HOTĂRÂRE

privind validarea rezultatelor procedurilor de evaluare externă a calității educației

Având în vedere prevederile generale şi specifice aferente proceselor sau procedurilor privind:

- **evaluarea externă a calităţii şi validarea rezultatelor cuprinse în Rapoartele de evaluare externă:** art. 223-226, art. 229-230 şi art. 249 alin. (1) lit. f), g) şi h) din Legea nr. 199/2023 a învățământului superior nr. 199/2023, cu modificările şi completările ulterioare, denumită în continuare Legea, precum şi în Metodologia de evaluare externă a calității educației în învățământul superior, aprobată prin Hotărârea Guvernului nr. 962/2024, cu modificările şi completările ulterioare, denumită în continuare Metodologia;

- **autorizarea** de funcţionare provizorie **pentru programele de studii universitare din ciclul I de licenţă:** art. 235 alin. (1) lit. a) şi lit. b) pct. (ii), alin. (2)-(5) şi art. 236 alin. (1)-(2) din Lege;

art. 27, art. 29 şi art. 32-33, coroborate cu art. 59, art. 62 şi art. 63 din Metodologie;

- **autorizarea pentru domeniile de studii universitare din ciclul II de masterat:** art. 235 alin. (1) lit. a) şi lit. b) pct. (iii), alin. (2)-(5) şi art. 236 alin. (1)-(2) din Lege; art. 27-29 şi art. 34-35, coroborate cu art. 59, art. 62 şi art. 63 din Metodologie;

- **autorizarea pentru domeniile de studii universitare din ciclul III de doctorat:** art. 235 alin. (1) lit. b) pct. (iv), alin. (2)-(5) şi art. 236 alin. (1) şi (3) din Lege; art. 27-29 şi art. 37-38, coroborate cu art. 59, art. 62 şi art. 63 din Metodologie;

- **acreditarea pentru programele de studii universitare din ciclul I de licenţă:** art. 239 alin. (1) lit. b) şi alin. (6)-(7), art. 240 alin. (1) din Lege; art. 39-40 şi art. 42, coroborate cu art. 60, art. 62 şi art. 63 din Metodologie;

- **acreditarea pentru domeniile de studii universitare din ciclul II de masterat:** art. 239 alin. (3) şi alin. (6)-(7), art. 240 alin. (1) din Lege; art. 39-40 şi art. 43-44, coroborate cu art. 60, art. 62 şi art. 63 din Metodologie;

- **acreditarea pentru domeniile de studii universitare din ciclul III de doctorat:** art. 239 alin. (4) şi alin. (6)-(7), art. 240 alin. (2) din Lege; art. 39-40 şi art. 46-47, coroborate cu art. 60, art. 62 şi art. 63 din Metodologie;

- **analiza şi validarea în vederea verificării respectării Metodologiei, de către comisiile de experţi evaluatori în cadrul rapoartelor de evaluare externă:** art. 235 alin. (4), pentru autorizare, respectiv art. 239 alin. (6) lit. d), pentru acreditare şi menținerea acreditării, din Lege, precum şi art. 62-63 din Metodologie.

Luând în considerare:

a. Ghidul aplicabil programelor de studii universitare de licență, aprobat prin Hotărârea Consiliului ARACIS nr. 42/06.02.2025, cu modificările şi completările ulterioare;

b. Ghidul aplicabil domeniilor de studii universitare de masterat, aprobat prin Hotărârea Consiliului ARACIS nr. 83/03.04.2025;

c. Ghidul aplicabil domeniilor de studii universitare de doctorat, aprobat prin Hotărârea Consiliului ARACIS nr. 84/03.04.2025;

Întrucât Consiliul ARACIS validează, prin vot deschis şi pe baza verificării respectării Metodologiei, propunerile formulate de către comisiile de experți evaluatori şi poate solicita refacerea Rapoartelor de evaluare externă atunci când constată că Metodologia nu a fost respectată ori respectivele rapoarte nu cuprind suficiente date şi dovezi pentru adoptarea deciziei,

Ținând seama de considerentele Consiliului aferente validării rezultatelor individualizate în procesele verbale de şedință, al căror format a fost aprobat prin Hotărârea Consiliului nr. 170/H/03.07.2025,

În temeiul art. 258 alin. (1) din Lege şi al art. 62 alin. (1) şi (2) din Metodologie, precum şi al art. 7 alin. (1) şi alin. (3) lit. b) şi h), art. 11 alin. (1) şi al art. 23 alin. (5) din Regulamentul de organizare şi funcționare al ARACIS, aprobat prin Hotărârea Consiliului ARACIS nr. 188/H/27.06.2024 şi completat prin Hotărârea nr.116/H/02.04.2026,

Consiliul Agenției Române de Asigurare a Calității în Învățământul Superior
HOTĂRĂŞTE:

Art. 1. (1) Se validează rezultatele procedurilor de evaluare externă a calității educației pentru programele de studii universitare de licență, domeniile de studii universitare de masterat şi de doctorat, precum şi pentru programul universitar de formare psihopedagogică pentru învăţământul preuniversitar, după caz, cuprinse în anexele nr. 1-23 care fac parte integrantă din prezenta hotărâre.

