comfort and electrical safety standards.

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

The [human resources of the Mechanical Engineering doctoral field](#) adequately support the provision of advanced training and research activities in accordance with Law no. 199/2023, OM no. 3020/2024 on doctoral university studies and the applicable ARACIS standards. The Doctoral School has enough qualified doctoral supervisors relative to the student body; they fully meet CNATDCU criteria, hold permanent contracts and exhibit a balanced distribution of academic workload. Faculty teaching advanced university studies courses possess the scientific and professional qualifications required by the field and are specialized in the thematic areas of the doctoral program. Course assignments follow the official job list and conform to national legislation, while teachers' competences are evidenced by their research portfolios, academic visibility, profile experience and, where applicable, habilitation certificates. Technical, laboratory and administrative staff are adequate, with technicians and engineers demonstrating competence accrued over at least ten years. The Doctoral School is supported by a dedicated secretary who maintains continuous coordination with the CSUD Secretariat and the Faculty of Mechanics Secretariat to ensure efficient, coherent communication. The faculty further provides OSH/PSI support, maintenance, IT and other administrative personnel, covering the Doctoral School's operational needs. These human resources framework establishes the prerequisites for delivering high-quality, sustainable doctoral training aligned with national and international standards.

✓ Analysis of the state of facts

The Mechanical Engineering doctoral program has sufficient human resources to deliver teaching, research and supervision in line with Law no. 199/2023, OM no. 3020/2024 and ARACIS DSUD standards. Its staffing includes tenured, qualified doctoral supervisors, faculty teaching the advanced university studies, technical and laboratory personnel who operate research infrastructure, and administrative and support staff (secretariat, IT, maintenance, OSH/PSI). Twelve qualified doctoral supervisors cover the field's research areas; all are tenured at the University of Craiova, hold habilitation certificates, and meet CNATDCU standards. Course instructors for advanced training are professors or associate professors with direct, specialized expertise in topics such as robotics, heat and mass transfer and mechanical engineering. Course assignments follow the official job list and each subject is matched to the teacher's expertise and a detailed course sheet specifying content, learning outcomes and assessment methods. Supervisors and faculty are actively engaged in grants and research projects, publish with doctoral candidates, serve on scientific and editorial committees, and participate in continuing education and international programs, activities that sustain the advanced character of doctoral training. IOSUD-UCV and the "Acad. Radu Voinea" Doctoral School also pursue recruitment and development measures (procedures for granting/withdrawing supervisor status, affiliation, research reporting and recruiting new members) to attract and integrate qualified supervisors and to train emerging faculty. Laboratory operations are supported by experienced engineers and certified OSH/PSI staff, plus IT expertise for equipment and software maintenance. The Doctoral School Secretariat manages academic records, platforms and regulatory procedures. Overall, self-evaluation indicates that human resources adequately cover admissions, scientific guidance, advanced study provision, periodic monitoring and dissemination support, with a supervisor-to-student ratio and workload distribution that ensure quality supervision.

✓ 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**

OSUD-UCV promotes and supports the professional and personal development of its teaching, research, technical and administrative staff through a coherent institutional framework. The Operational Plan of the Department for the Training of Teaching Staff (DPPD) implements the strategic objectives, values and action lines set out in the [Strategic Plan 2024–2029](#). It supports teacher development through ERASMUS+ Strategic Partnership projects that deliver international collaborative learning activities to enhance teaching skills, and through national and international research projects that engage members of the Doctoral School. A dedicated budget - the [Fund for the Support of Scientific Research Activity \(SACS\)](#) - finances participation in conferences and related research activities. Institutional incentives include the RESEARCH GAS 2024 internal awards competition, which recognizes prior-year research achievements with monetary prizes and professional development opportunities. Staff also benefit from access to advanced scientific resources, including specialized databases and digital platforms.

✓ **Analysis of the state of facts**

For several years the system has operated on principles now formalized by Law no. 199/2023, the Framework Regulation on Doctoral University Studies (OM 3020/2024) and the ARACIS DSUD 2025 standards. Implementation relies on institutional mechanisms such as the Department of Continuing Education, Distance and Part-Time Education (DECID-FR), which monitors continuing education across the university and promotes complementary and professional conversion training in collaboration with faculties. Procedure P_CCP (Competence, Awareness and Improvement) defines responsibilities and authorities for staff development and for ensuring competent personnel for higher education. University and faculty management consistently support professional development financially (over 130,000 lei in the last five years for conference fees and publications), helping supervisors meet CNATDCU standards. Teaching staff in the advanced studies program access internal courses on university teaching, curriculum design, assessment, digital tools and academic publishing. Participation in scientific events is supported through reimbursement, internal mobility grants and access to research infrastructure. Technical personnel receive training on equipment operation, maintenance and laboratory safety (OSH/PSI), typically linked to new equipment purchases. Administrative staff are trained in institutional platforms (ReGIS, ARACIS reporting) and in relevant legislation and procedures.

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**

Recruitment of teaching, research, technical and administrative staff at IOSUD-UCV follows Law no. 199/2023, the Labor Code, GD no. 962/2024, OM 3020/2024 and national norms. The University applies its [Senate-approved methodology for filling academic and support positions](#), ensuring transparency, equal opportunity and conflict-of-interest safeguards. [Vacancies are publicly](#) advertised ([university site](#), [Ministry platform](#), Official Gazette) with job descriptions, legal requirements, evaluation criteria and application procedures. [Selection panels](#) comprise qualified external and internal experts who sign impartiality declarations; results are published and subject to a 48-hour appeal. Doctoral supervisor appointments follow CNATDCU standards and [internal procedures](#) (habilitation verification, scientific activity review, Doctoral School and CSUD approval, Senate validation). For [academic posts](#), at least three commission members must be external; course assignments respect the official job list and match teacher expertise. Technical staff are recruited through [public competitions](#) with practical/theoretical tests and specialist evaluators; administrative staff are appointed according to the Administrative Code. All methodologies, calls and outcomes are published online and updated regularly.

to reflect legislative changes. The Doctoral School Director is accountable to the Senate for the integrity of recruitment processes.