(2) Pentru fiecare dintre programele sau domeniile de studii universitare, anexa corespunzătoare indică, conform art. 230 alin. (2) şi alin.(3) lit. b), c) şi d), art. 231 lit. a) şi b), art. 232 lit. c), d) şi e), art. 235 alin. (1) lit. b), punctele ii-iv, alin. (3)-(5), art. 239 alin. (1) lit. b), alin. (3), (4), (6) lit. a)-d) din Lege, procesul sau procedura de evaluare parcursă, rezultatele din Raportul de evaluare externă care se validează, precum şi considerentele analizei de validitate şi concluzia motivată a Consiliului.

(3) Rezultatele prevăzute la alin. (1) se comunică Ministerului Educației şi Cercetării şi instituțiilor solicitante şi se publică pe site-ul ARACIS.

Art. 2. Analiza de validitate se exercită în limitele art. 235 alin. (4), respectiv ale art. 239 alin. (6) lit. d) din Lege şi ale art. 62 raportat la art. 63 din Metodologie.

Art. 3. Rapoartele de evaluare externă, inclusiv numele experților, se publică integral pe site-ul ARACIS, în condițiile art. 229 alin. (2) din Lege şi ale art. 62 alin. (3) din Metodologie.

Art. 4. Prezenta hotărâre intră în vigoare la data de 22.10.2026.

Art. 5. Prezenta hotărâre va fi dusă la îndeplinire de Direcția Asigurarea Calității şi de Compartimentul Tehnologia Informației.

Prof. univ. dr. ing. Cristian-Vasile DOICIN
Preşedinte

Daniela Cristina GHIȚULICĂ
Director general

Carmen MIRIAN
Director Direcţia Asigurarea Calităţii

Cristina-Vasilica ICOCIU
Director Direcția Juridică, Cooperare, Comunicare şi Formare

Consilier juridic

NR. 318/H/22.10.2026

ANEXA NR. 10
la Hotărârea Consiliului ARACIS nr. 318/H/22.10.2026

Anexa 10.3

DATE DE IDENTIFICARE	
Instituţia de învăţământ superior/organizaţia furnizoare de educaţie	Universitatea Tehnică „Gheorghe Asachi“ din Iaşi
Şcoala(ile) doctorală(e)	Școala Doctorală din cadrul Universității Tehnice „Gheorghe Asachi“ din Iaşi
Domeniul de studii universitare de doctorat (DSUD)	*Inginerie electrică*
Procedura/procesul de evaluare externă a calităţii educaţiei	Menținerea acreditării

DECIZIA

Descrierea pe scurt a procesului de luare a deciziei

Raportul de evaluare externă (REE) a fost analizat în ședința Comisiei permanente de specialitate Științe Inginereşti 2 (CPS_C11) din 25.09.2026, propunerea de decizie fiind consemnată în PV nr. **4820/25.09.2026.** Propunerea de decizie a fost analizată de către Departamentul de evaluare Studii Universitare (DESU), opinia DESU fiind consemnată în PV nr. **5321/ 20.10.2026**

Gradul de îndeplinire a standardelor şi indicatorilor de performanţă şi motivarea deciziei

(se indică cifrele care stau la baza luării deciziei Consiliului ARACIS)

Domeniul	Standarde Î / N	Indicatori de performanţă Î / PÎ / N
A	**Î:** S.A.1.1, S.A.1.2., S.A.2.1., S.A.2.2., S.A.3.1., S.A.3.2., S.A.4.1. N: -	**Î:** I.P.A.1.1.1, I.P.A.1.2.1, I.P.A.2.1.1, I.P.A.2.2.1, I.P.A.3.1.1, I.P.A.3.1.2, I.P.A.3.2.1, I.P.A.4.1.1 PÎ:- N: -
B	**Î:** S.B.1.1., S.B.2.1., S.B.3.1., S.B.3.2., S.B.4.1., S.B.5.1., S.B.7.1., S.B.7.2., S.B.8.1., S.B.9.1., S.B.9.2. N: -	**Î:** I.P.B.1.1.1., I.P.B.2.1.2, I.P.B.3.1.1, I.P.B.3.1.2, I.P.B.3.2.1, I.P.B.4.1.1., I.P.B.5.1.1, I.P.B.5.1.2, I.P.B.7.1.1, I.P.B.7.1.2, I.P.B.7.2.1, I.P.B.8.1.1, I.P.B.9.1.1, I.P.B.9.2.1 PÎ:- N: -
C	**Î:** S.C.1.1, S.C.1.2, S.C.2.2., S.C.3.1, S.C.4.1., S.C.5.1., S.C.6.1., S.C.8.1 N: -	**Î:** I.P.C.1.1.1, I.P.C.1.2.1, I.P.C.2.2.2, I.P.C.3.1.1, I.P.C.3.1.2, I.P.C.4.1.1., I.P.C.5.1.1, I.P.C.6.1.1, I.P.C.6.1.2, I.P.C.8.1.1 PÎ:- N: -

Motivarea deciziei

Consiliul ARACIS în ședința din 22.10.2026 analizează și validează propunerea comisiei de experți în evaluarea externă a calității, constatând că din:

- *32 indicatori: 32 sunt îndepliniți, 0 parțial îndepliniți și 0 neîndepliniți*
- *26 standarde: 26 sunt îndeplinite, 0 neîndeplinite,*

*și, astfel, prin aplicarea art. 63 din Metodologie decide că **standardele sunt ÎNDEPLINITE** și, astfel, prin aplicarea art. 63 din Metodologie decide că **standardele sunt ÎNDEPLINITE.***

Decizia	Menţinerea acreditării

The Romanian Agency for Quality Assurance in Higher Education

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

Higher Education Institution/Education Provider Organization:	Universitatea Tehnică "Gheorghe Asachi" din Iaşi
Doctoral School:	TUIASI Doctoral School
Doctoral Domain:	Electrical Engineering
The objective of the external evaluation:	Maintaining accreditation (MAC)

I. Introduction

The evaluation committee was composed of Prof. Laurentiu Dan Milici, expert evaluator and coordinator of the committee; Prof. Rodrigo Ferrao de Paiva Martins, from the NOVA University of Lisbon, international expert evaluator and student Lavinia Ilie. The committee carried out the external evaluation visit between 01.09 – 02.09.2026 at the Gheorghe Asachi Technical University of Iasi, for the periodic external evaluation of the quality of the doctoral studies in Electrical Engineering, to obtain the maintenance of accreditation (MAC).

The "Gheorghe Asachi" Technical University of Iasi (TUIASI) is an accredited public higher education institution. Following its most recent accreditation process conducted in 2021, the institution was awarded the "HIGH DEGREE OF CONFIDENCE" rating. Since its establishment in 1937, it has operated continuously under the following names: the "Gheorghe Asachi" Polytechnic School and the "Gheorghe Asachi" Polytechnic Institute (1948). The current designation was adopted in 1993, and its present organizational structure is governed by Government Decision No. 1030 of August 21, 2024.
TUIASI assumes the role of an educational, scientific research, and cultural forum. To fulfill its mission, the university assumes the following roles: (i) transmitting knowledge to new generations and providing professional training through bachelor's, master's, doctoral, and postgraduate studies, stimulating thought and creativity, thereby ensuring genuine opportunities in the competitive labor market; concurrently, the university addresses society as a whole, aiming for lifelong education and training in accordance with global advancements in science and technology; (ii) conducting scientific research, development, innovation, and technology transfer activities, as well as capitalizing on and disseminating their results, as inseparable components of the instructional and formative process, in order to contribute to technological, economic, and socio-cultural progress, in the spirit of sustainable development and the transition toward a knowledge-based society; (iii) actively participating in addressing and resolving social, economic, technical, and cultural challenges by cultivating civic responsibility and engaging directly in the evolution of society; (iv) developing, encouraging, and supporting the fundamental values of modern society: freedom of thought, expression, and action, justice, truth, equity, honesty, fairness, dignity, impartiality, integrity, balance, equal opportunities, and honor, alongside fostering a positive attitude toward the profession.
According to the Charter, the "Gheorghe Asachi" Technical University of Iasi "is an advanced research and education university, whose mission is to conduct specific activities regarding the creation, innovative capitalization of knowledge, and its transfer to society in the fundamental fields of Engineering Sciences, Architecture and Urban Planning, as well as in interdisciplinary and complementary domains, within the local community, and at the regional, national, and international levels." There are 27 research centers operating within TUIASI, 14 of which are accredited by CNCS. Out of there 14, 4 are recognized as *centers of excellence*. Coordination is ensured by the *Vice-Rectorate for Scientific Research*. Additionally, nationally funded research and development projects are implemented through the Project Management and Monitoring Directorate.
TUIASI has in its organizational structure the Council for University Doctoral Studies (CSUD), which was established by Rector's Decision no. 2184 of October 09, 2012, and which initially