✓ **Analysis of the state of facts**

The existing procedures ensure a rigorous selection of doctoral supervisors aligned with the specific requirements of Mechanical Engineering. Doctoral candidates benefit from specialized mentorship, integration into national and international research projects, and access to faculty research infrastructure. Supervision is delivered through guidance committees that provide balanced, expert oversight, and recruitment transparency is documented and maintained in accordance with institutional procedures. Recently, three new habilitated members were recruited to the Mechanical Engineering Doctoral School.

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 “Acad. Radu Voinea” Doctoral School within IOSUD-UCV employs a comprehensive suite of [IT tools](#) to manage all administrative and educational processes in line with ARACIS DSUD 2025 standards and GD no. 962/2024. These platforms support [admissions and student administration](#), provide access to [curricula and course descriptors](#), and host the [university's e-learning environment](#) for teaching materials, online courses, assignment management and course communication. They enable submission of coursework, delivery of [online and hybrid teaching](#), and the holding of seminars, meetings and distance activities. Institutional email, collaborative cloud services and Microsoft Office licenses facilitate communication, document sharing and teamwork, while [electronic catalogues](#), digital resources and databases ensure access to research and [learning materials](#).

✓ **Analysis of the state of facts**

The administrative tools ensure full traceability of processes, rapid access to documents, version control and faster processing of doctoral students' requests. PhD admissions are managed via the EvStud platform for publishing methodologies, topics, commissions and schedules, submitting documents, arranging interviews, communicating results and digitally archiving files. Advanced training employs Google Classroom/Meet, Moodle/SharePoint and other collaboration tools for teaching, resource management and student group administration, while faculty use IT resources to prepare materials, evaluate and manage doctoral portfolios. The Mechanical Engineering field relies on specialized software (ANSYS, SolidWorks, MATLAB, LabVIEW, AutoCAD, ALLPLAN), simulation and data-acquisition systems, and scientific databases (WoS, Scopus, ScienceDirect) accessible via VPN and the library. Digital laboratory management (scheduled access, equipment reservations) supports reproducibility, traceability and research quality. Quality assurance is fully digitized: CEAC questionnaires, annual reports, and regulations are submitted and archived online, enabling continuous monitoring, centralized data, decision traceability, reduced bureaucracy and increased efficiency. For transparency and public access, IOSUD-UCV publishes doctoral-school and faculty information online (regulations, procedures, forms, announcements, admissions, programs, research topics and supervisor lists). Operational procedures (forms, opinions, requests, reports, evaluations) are available in digital format and conform to current legislation and IOSUD-UCV methodologies.

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 [Mechanical Engineering doctoral program](#) is constructed around clearly defined [learning outcomes](#) (LO) aligned with the National Qualifications Framework (level 8), Higher Education Law no. 199/2023, the Framework Regulation on Doctoral University Studies (OM 3020/2024) and the ARACIS DSUD 2025 standards. These outcomes target [advanced disciplinary](#) knowledge, high-level research competencies, the ability to design and conduct original research, and skills in critical analysis, evaluation and synthesis. They also emphasize responsible integration into the international scientific community, professional autonomy and adherence to academic integrity. The LOs are embedded across the curriculum, [advanced courses](#), research activities and annual assessments, and are ultimately evidenced through the preparation, analysis and public defense of the doctoral thesis.

✓ Analysis of the state of facts

The curriculum is approved sequentially by the Doctoral School Council, the Council of Doctoral Studies (CSUD) and the UCV Senate. Learning outcomes are explicitly stated in the [Advanced Study Sheets](#) and mapped to ESCO and ISCO-08 requirements for EQF8. The program follows the ECTS system (240 credits); every course has a detailed [sheet](#) specifying workload, teaching methods, expected learning outcomes, theoretical and applied content, assessment criteria and ECTS allocation. The curriculum integrates diverse learning experiences to provide coherent, progressive scientific training that builds the competencies required for a PhD in Mechanical Engineering at EQF8: knowledge generation, innovation capacity, independent research, leadership in research teams, and adherence to ethics and professional integrity.

✓ Recommendations

Ensure the periodic revision and updating of the DSUD-IM documentation package (curriculum and course syllabi) through the systematic incorporation of recommendations and feedback received from relevant stakeholders, including alumni, doctoral supervisors, and 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

* 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 [Mechanical Engineering doctoral program](#) is structured to develop the competencies demanded by relevant EQF Level 8 occupations as defined in the ESCO classification. These roles require advanced capabilities in design, modelling and optimization, applied research, industrial process management and innovation — competencies that are central to the doctoral curriculum in Mechanical Engineering. [Doctoral theses](#) are aligned with both disciplinary and industry needs, ensuring that their learning outcomes map to the competencies specified in ESCO occupational standards and CNATDCU criteria.

✓ [Analysis of the state of facts](#)

The program's expected learning outcomes (LO) are defined in line with National Qualifications Framework Level 8 and ESCO occupational requirements. ESCO competencies are embedded in advanced coursework (e.g., Methodology of Advanced Scientific Research in Engineering, Advanced Modelling Elements, Fundamentals of Experimental Research), practical training in advanced CNC/CAD-CAM, testing and robotics labs, and research activities (individual projects, grant and industry participation, publications and conference presentations). The doctoral thesis must demonstrate the capacity to generate new knowledge. LO-ESCO alignment is reviewed periodically through consultations with faculty and doctoral supervisors, feedback from employers and industry partners, and analysis of graduate employability. CEAC, CSD and CSUD recommendations also inform annual LO and curriculum updates approved by the CSD. This ongoing LO-ESCO linkage ensures the program remains relevant, supports graduate employability and maintains the qualification's conformity with European standards.

[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 “Academician Radu Voinea” Doctoral School implements a student-centered educational model that emphasizes learning and research autonomy, academic responsibility, personalized doctoral pathways and individualized scientific mentoring. Doctoral candidates play an active role in investigating, generating and validating scientific knowledge and are engaged in projects and the wider academic community. The curriculum allows [curricular flexibility](#) and personalization of course packages alongside research-focused activities and formative assessment. All courses and activities prioritize applied research, critical analysis and technological [problem solving](#), employing advanced research methods such as experimental design, simulation, modelling and systems engineering. Supervisors and faculty adopt tailored mentoring strategies - one-to-one guidance, in-depth scientific discussion, critical literature review, collaborative research and practice in scientific communication ([conference presentations](#), article preparation, etc.). Effective implementation of this student-oriented approach requires involvement across organizational units and continuous consultation with doctoral candidates. To that end, periodic supervisor-student meetings are held, CEAC administers digital questionnaires to gather student feedback, and doctoral students may propose supplementary activities (workshops, topics, etc.). Feedback is used to adjust curricula and procedures. The University supports these activities with [digital platforms](#), [databases and IT infrastructure](#), [laboratory facilities](#) accessible to doctoral students (including [INCESA](#)), opportunities for [international mobility](#), and ongoing administrative and academic support — together forming an ecosystem that fosters active participation and research autonomy.