supervised ten Doctoral Schools that operated at the faculty level: Automatic Control and Computer Science; Civil Engineering and Building Services; Machine Manufacturing and Industrial Management; Electrical Engineering, Energetics and Applied Informatics; Electronics, Telecommunications and Information Technology; Hydrotechnics, Geodesy and Environmental Engineering; Chemical Engineering and Environmental Protection; Mechanical Engineering; Materials Science and Engineering; Textiles, Leather and Industrial Management which became Industrial Design and Business Management.
According to ARACIS Council Decision no. 123/ 16.12.2021, following the periodic external evaluation of the IOSUD within the "Gheorghe Asachi" Technical University of Iasi, the rating granted was the maintenance of accreditation for all 13 doctoral study fields.
The Doctoral School (SD-TUIASI) is the organizational and administrative structure established within the IOSUD that provides the necessary support for conducting doctoral studies in a specific discipline or in a disciplinary or interdisciplinary field.
Composition of the Doctoral School Council:
I. Doctoral School Director prof.univ.dr.ing. GABRIELA LISA
II. Doctoral School Council members:
1. Prof.univ.dr.ing. LEON FLORIN - Facultatea de Automatică și Calculatoare
2. Prof.univ.dr.ing. IOAN DOROFTEI - Facultatea de Mecanică
3. Student doctorand ing. MIHAIL-CRISTIAN HEGHEA - Facultatea de Automatică și Calculatoare

The doctoral field of *Electrical Engineering* is a traditional field within IOSUD-TUIASI, where prestigious personalities of the academic environment have carried out their activity (Dumitru Bărbulescu, Gheorghe Savin, Leopold Sebastian, Ioan Bejan, Alexandru Poeată, Mihai Antoniu, Gheorghe Vasiliu, Nicolae Boțan, and Emil Luca). Over time, the doctoral field of Electrical Engineering has evolved in accordance with the academic, economic, and social context and in compliance with the proposed mission and objectives. Currently, doctoral activity in the field of Electrical Engineering takes place within the Faculty of Electrical Engineering, Energetics and Applied Informatics (IEEIA) of the "Gheorghe Asachi" Technical University of Iași as IOSUD. The legal framework for the functioning of the Electrical Engineering doctoral field was approved in the ARACIS Council Meeting on December 16, 2021, where the results of the periodic evaluations for IOSUD-TUIASI and its related doctoral university study fields, including *Electrical Engineering*, were analyzed. The rating granted was the *Maintenance of Accreditation.*
The training program based on advanced university studies has an advanced training component and a scientific research component. The doctoral field of Electrical Engineering provides doctoral students with an advanced training program based on a curriculum that includes subjects aimed at addressing, in a unified context, issues related to training a researcher capable of conducting high-level research within the framework of the scientific method and capitalizing on research results through projects, publication, and communication—all in accordance with the principles of academic ethics and integrity, research deontology, and intellectual property rights. The curriculum is flexible and periodically updated in accordance with the latest developments specific to the research field and the requirements of each generation of doctoral students.
The research directions addressed within the Electrical Engineering doctoral program are strongly aligned with global trends and priorities, particularly with the European Union's research agenda. This synchronization is supported by the National Strategy for Research, Innovation and Intelligent

Specialization 2022-2027 and by integration into programs such as Horizon Europe: (i) Intelligent electrical systems and the digitalization of production systems; (ii) Power electronics and electric drives; (iii) Electrical machines and electromechanical conversion systems; (iv) Smart and nanostructured materials; (v) Automation and control of industrial processes and robotics; (vi) Electromagnetic compatibility; (vii) Sensors, instrumentation, and IoT networks; (viii) Measurements in ecology and biomedicine; (ix) Brain–machine interaction.
In the last five years, doctoral supervisors in the field of Electrical Engineering have contributed substantially to the publication of a significant number of papers in WoS-indexed journals and conferences. Through research/institutional development grants and contracts obtained through competitions, the doctoral supervisors have contributed to the development of research laboratories that offer doctoral students the best conditions for producing original and internationally relevant doctoral theses.

II. Methods used

To perform the external quality evaluation aimed at maintaining the DSUD-EE accreditation, the ARACIS evaluation panel accomplished analysis of the Internal Evaluation Report uploaded by the institution in Aracis Sharepoint. In order to carry out the external quality assessment in order to maintain DSUD-EE accreditation, the ARACIS evaluation committee considered that no additional information was needed to that already submitted.
The visit took place between September 1-2 according to the attached program.

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.

Within IOSUD-TUIASI, there is one CSUD and a single Doctoral School (SD-TUIASI), which includes 13 doctoral fields, including Electrical Engineering.
Specific regulations and procedures legally and rigorously govern all processes related to doctoral programs:
a) Two regulations govern the doctoral university study activities within the Doctoral School of IOSUD-TUIASI: the Regulation on the Organization and Conduct of Doctoral University Study Activities and the Regulation on the Organization and Functioning of the Doctoral School within the Institution Organizing Doctoral University Studies (IOSUD) – "Gheorghe Asachi" Technical University of Iași. Within IOSUD-

TUIASI, functional leadership structures are in place, elected through democratic and transparent processes in accordance with the following procedures and methodologies.

b) The election procedure for the position of Director of the Doctoral School Council (CSD), as well as the procedure for the student election of the CSD representative and evidence of their implementation (Procedure for electing the Director of the Doctoral School and the members of the Doctoral School Council within the Institution Organizing Doctoral University Studies (IOSUD) – "Gheorghe Asachi" Technical University of Iaşi).

The Doctoral School Council (CSD) has the following structure: the CSD Director; 2 doctoral supervisors, elected through the universal vote of the doctoral supervisors who are tenured faculty members within IOSUD-TUIASI; 1 doctoral student, elected through the universal vote of the doctoral students within IOSUD-TUIASI.

c) Within the IOSUD, the CSUD is operational, consisting of: the Director, selected following a competition (the Methodology for conducting the competition for the position of Director of the Council for University Doctoral Studies (CSUD) at IOSUD – "Gheorghe Asachi" Technical University of Iaşi; The CSD director; 9 CCPD directors; One external member from outside the IOSUD, 4 doctoral students elected by vote.

The CSUD and CSD meet monthly in ordinary joint working sessions, except for August. Extraordinary meetings are convened for special cases. Official records are drafted after each meeting and disseminated to all doctoral supervisors via an internal drive.

d) The doctoral program coordination councils (CCPD) of the faculties consist of 3-5 members, including and elected director.

e) The entire doctoral program is conducted based on specific procedures, from admission to the public defense of the doctoral thesis:

- Procedure for the organization and conduct of admission to the scientific doctoral university study cycle
- Procedure for the presentation of doctoral theses.

f) Within IOSUD-TUIASI, mechanisms have been implemented for the recognition of doctoral supervisor status and the equivalence of doctoral degrees obtained abroad:

- Procedure for the automatic recognition of doctoral supervisor status obtained in higher education or research-development institutions abroad,
- Procedure for the recognition of the doctoral diploma and title obtained abroad,

g) The rights and obligations of the doctoral student are regulated through the doctoral university study contract. Study contracts vary according to the funding source (state budget or tuition fees) as follows: full-time with stipend; part-time without stipend; full-time with tuition fee.

Based on the regulations, proposals for the advanced university training program and the research program are elaborated. The research topics and priority research themes proposed annually by doctoral supervisors in the Electrical Engineering field.

Most institutional procedures and regulations have been updated through new editions or revisions. These changes were necessitated by the enactment of the Higher Education Law no. 199/2023 and the Framework Regulation on Doctoral University Studies, approved by Ministerial Order no. 3020/2024.

In conclusion IOSUD-TUIASI, within which the CSUD and SD-TUIASI operate, possesses adequate organizational components and a management system based on methodologies, regulations, and procedures periodically reviewed in accordance with the law, ensuring the proper conduct of the Electrical Engineering doctoral field.

CSUD and SD-TUIASI continuously monitor the dynamics of the legislative framework applicable to doctoral university studies, with the obligation to reflect any changes in the specific procedures and regulations of TUIASI.

Recommendations: none

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.

The opinions of doctoral students, doctoral supervisors, and other stakeholders are systematically collected through periodic surveys, structured consultations, and a formal proposal submission mechanism. The feedback obtained is analyzed at the CSUD and SD-TUIASI levels. Methodologies, regulations, and application procedures are revised periodically or whenever legislative changes, external recommendations, or non-conformities identified during the internal evaluation process occur. Consultation results are transparently communicated to the academic community by publishing updated document versions, accompanied by summaries of the implemented changes. Thus, stakeholder opinions are not merely collected formally but are effectively integrated into the decision-making process, supported by clear mechanisms for periodicity, analysis, traceability, and concrete outcomes.

Consultations are conducted consistently during joint monthly CSUD–CSD meetings, which ensure adequate representation of doctoral students. These meetings address proposals, observations, and suggestions from academic community members, doctoral students, and other stakeholders (such as the CSUD-CSD secretariat, the quality assurance or legal departments, human resources, socio-economic partners, research institutes, and alumni), contributing directly to the continuous improvement of the normative and procedural framework for doctoral studies. The joint CSUD-CSD meetings are open; doctoral supervisors and students who are not members may attend as observers (without voting rights). Periodically, consultations are held via roundtables, workshops, seminars, and training sessions involving employers (http://inserting.tuiasi.ro/), members of the Doctoral School Alumni community or external experts.