✓ [Analysis of the state of facts](#)

Applying student-centred learning in the Mechanical Engineering PhD programme has promoted autonomous development and advanced research skills among doctoral candidates. Integration into interdisciplinary projects, active participation in seminars and conferences, and ready access to

electronic resources and scientific databases have deepened students' expertise and bolstered the programme's international visibility. Activities and progress are monitored annually through anonymized reports, which support assessment and adjustment of academic support. Conversations with the Doctoral School confirm a continued focus on autonomy and critical thinking, greater engagement in interdisciplinary and academic-industry collaborations, enhanced use of digital resources, and tailored mentoring to secure robust and relevant scientific competence.

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

The "Acad. Radu Voinea" Doctoral School, in partnership with the University of Craiova's International Relations Department, offers doctoral candidates' genuine opportunities for both [physical and virtual academic mobility](#) in line with Law no. 199/2023, the Erasmus+ programme and [institutional regulations](#). The university implements an Academic Internationalization Strategy (2024–2029) and a suite of [internal regulations](#) governing credit transfer, the organization and recognition of Erasmus and non-Erasmus mobility, professional student activity and related mobility procedures ([incoming/outgoing Erasmus and non-Erasmus](#)). Mechanical Engineering doctoral students can access [mobility support](#) from the Doctoral School's funds or [faculty/university research funds](#), enabling frequent participation in conferences and collaborative research; this support has led to numerous defended and subsequently published papers and to international recognition, including awards from professional scientific associations such as IFTOMM.

✓ Analysis of the state of facts

Analysis of the reporting period shows UCV provides an institutional framework for doctoral mobility via Erasmus+ and other international partnerships, and actively pursues co-supervision agreements (e.g., discussions with Prof. Giuseppe Carbone, University of Calabria, and a meeting on 01.10.2025 in Chişinău between CSD delegate Ionel-Dănuţ Savu and Assoc. Prof. Eng. Rodica Siminiuc of the Technical University of Moldova). The university promotes virtual mobility through Erasmus+ Virtual Exchange and project initiatives such as DigiSkills (ERASMUS-EDU-2025-VIRT-EXCH-WB), which, although not funded on first submission, will be revised and resubmitted to offer online courses and cross-border collaboration opportunities. Between 2021–2025, Erasmus+ projects organized multiple dissemination events that included doctoral students. Supervisors and the CSD advise candidates on mobility choices, support applications, ensure ECTS and research recognition, integrate outcomes into individual research plans, provide financial support and monitor progress during mobility. Overall, these measures have deepened research, expanded knowledge and transversal skills (leadership, communication, adaptability), increased scientific visibility and international collaboration, and contributed to higher quality doctoral theses.

✓ 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

The "Acad. Radu Voinea" Doctoral School, within IOSUD – University of Craiova, actively promotes equity, inclusion and equal access to opportunities for all doctoral students, in accordance with Law no. 199/2023, the ARACIS Methodology (GD 962/2024) and ESG (Section 1.3: Student-centred learning, teaching and assessment). Institutional procedures governing student support (Access of

doctoral students to [research infrastructure](#); [Methodology for student awards](#); [Doctoral School Regulations](#), Art. 13(1), Art. 28(5,6,8), Art. 47(3)(e), Art. 48(1)) underpin these commitments. As a result, all doctoral candidates receive equal access to educational and research infrastructure, mobility programs, digital resources, opportunities to participate in conferences and projects, and comprehensive administrative support.

✓ [Analysis of the state of facts](#)

The analysis indicates that for each doctoral candidate, an individual research program is drafted by the supervisor in collaboration with the student (Doctoral School Regulations, Art. 28(1)) and may be adjusted with the academic guidance and ethics committee. The plan is tailored to the student's profile, learning style, pace, research topic and career goals, permitting selection of advanced courses, participation in interdisciplinary activities and flexible research modalities (lab work, simulation, modelling, applied research). Supervisors and the Doctoral School employ diverse teaching and assessment methods - interactive lectures, case studies, project-based and problem-based learning, presentations, written work, continuous evaluation, annual reports and pre-defences - while adapting workload and timelines to individual circumstances. IOSUD-UCV ensures accessibility measures under Law no. 448/2006 (ramps, lifts, adapted toilets), digital accommodations, adapted research arrangements and personalized administrative and financial support to include students with disabilities or special needs. Equity is reinforced through transparent, proportional allocation of resources (scholarships, mobility, conference participation), cross-supervisor involvement of doctoral students in Erasmus+ and research projects, and regulated access to laboratories by agreement between supervisors and students.

[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 "Acad. Radu Voinea" Doctoral School and the Faculty of Mechanics ensure comprehensive access to specialized resources for Mechanical Engineering. Doctoral students use the [Central University Library](#) and [faculty libraries](#) (Craiova, Drobeta-Turnu Severin) with reading rooms, electronic catalogues and full access to scientific databases (Web of Science, Scopus, ScienceDirect, SpringerLink, etc.) and [faculty journals](#). The PhD students have access to [advanced laboratories \(manufacturing, materials, metrology, robotics, simulation, CAD/CAM\)](#), specialized software (ANSYS, MATLAB, SolidWorks, AutoCAD, LabVIEW), and digital platforms (Microsoft Teams, Moodle, Outlook, OneDrive, SharePoint). Academic support includes individual mentoring by supervisors, steering-committee guidance, technical laboratory support, workshops and seminars; [professional services cover career counselling](#), mobility and conference support; psychological and [medical services](#) are also available via the Student Medical Office. IOSUD-UCV provides an inclusive framework compliant with disability legislation through physical (ramps, elevators, adapted toilets) and digital accessibility measures, adapted research arrangements and personalized administrative support. Flexibility in research programs, individualized assistance and adapted assessment methods - specified in the [Doctoral School Regulations](#) - facilitate effective supervisor-student collaboration. CEAC and the Doctoral School collect student feedback via digital questionnaires, consultations and thematic meetings; findings feed into annual improvement plans and institutional strategy.