Following these consultations, several procedures have been revised and updated in recent years to reflect proposals from the academic community and ensure better alignment with the legislative framework and best practices in doctoral studies. A dedicated email address, doctorat@tuiasi.ro, is available for these consultations and for collecting opinions, proposals, suggestions, and inquiries, with all messages being analyzed promptly. The traceability of these opinions is ensured through an observation table, which sequentially centralizes information regarding the author of the proposal, the analyzing person/structure, the decision-maker, and the result (either the implemented changes or the rationale for non-implementation). This tool allows for clear tracking of each proposal's progress and contributes to the transparency of the decision-making process.

Annually, doctoral students in the Electrical Engineering field can respond to a survey focused on the primary issues related to the doctoral program, https://doctorat.tuiasi.ro/descopera/transparenta/. Relevant indicators are monitored for these consultations, such as the survey response rate, the number of proposals received, their implementation percentage, and the average analysis and response time.

In conclusion the opinions of academic community members, doctoral students, and all stakeholders are considered during the adoption and revision of methodologies, regulations, and procedures. Regulations and procedures are elaborated at the SD-TUIASI level, verified/endorsed by CSUD/CMC, endorsed by CEAC/CA, and approved by the University Senate. The institution will continue to consult all stakeholders in the process of elaborating and revising procedures and their application methods. However,

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

representatives of companies and institutions feel the need to take over, within the doctoral school, to resolve, some topics of interest to the community or enterprise.

Recommendations: Taking on industry topics to be solved through the doctoral program.

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.

The Doctoral School of TUIASI (SD-TUIASI) has specific procedures that ensure doctoral students' access to the infrastructure and logistics necessary for research activities. Furthermore, fully functional and accessible social and academic support services (including participation in various events, article publication, etc.) and counseling services are available to doctoral students.

The material resources of TUIASI have developed alongside its general growth, aiming to modernize and renew education and research equipment, and to initiate new investments to ensure adequate conditions for study, accommodation, and relaxation for doctoral students - https://www.tuiasi.ro/raport-privind-starea-universitatii/. The facilities and equipment allow for research activities to be conducted in accordance with the assumed mission and objectives. Material resources include computers, specific software, apparatus, laboratory equipment, the library, and access to international databases, etc.

According to Art. 8 of the Accommodation Regulations, housing is assigned annually or per semester, proportional to the number of students enrolled on state-budgeted spots, with places distributed by faculties and dormitories.

The campus also features a student cafeteria with the most affordable prices in the city, a medical dispensary (providing free medical services for students), and a sports complex consisting of six outdoor sports fields, a fitness room, an aerobics room, a weight room, and a team games hall. Doctoral students have free access to the sports facilities outside of the teaching schedule, https://campus.tuiasi.ro/.

Students have access to the TUIASI Library - https://biblioteca.tuiasi.ro/, which operates through 7 branch libraries (Central Library Building A and 6 specialized faculty libraries), featuring reading rooms, lending rooms, and archives. It holds a total document fund of 962,528 volumes (522,187 books, 129,332 journals, 5,042 special collections like CDs/DVDs/microformats, and 305,967 technical documents).

The Counseling and career guidance center (CCOC-TUIASI), https://www.consiliere.tuiasi.ro/ provides personal, professional, and volunteer development programs for TUIASI students. Students interested in achieving personal and professional performance, as well as recognized and accredited volunteer programs, are invited to register in the center's database. The center focuses on educational, vocational, and/or psychological counseling, as well as facilitating internships, complementary training programs, social integration, and research.

For students with disabilities, special accommodation spaces have been arranged, adapted with interior ramps with side railings, bathrooms equipped with special handles and bathtubs, and threshold-free rooms. Students with disabilities benefit from free accommodation; where applicable, their companions may also receive free accommodation. Access to the cafeteria is through the main gate, which features a special ramp with stainless steel handrails for people with locomotor disabilities. A specially designated table is available on the ground floor of the cafeteria. Students with severe or pronounced disabilities receive, upon

request, a 50% reduction in accommodation and meal fees at the cafeteria and dormitories, based on Law no. 448/2006, Art. 15 (8), with subsequent amendments regarding the protection and promotion of the rights of persons with disabilities - https://www.consiliere.tuiasi.ro/informatii-si-resurse/.
Doctoral students have unrestricted access to research laboratories, with the approval of the faculty member in charge of the laboratory, as mentioned in the CSUD regulations. Doctoral students enrolled in the Electrical Engineering field may conduct their activity within CNCSIS-recognized research centers, also listed on the eertis.eu platform. Additionally, doctoral students in the Electrical Engineering field have access to the research laboratories. The research infrastructure of these laboratories has developed constantly in recent years, with a selection of the highest performance.
The material resources allow for the optimal development of activities included in scientific research programs. The research centers and laboratories where doctoral students enrolled in the Electrical Engineering field conduct their activities are equipped with state-of-the-art technical equipment specific to each research topic.
CSUD and SD-TUIASI aim for the continuous improvement of the material resources necessary for conducting activities and fulfilling the objectives set in scientific research programs, ensuring a favorable environment for life and study for all students, including those with disabilities.