✓ [Analysis of the state of facts](#)

The Mechanical Engineering PhD field within IOSUD-UCV is supported by strong research infrastructure—well-equipped laboratories and centres across the affiliated faculties and the Research and Development Institute—combined with access to extensive bibliographic resources and international scientific databases. Doctoral candidates are integrated into national and international research projects, benefit from established collaborations with industry and have access to Erasmus+ mobility opportunities. In addition, PhD students receive institutional support services (career counselling e-learning platforms, accommodation) and the university implements measures to ensure an inclusive academic environment.

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

Within the [Mechanical Engineering doctoral program](#), learning outcomes (LO) are established in line with the National Qualifications Framework (EQF Level 8), Law no. 199/2023, the Framework Regulation on doctoral studies (OM 3020/2024), ARACIS DSUD 2025 standards and ESG Standard 1.3 (student-centred learning). LO are specified for each curriculum discipline and cover three dimensions characteristic of doctoral level: advanced disciplinary knowledge, research competencies, and professional and transversal skills. Each course is accompanied by a [detailed course sheet](#) that states objectives, expected LO, syllabus, teaching and assessment methods, required resources, target competence level and ECTS credits. An annex links the course content and LO to ESCO and ISCO-08 occupational requirements, ensuring that course design responds to job market needs. Course content is constructed to enable genuine acquisition of the stated LO. LO are written in accessible language and communicated to doctoral students via course sheets on the EvStud platform, instructor presentations at course start and seminar/laboratory discussions. Faculty use LO both to structure course content and to guide assessment choices, selecting teaching methods that best support the targeted outcomes. This alignment (objectives → content → teaching → assessment) ensures pedagogical coherence and a clear causal connection between occupational demands, learning outcomes and curriculum content.

✓ Analysis of the state of facts

The analysis shows that learning outcomes are clearly defined, relevant to Mechanical Engineering, and accessible to both doctoral students and supervisors. These objectives are explicitly connected to research activities and progress assessments, providing a transparent and predictable framework for doctoral training. However, the report identifies a need to clarify specific indicators for interdisciplinary competencies acquired through collaborative projects and industry partnerships. Consultations with the Doctoral School reveal plans to update and standardize learning-outcome descriptions across all courses, to align them with skills gained via research and interdisciplinary initiatives, and to establish continuous feedback mechanisms between students and supervisors to optimize the progression of scientific training.

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

In the [Advanced Studies program for Mechanical Engineering](#), each [course sheet](#) defines [learning outcomes \(LO\)](#), assessment criteria, teaching methods, target competencies and ECTS credits, and instructors choose aligned assessment methods (exams, practical tests, projects, portfolios,

presentations). Research progress is reviewed biannually via scientific reports of experiments, publications and preliminary results, followed by an oral presentation to the Academic Guidance and Integrity Commission, which evaluates problem formulation, use of advanced methods, scientific communication and research autonomy, and prescribes corrective measures when needed, in accordance with the [regulations of the doctoral school](#). Prior to public defense, theses undergo an internal pre-defense - full presentation, committee appraisal of contributions, originality check and final LO assessment - culminating in recommendations. The formal defense relies on referees' reports, the oral presentation and debate, and verification of final LO achievement (originality, scientific contribution, relevance, methodological rigor and communication), with outcomes recorded in official minutes and the admission/rejection report. Together, exams, projects, annual reviews, pre-defense and public defense form an integrated system where interim assessments monitor LO progress and the thesis defense certifies fulfillment of EQF-8 outcomes. [CEAC](#) annually monitors assessment quality and student feedback is used to improve evaluation methods.

✓ **Analysis of the state of facts**

Continuous assessment monitors doctoral candidates' competence development and research progress, revealing strengths and areas requiring additional support. This integrated evaluation framework preserves a direct link between learning objectives and research activity, thereby fostering advanced competencies and academic autonomy. Going forward, the school will maintain and enhance the continuous and final evaluation system by integrating regular feedback and digital monitoring tools to ensure the attainment of the learning outcomes and discipline-specific competencies in Mechanical Engineering.

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**

Admission to the Mechanical Engineering doctoral program is conducted within a clear institutional and [legal framework](#) that includes Higher Education Law no. 199/2023, OM 3020/2024 (Framework Regulation on doctoral studies), the ARACIS Methodology (GD 962/2024), the [University of Craiova's Senate-approved admission methodology](#), and the [Regulations and procedures of the "Acad. Radu Voinea" Doctoral School](#). All elements of this admission framework are published annually on the [University of Craiova and Doctoral School websites](#), ensuring full transparency.

✓ **Analysis of the state of facts**

The "Acad. Radu Voinea" Doctoral School adheres to its published admission procedures - calendar, file submission and verification, validation of formal conditions, committee formation, examinations, ranking, appeals and enrolment - under CSD, CSUD and Senate oversight. For each session, information on budgeted and fee places, available supervisors, research topics, participation conditions, evaluation criteria, timetable and bibliography is posted online to ensure equal access. Candidate assessment combines dossier review (academic record, publications, projects, experience, motivation), an interview/oral test (research formulation, subject knowledge, innovation potential) and evaluation of the research proposal (originality, relevance, maturity, methodological feasibility). Admission committees, composed of supervisors and field experts with a recording secretary, follow the Code of Ethics; results are published, validated by CSD/CSUD and subject to appeals. Admitted candidates sign a study contract, are assigned a supervisor and register with CSUD; all admission records, minutes and evaluation documents are archived and available to CEAC and oversight bodies.

✓ **Aspects that constitute best practice examples**

The implementation of clear, formalized, and publicly accessible admission procedures, consistent with national and institutional regulations, represents good practice by ensuring transparency in the admission process and the uniform application of admission requirements across the Doctoral School.

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 “Academician Radu Voinea” Doctoral School follows an [admissions model](#) fully aligned with national law and [IOSUD-UCV regulations](#) and with non-discrimination and disability-protection legislation. Admissions are conducted impartially, using [identical criteria](#) for all candidates and documented procedures, with criteria, tests and the [calendar](#) published at least 30 days before registration. The Doctoral School and university provide targeted support for disadvantaged, rural, minority, international and special-needs applicants, including pre-admission counselling, fee exemptions in approved cases, flexible scheduling for distant applicants and personalized administrative assistance. Physical and digital accessibility measures are in place (ramps, elevators, adapted rooms and toilets; accessible IT platforms and high-legibility documents), and admission tests can be adapted (extra time, assistive devices, technical support or interpreters) based on medical or psycho-pedagogical recommendations. These provisions ensure equal opportunity and effective participation for all applicants.

✓ Analysis of the state of facts

The procedures applied in the Mechanical Engineering PhD field ensure a fair and transparent admission process, with clear rules and documented steps from announcement to enrolment. Specific measures are implemented to support candidates from vulnerable groups and those with special educational needs, facilitating their effective participation through adapted documentation, accessibility provisions and targeted assistance. Experience in recent years demonstrates that these mechanisms operate effectively, upholding inclusion and equal access to doctoral studies.

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 “Academician Radu Voinea” Doctoral School governs professional activity through documented procedures, [regulations and methodologies](#), which are provided to doctoral students at enrolment, reiterated by supervisors and the [Academic Guidance and Ethics Committee](#), and posted with open access on the University and Doctoral School websites. The Academic Guidance and Ethics Committee supports supervisors in monitoring internships. Doctoral activity is structured across three strands: advanced coursework (courses, seminars, projects, evaluations and skill development), scientific research (individual research plans, experimental or simulation work, project stages, dissemination via articles and conferences, participation in grants) and [regular monitoring](#) (semesterly and annual progress reporting to the Academic Guidance and Ethics Committee, review by the Steering Committee, decisions recorded in minutes). Non-compliance is managed under the [Doctoral School Regulations](#) and [related procedures](#): sanctions range from warnings and replanning or repeat evaluations to, in severe cases of ethical breaches or failure to meet research obligations, expulsion in accordance with national law.

✓ Analysis of the state of facts

The procedures in place provide a clear and transparent academic pathway for doctoral candidates, facilitating regular evaluation of their activities, formal recognition of prior studies, and the seamless integration of international mobility experiences into their individual research programs.

✓ Aspects that constitute best practice examples

A well-defined regulatory framework for doctoral students' academic and professional activities, complemented by regular monitoring through monthly evaluations and activity reports, ongoing guidance and assessment by doctoral supervisors, and effective communication of students' rights and obligations, constitutes a good practice that supports transparency, accountability, and the consistent achievement of learning and research objectives throughout the doctoral programme.

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

The "Academician Radu Voinea" Doctoral School, working closely with the University of Craiova's International Relations Department, conducts ongoing international cooperation in line with applicable legislation and regulations. These collaborations support mobility for doctoral students, faculty and researchers and foster joint scientific activities. Internationalization efforts are coordinated through the [Institutional Strategy for Academic Internationalization 2024–2029](#) and the [related procedural framework](#).

✓ Analysis of the state of facts

The University maintains extensive international partnerships - Erasmus+ agreements with 290 universities across 27 European countries plus Turkey, and protocols with some 60 institutions on five continents - supporting mobility, joint research, access to specialized infrastructure and co-supervision of doctoral research. These collaborations are governed by the University's mobility regulations and enable Mechanical Engineering doctoral students to benefit from Erasmus+, UEFISCDI and other programs for research internships, equipment use, article preparation, seminars and conference presentations. Between 2021–2025, Erasmus+ projects (ALLIES, DIGIGREEN, LOGMASTER, ANGIE) organized multiple multiplier events that included doctoral participation, and the Doctoral School already hosts co-supervision agreements enabling cross-institutional guidance. Mobility activities and scientific visits are recognized in students' individual research plans and integrated into annual assessments. Academic staff and doctoral candidates engage in international projects, professional associations and conferences (e.g., IFToMM, EUCOMES, ICOME), which enhances research quality, modernizes topics, raises international visibility and strengthens the program's professional relevance. The University's International Relations Office provides coordinated support - information, individual advice, funding channels, administrative assistance, insurance and recognition - while the Doctoral School and Faculty organize international courses, webinars and conferences to further internationalization and research excellence.

✓ 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**

The Advanced Study Program in Mechanical Engineering, delivered by the “Academician Radu Voinea” Doctoral School, is designed to form authentic researchers rather than merely advanced students, tightly linking research-based learning to research outputs (articles, experiments, projects), the attainment of [learning outcomes \(LO\)](#) and acquisition of doctoral-level skills. Research serves as the primary pedagogical method and the main vehicle for achieving LO: doctoral candidates develop advanced analytical, synthetic and interpretative abilities, the capacity to generate new knowledge, autonomy in designing and conducting research, methodological rigor, academic integrity and effective scientific communication.

✓ **Analysis of the state of facts**

Research-based learning strongly underpins the competencies and outcomes targeted by the doctoral program. Participation in conferences and authorship or co-authorship of publications enables doctoral candidates to integrate research results into their learning and to embed themselves within the scientific community. Engagement in research projects, even in limited roles, enhances practical experience and professional training. The Doctoral School promotes close collaboration between students and faculty to incorporate research findings into coursework and to develop research skills that meet international standards.

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**

The outcomes of doctoral activity are evident across several dimensions. Doctoral students and supervisors publish in reputable journals indexed in Web of Science (Q1–Q4), Scopus and national bibliographic indexes, with all publications closely tied to thesis topics and supporting the learning outcome of generating new knowledge. Students regularly present research at international conferences - such as [ICOME](#), [CARE](#), ADEM, MESROB, NACOT and IFTOMM - enhancing their visibility and integration into the research community. Prizes won at international innovation contests further attest to research quality. This body of results underpins specific [learning outcomes](#): originality through knowledge generation; scientific communication via articles and presentations; advanced methodological competence through critical data analysis; international integration via collaborative work; and professional and societal impact through industrial application. All outputs are systematically assessed through periodic student research reports, the pre-defense process and the [final thesis evaluation](#).

✓ **Analysis of the state of facts**

Inquiry-based learning enables PhD candidates to use research outcomes to achieve both program-level goals and thesis-specific objectives. Engagement in projects, conferences and publications develops professional and academic skills, embeds students in the scientific community and raises the visibility of research nationally and internationally. Going forward, emphasis will be placed on strengthening individualized research by promoting participation in competitive projects, publishing in high-impact journals and presenting at international conferences. Enhanced collaboration between students and faculty will be encouraged to align thesis results with program objectives and to boost the field's scientific visibility and impact.