Recommendations: Setting up a workspace dedicated to doctoral students where they can work together, discuss and collaborate on common projects of interest.

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.

The maintenance of the material base is managed through an integrated system: updated asset records, an annual maintenance and investment plan, notification–intervention–acceptance procedures, and a dedicated budget. Performance is monitored through indicators such as: the percentage of spaces complying with standards, the completion rate of preventive maintenance, average repair time, availability of critical equipment, and user satisfaction levels, ensuring optimal conditions for study, research, living, and work. Within TUIASI, proper maintenance involves inventorying, planning, execution, and improvement. Additionally, there is an asset inventory, an annual maintenance and investment plan, procedures and workflows for reporting and resolving malfunctions, and a dedicated budget for ongoing repairs, capital repairs, and modernizations.
Research laboratories are compliant spaces, where maintenance work is performed preventively. A centralized record of recurring breakdowns is maintained to identify areas where prevention did not yield the expected results. For critical equipment, usage schedules are in place to balance availability rates while adhering to the schedule for inspections and, where necessary, calibrations.
In the satisfaction survey addressed to doctoral students, a key point refers to their satisfaction score regarding infrastructure and access to facilities.
An overview of the material base, research infrastructure, primary acquisitions, and policies is presented annually in the Rector's Report on the State of the University.
The spaces used by doctoral students enrolled in the Electrical Engineering field were rehabilitated, with the final acceptance of the works taking place in 2023.
The research spaces utilized by doctoral students in the Electrical Engineering field are adequately maintained, ensuring optimal conditions for study, research, and work. CSUD and SD-TUIASI continuously

monitor the condition of the buildings and spaces within their assets/administration and, depending on specific situations and financial possibilities, implement measures to increase the degree of sustainability.

Recommendations: none

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.

The human resources supporting the doctoral programs in the Electrical Engineering field are adequate both numerically and qualitatively. The organizational component has clearly defined roles - doctoral school leadership, council/commissions, and secretariat - with functional responsibilities and workflows for admission, progress monitoring, evaluations, and quality assurance. The teaching staff and doctoral supervisors possess qualifications and professional competences relevant to the field, and the disciplines in the curriculum are covered in accordance with the expertise of each faculty member. Doctoral training capacity is supported through research activity, project participation, and scientific publication, and the workload is distributed to ensure genuine and constant supervision. Furthermore, continuous professional development measures and feedback-based evaluation mechanisms are in place to improve teaching quality within both the Advanced University Training Program (PPUA) and the supervision of the scientific research program.

Within SD-TUIASI, for the Electrical Engineering field, as of December 31, 2025, there are 20 doctoral supervisors, assisted by teaching and support staff, to guide the activities within the doctoral program (coordination and supervision, courses, evaluations, commissions) for the 96 enrolled doctoral students (79 in the standard stage and 17 in the extension/grace period). Information regarding the doctoral supervisors affiliated with the Electrical Engineering field can be found at: https://doctorat.tuiasi.ro/conducatori-de-doctorat/.

There is a proper role assignment within the organizational structure, the most important aspect being the qualifications and professional competence of the doctoral supervisors. All doctoral supervisors clearly exceed the current points required for granting the habilitation, as evidenced by the Standards Verification Sheets drafted in 2025.

The number of doctoral students in the standard stage and in extension, respectively, for each of the 5 doctoral supervisors who possess qualifications and professional competences relevant to the field. 3 doctoral supervisors currently have more than 8 doctoral students (standard stage and extension/grace period), but this situation is contextual and will be resolved during this year). Nevertheless, any potential numbers exceeding the limit will be mitigated by October 1, 2026, when the new procedure comes into effect.

In conclusion, in the Electrical Engineering field, there are 20 active doctoral supervisors, assisted by teaching and support staff, for the supervision of the mandatory activities within the doctoral program for a number of 96 enrolled doctoral students, of which 17 in extension.

CSUD and SD-TUIASI continuously monitor and support teaching staff with the potential to become doctoral supervisors by defending their habilitation thesis for all doctoral fields, including Electrical Engineering, to attract human resources possessing the adequate qualifications and professional

competences to conduct research activities at high standards. The optimization of the ratio between the number of doctoral supervisors and the number of doctoral students is being considered.

Recommendations: Limiting the number of doctoral students coordinated by a supervisor to 8 during the training period.