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

IOSUD-UCV maintains an integrated quality management system centered on the [Quality Assurance Code](#), designed to monitor internal quality indicators and inform improvement plans. Implementation and periodic assessment of quality policies and criteria are the responsibility of the [Department of Quality Management](#), which reports to the Vice-Rector for Study Programs and Professional Insertion. The department is led by a Director and operates through the central [Commission for Evaluation and Quality Assurance \(CEAC-UCV\)](#), the [Quality Council](#) and supporting administrative staff. [CEAC-UCV](#), established under Law no. 199/2023 and university statutes, coordinates evaluation and quality-assurance activities institution-wide; its composition includes academic, administrative, employer and student representatives, and it delegates functional CEAC commissions at faculty level. Its work is governed by operating [regulations and documented](#) in monthly minutes, providing [evidence of system application](#). Quality oversight is monitored by the Senate's Committee on Education, Quality Management and Academic Evaluation in line with ARACIS instructions. Parallel ethical governance is ensured by the [University Ethics Commission](#), which applies the [UCV Code of Ethics](#) and related [student guidelines](#); its activities and case outcomes are recorded in [annual reports](#) and [individual case files](#).

✓ Analysis of the state of facts

Consistent application of quality-assurance strategies and procedures drives the continuous improvement of the doctoral program. Systematic feedback mechanisms identify strengths and areas for optimization, while strict adherence to academic ethics and deontology safeguards the integrity of education and research. Active involvement of stakeholders, including employers, ensures the program remains aligned with the practical needs and expectations of the professional and scientific environment.

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

The "Academician Radu Voinea" Doctoral School, together with other doctoral schools within IOSUD-UCV, implements the institution's integrated quality management system and actively contributes to its ongoing enhancement. This framework rests on the [Quality Assurance Code](#), the [UCV Code of Ethics and University Deontology](#) and [the Guide to Ethical Norms for Students](#), as well as on [analytical outputs from CEAC](#), the [Quality Council](#), [CSUD](#) and [CSD](#). External ARACIS evaluation reports (2021 and 2024) further confirm the compliance and effectiveness of the [procedures applied by the "Academician Radu Voinea" Doctoral School](#). The Doctoral School systematically considers input from internal and external stakeholders under [Procedure Treatment of proposals from inside and outside the Doctoral School](#). External stakeholders include employers in industry, research and the public sector (users of graduate skills); partner institutions (universities, research institutes, centers of excellence) for academic collaborations; alumni who provide feedback on training relevance; regulatory and evaluation bodies (ARACIS, CNATDCU, Ministry of Education) ensuring compliance and quality;

the national and international scientific community that validates research; and society and the socio-economic environment, including economic and institutional partners engaged in research, technology transfer and innovation projects.

✓ **Analysis of the state of fact**

Consultation with PhD students, supervisors, and other stakeholders contributes to adapting and streamlining Doctoral School procedures. The feedback collected helps identify areas for optimization and strengthens the quality of education and research in Mechanical Engineering. Stakeholder input has produced tangible improvements: curricula are updated annually (LO aligned with ESCO; last revision Oct 2025, reflected in [course sheets](#)) and new courses on Industry 4.0/5.0 technologies (additive manufacturing, microwave and ultrasonic processing) have been introduced. Doctoral management has been modernized through greater digitization of administrative workflows, use of digital classrooms and improved transparency via comprehensive [website publications](#), alongside new or simplified internal procedures. Research quality has risen through increased doctoral involvement in national and international projects and a growth in ISI publications co-authored with supervisory committees, supported by international collaborations. CEAC evaluations show [higher doctoral satisfaction](#) in [supervision quality](#), resource access, administrative support and international opportunities.

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**

IOSUD-UCV's integrated quality management system implements the [Quality Assurance Code](#), conducts regular internal quality assessments, monitors performance indicators and uses those findings to design improvement plans. The [Department of Quality Management \(DMC\)](#) organizes and oversees periodic evaluation and quality-assurance activities, reporting to the Senate's Committee on Education, Quality Management and Academic Evaluation in line with ARACIS guidance. The central [Commission for Evaluation and Quality Assurance \(CEAC-UCV\)](#) coordinates, develops and supervises implementation of evaluation [policies and procedures](#) across the institution, while the [University Ethics Commission \(CEU\)](#) enforces the [Code of Ethics and University Deontology](#). Together, these bodies operationalize the integrated quality management framework at IOSUD-UCV.

✓ **Analysis of the state of facts**

The University of Craiova (IOSUD-UCV) operates an autonomous University Ethics Commission (CEU), composed of a president, vice-president, three faculty members, two student members and a secretary. The CEU's independence is secured by transparent selection procedures with fixed mandates, protections against hierarchical interference, conflict-of-interest rules, and its direct annual reporting to the Senate rather than to executive management. Its membership and operating regulations were approved by the Senate (meeting no. 6, 28 March 2024), and the Commission develops and applies its own working procedures, also ratified by Senate decisions. The CEU's activity is grounded in institutional ethics and academic-integrity policies, national legislation on plagiarism and conflicts of interest, and internal complaint-analysis procedures.

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 integrated quality management system at the University of Craiova (IOSUD-UCV) implements and consistently applies a formal [procedure for initiating, monitoring and periodically reviewing programs and fields of study](#). Ensuring program quality and relevance relies on continuous, rigorous initiation, monitoring and review processes conducted in accordance with ARACIS requirements and [GEO no. 75/2005](#) on quality assurance in education.

✓ **Analysis of the state of facts**

The DMC coordinates these processes, managing quality assurance at the educational level and advising institutional leadership on strategic quality decisions. At the institutional level, CEAC oversees and coordinates the implementation of quality functions, with responsibilities delegated to the Doctoral School: the Faculty of Mechanics quality managers, the Director of the Doctoral School and the CSD are tasked with executing the initiation, monitoring and periodic review activities. The procedure "Regulation for the initiation, approval, monitoring and periodic evaluation of study programmes" is defined and applied in accordance with Higher Education Law no. 199/2023, GD no. 962/2024, OM 3020/2024 (Framework Regulation for Doctoral Studies), the UCV Strategic and Operational Plans, the "Acad. Radu Voinea" Doctoral School Regulations and the operational procedures of IOSUD, CEAC and the Doctoral School. The application of the system is documented and publicly reported, ensuring transparency and institutional accountability for program quality and relevance.

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**

The "Academician Radu Voinea" Doctoral School applies a participatory procedural system that actively involves doctoral students, supervisors, faculty teaching advanced courses, administrative staff and external stakeholders (industry partners, international collaborators and alumni). This inclusive approach is grounded in Higher Education Law no. 199/2023, GD no. 962/2024 (ARACIS methodology), OM 3020/2024 (Framework Regulation for Doctoral Studies), and is aligned with the [UCV Strategic and Operational Plans](#), the [Doctoral School Regulations](#) and the operational procedures of IOSUD, CEAC and the [Doctoral School](#).

✓ **Analysis of the state of facts**

Involving internal and external stakeholders ensures transparency, helps adapt procedures to doctoral students' real needs and enhances the programme's academic and practical relevance. Regular consultations identify problems and enable procedural adjustments that improve the quality and efficiency of education and research. Going forward, stakeholder participation will be reinforced by digitizing feedback channels, expanding consultations with employers and research partners, and more actively integrating doctoral students into decision-making on procedures and academic progress assessment.

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**

The University of Craiova's integrated quality management system comprises active organizational bodies ([DMC](#), [CEAC](#), [Quality Council](#), [CEU](#)) and a comprehensive regulatory framework ([codes](#), [regulations](#), [methodologies and procedures](#)) aligned with primary and secondary [legislation](#). Applied continuously, this system ensures that processes, actors and outputs meet required quality standards. A key objective is to enhance the activities of teaching, research and administrative staff, and of doctoral students, by improving coherence and transparency, ensuring compliance with quality criteria, enabling objective performance evaluation and driving continuous improvement through instruments such as the Competence-Assessment, Awareness and Improvement [Procedure](#) and the [Department for the Training of Teaching Staff's strategic plan](#).

✓ [Analysis of the state of facts](#)

Analysis of evaluation results shows doctoral students' level of satisfaction with teaching performance and the research support they receive. This objective feedback mechanism highlights strengths and areas for improvement, contributing to sustained quality enhancement. Doctoral School representatives plan to strengthen the process by fully digitizing evaluation forms, producing analytical reports that give personalized faculty feedback, and integrating results into professional development plans. They also propose greater doctoral student participation in evaluations and broadening indicators to cover research activities and doctoral supervision/counseling.

✓ [Recommendations](#)

Encourage doctoral students to actively participate in the evaluation of teaching staff and doctoral supervisors in order to ensure broad and representative feedback.

[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](#)

The ["Academician Radu Voinea" Doctoral School](#) operates a consolidated system for collecting and analyzing quality-assurance data, integrated across several platforms. [Student Records \(EvStud\)](#) holds [doctoral student files](#), [curriculum elements](#), course and application materials, and provides virtual spaces for supervisor–student discussions. Google Classroom supports [class organization](#), supervisor–student communication, document archiving and assignment management. Google Meet, Webex and Zoom are used for procedural and academic communication. CEAC platforms on the university website collect feedback, host quality data and publish [regulatory information](#).

✓ [Analysis of the state of facts](#)

Analysis of collected data enables evaluation of the quality of both the educational process and doctoral students' research activities, highlighting strengths and gaps that require improvement. This evidence-based insight informs decisions to adapt research plans and to provide targeted support so candidates can meet their academic and scientific goals. The School also plans to more actively integrate feedback from doctoral students and supervisors into decision-making and to develop additional indicators to monitor international mobility, publications and participation in research projects.

[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**

In line with Higher Education Law no. 199/2023, GD no. 962/2024 (ARACIS external assessment methodology), Law no. 544/2001 on access to public information, the institutional regulations governing IOSUD-UCV and the “Acad. Radu Voinea” Doctoral School, and ESG Standard 1.8 on public information, the Doctoral School ensures full transparency of the PhD program. Relevant documents and information are systematically published and kept up to date on the [University of Craiova website](#), the [IOSUD-UCV section](#), the [EvStud student-records platform](#) and the [Doctoral School's web pages](#), making all materials publicly accessible and verifiable.

✓ **Analysis of the state of facts**

Transparency of information allows doctoral students, prospective candidates and external stakeholders to promptly access relevant data, supporting informed decision-making and strengthening confidence in the programmer's quality. Continuous publication and regular updating of documents also enhance the field's visibility and attractiveness at national and international levels.

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**

At IOSUD-UCV and within the “Academician Radu Voinea” Doctoral School, decision-making is exercised by a set of institutional bodies: [the University Senate for higher-level decisions](#), [the Council for Doctoral Studies \(CSUD\) of IOSUD-UCV](#), [the Commission for Evaluation and Quality Assurance \(CEAC\)](#), [the Doctoral School Council \(CSD\)](#), [the doctoral supervisors](#) and [the Doctoral School Secretariat](#). The organizational structure and membership of these bodies are published online and updated annually on [the institutional websites](#).

✓ **Analysis of the state of facts**

Documentation and established procedures ensure transparency and accountability in decision-making, providing PhD students and other stakeholders with clear access to the criteria and rationale underpinning institutional decisions. This openness fosters trust in governance and supports consistent application of rules across the doctoral field.

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**

IOSUD-UCV and the “Academician Radu Voinea” Doctoral School have established a comprehensive operational system to manage ARACIS external evaluations, in full compliance with Higher Education Law no. 199/2023, GD no. 962/2024 (ARACIS methodology), Law no. 544/2001 on access to public information, OM no. 3020/2024 (Framework Regulation on doctoral studies), the institutional regulations governing IOSUD-UCV and [the Doctoral School](#), and ESG Standard 1.8 on public information. External evaluation is embedded in the institution's quality-assurance framework and actively engages the academic, administrative and service communities. The University coordinates and supervises all required [procedures](#): preparing the evaluation dossier for each academic unit (doctoral field, Doctoral School, IOSUD-UCV), selecting and liaising with external evaluators, organizing site visits and associated events, and ensuring timely submission of all documents and information requested by accreditation bodies.

✓ **Analysis of the state of facts**

The Mechanical Engineering PhD field maintains a robust organizational culture oriented towards external evaluation, consistently meeting legal deadlines and applying ARACIS procedures at every stage. Its active engagement in the evaluation process enables systematic identification of strengths and areas for improvement, thereby enhancing the quality of both education and research and ensuring that recommendations from previous evaluations are implemented.

The indicator is: fulfilled.

IV. SWOT Analysis

Strengths:		Weaknesses:
✓ IOSUD-UCV is a member of the ACROSS European university alliance, fostering cross-border cooperation in education and research (2025–2028), and participating in the establishment of the Across Graduate School. ✓ Longstanding experience in doctoral education, with over 25 years since establishment and more than 20 years since the first graduations. ✓ The doctoral field defines contemporary research directions with sustained national and international relevance. ✓ The program trains highly qualified specialists demanded by universities, research institutes and R&D departments in industry. ✓ A balanced supervisory body combining experienced senior supervisors and younger academics with growing international visibility. ✓ Doctoral students demonstrate a high level of training and publish research results in WoS-indexed journals. ✓ Clear institutional procedures govern admission, evaluation, quality assurance and academic ethics. ✓ Robust material base: modern laboratories and equipment, library holdings with international databases, and INCESA research infrastructure. ✓ A coherent, mature quality-assurance system for IOSUD-UCV / “Acad. Radu Voinea” Doctoral School, proven through repeated cycles of evaluation, monitoring and improvement. ✓ Demonstrable improvement in research quality: increasing WoS-indexed outputs, stronger experimental and modelling results, and rigorous validation through multi-stage evaluations. ✓ High predictability of the doctoral pathway supported by structured individual research plans, annual evaluations and reduced delays in reporting and completion. ✓ Improved thesis final-evaluation quality, resulting in fewer major revisions, greater methodological coherence and favorable external assessments. ✓ Advanced digitization of administrative and	INTERNAL FACTORS 	✓ The recruitment and accreditation of new doctoral supervisors are constrained by stricter minimum qualification standards than in other engineering fields. ✓ A limited number of doctoral scholarships are allocated by IOSUD, reflecting a low ministry quota relative to the University of Craiova’s needs and capacities. ✓ Initial inconsistencies occurred in procedural application—notably in completing annual reports, interpreting requirements by supervisors, and, at times, in recognition/equivalence of mobilities. ✓ Delays in updating certain internal procedures generate short periods of administrative uncertainty. ✓ The system relies heavily on individual supervisor training as a corrective measure, indicating a need for stronger standardization. ✓ A relatively low number of theses completed during the recent evaluation period restricts the available statistical base for extensive comparative analyses.

academic processes, reducing processing time, enhancing document traceability and improving institutional communication. ✓ High and increasing doctoral-student satisfaction (CEAC surveys), linked to better supervision, transparent procedures and international mobility support. ✓ Data-driven management enabled by systematic collection and longitudinal analysis of quantitative and qualitative performance indicators. ✓ Strengthening collaborations with leading industry partners (e.g., Ford, Popeci) that support doctoral training, laboratory equipment and infrastructure.		
SWOT analysis		
Opportunities: ✓ European policy prioritizes systems engineering (automation and intelligent systems), offering funding opportunities via Horizon Europe, Erasmus+ and similar programs. ✓ Growing openness to industry, especially in robotics, biomechanics, automotive and related sectors, creates collaboration and funding prospects. ✓ Rapid adoption of Open Science practices (open science, open data) enhances visibility, collaboration and research impact. ✓ Opportunity to attract valuable regional human resources (doctoral candidates, researchers) from Oltenia, given limited outward migration. ✓ Potential to recruit international doctoral candidates and researchers through initiatives such as the Across Graduate School. ✓ Strengthening institutional standing by leveraging positive evaluation outcomes to support accreditation and recognition. ✓ Expanding international collaborations using evaluation results as evidence of academic credibility. ✓ Standardizing and fully digitizing procedures, applying lessons from identified non-conformities. ✓ Increasing the doctoral program's attractiveness to high-profile research candidates through clear pathways, transparency and demonstrated results. ✓ Enhancing technology transfer by integrating research outputs into industry, driven by a focus on applicability and professional impact.	EXTERNAL FACTORS	Threats: ✓ Competition from comparable programmes nationally and across Europe. ✓ Declining interest among young people in technical doctoral studies, compounded by rising living costs. ✓ Reduced national research funding, negatively affecting faculty and doctoral students. ✓ Regional and international political instability that may hinder attraction of financial and human research resources. ✓ Weak regional economic development, limiting opportunities for advanced industry–research partnerships supporting doctoral activity. ✓ Rising ARACIS requirements, potentially increasing administrative and academic workload. ✓ Risk of recurrent procedural irregularities if updates are not systematic and synchronized. ✓ Pressure on human resources to sustain high standards of supervision, mentoring and monitoring. ✓ Reliance on a sustained quality culture, requiring long-term institutional commitment.

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	-
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	-
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	Ensure the periodic revision and updating of the DSUD-IM documentation package (curriculum and course syllabi) through the systematic incorporation of recommendations and feedback received from relevant stakeholders,

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
			including alumni, doctoral supervisors, and 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	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 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	-
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 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 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	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

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
			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 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	-
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	Encourage doctoral students to actively participate in the evaluation of teaching staff and doctoral supervisors in order to ensure broad and representative feedback.
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

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 from the periodic evaluation visit of the Mechanical Engineering doctoral program, the “Academician Radu Voinea” Doctoral School, University of Craiova, are as follows:

- ✓ The ARACIS Council issued Decision 95 /25.11.2021 stating that for IOSUD-UCV 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, 13 doctoral supervisors (12 tenured, 1 associate) were active in Mechanical Engineering doctoral fields. For all DSUD-IM doctoral supervisors, CNATDCU minimum standards in force for habilitation are 100% met.
- ✓ At the on-site visit, 26 doctoral students were enrolled in DSUD-IM (6 scholarship, 5 non-scholarship, 15 fee-paying, and 0 international).
- ✓ The Mechanical Engineering PhD program (DSUD-IM), within “Academician Radu Voinea” Doctoral School, 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.
- ✓ Research centers/laboratories are appropriately developed and equipped for advanced research and training experts in DSUD-IM.

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