The indicator is: fulfilled

Indicator I.P.A.3.1.2	The HEI ensures professional and personal development for its staff.

The habilitated doctoral supervisors for the Electrical Engineering field possess relevant expertise, forming a solid academic structure capable of organizing and sustaining doctoral programs under conditions of quality and continuity. They are supported through clear mechanisms for professional and personal development: participation in research projects, mobilities, training courses, and mentoring activities, which directly contribute to enhancing competence and performance. Through these resources and development policies, the institution aims to meet the performance indicator regarding the support for the professional evolution of doctoral supervisors.

Over the last five years, the 20 doctoral supervisors in the Electrical Engineering field have contributed substantially to publishing a significant number of papers in journals with an impact factor. Through research projects secured via competitions, the doctoral supervisors have contributed to the development of research laboratories that offer doctoral students the best conditions for producing original doctoral theses, relevant at both the national and international levels.

The teaching staff and doctoral students from the IEEIA Faculty (together with colleagues from the Faculty of Electronics, Telecommunications and Information Technology, and the Faculty of Automatic Control and Computer Engineering) edit the scientific journal "Bulletin of the Polytechnic Institute of Iasi", Electrotechnics, Energetics and Electronics section, a journal in the CNCSIS B+ category (http://www.bulipi-eee.tuiasi.ro/index_ro.html). Furthermore, doctoral students and supervisors benefit from Erasmus mobilities or access to COST-type programs for supplementary funding of scientific research and networking actions to increase cooperation and the visibility of doctoral studies in the field. Finally, doctoral supervisors and students are part of the organizing committees of the SIELMEN international conference and the EPE international conference (https://www.epe.tuiasi.ro).

The CSUD and SD-TUIASI encourage and support the professional and personal development activities of their staff through Erasmus+ mobilities, participation in international conferences and symposia, the publication of scientific papers, etc. of habilitated doctoral supervisors to facilitate the acquisition of more in-depth training.

Recommendations: none

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.

The recruitment and affiliation of doctoral supervisors within the Doctoral School are carried out strictly in accordance with legal provisions and applicable institutional regulations. The process is organized transparently, based on public criteria and standards, with steps and deadlines clearly communicated to all interested parties. The verification of documentation and eligibility conditions is ensured, so that the selection is fair, objective, and justified. In this way, the Doctoral School guarantees a legal and ethical framework for attracting and retaining high-quality academic human resources.

The mandatory step for affiliation with SD-TUIASI is obtaining the habilitation certificate, under the sine qua non condition of cumulatively fulfilling the minimum national standards and the specific standards

established by IOSUD-TUIASI, which are superior or at least equal to the minimum CNATDCU standards. TUIASI standards cannot derogate from the minimum national standards defined in Art. 156, Para. (1) of the Higher Education Law no. 199/2023, with subsequent amendments and completions, approved by Ministerial Order.
The TUIASI-CSUD Procedure regarding the obtainment of the habilitation certificate (Code PO.CSUD.05) is published on the Doctoral School's website,
Currently, the standards established by the Order of the Minister of National Education and Scientific Research no. 6129 of 20.12.2016 are still in force and are met by all doctoral supervisors in the Electrical Engineering field. Through the Order of the Minister of Education and Research no. 3019 of January 13, 2025, the level of minimum standards was increased for almost all engineering doctoral fields. Even though these criteria will be applied starting with the 2026/2027 academic year, the doctoral supervisors in the Electrical Engineering field have successfully focused on meeting these new standards in advance. Furthermore, through Procedure PO.CSUD.03 regarding the automatic recognition of doctoral supervisor status obtained in higher education or research-development institutions abroad the possibility of affiliating new doctoral supervisors is ensured.
The rules for accepting affiliation or deciding on disaffiliation are clearly presented in Procedure PO.CSUD.06 regarding the affiliation and termination of the affiliation of doctoral supervisors to the Doctoral School of IOSUD "Gheorghe Asachi" Technical University of Iași.
Falling into the same category of clear, transparently conducted procedures are the 3 procedures and one methodology regulating how doctoral supervisors elect their leadership structures:

- Procedure PO.CSUD.09 for the election and designation of the members of the Council for University Doctoral Studies (CSUD) within IOSUD-TUIASI for the 2024-2029 legislature.
- Procedure PO.CSUD.10 for the election of the Doctoral School Director and the members of the Doctoral School Council within the Institution Organizing Doctoral University Studies (IOSUD).
- Methodology for conducting the competition for the position of Director of the Council for University Doctoral Studies (CSUD) at IOSUD.

The recruitment procedures for doctoral supervisors within the Doctoral School, elaborated at the level of IOSUD – "Gheorghe Asachi" Technical University of Iași, are applied transparently and in accordance with legal provisions.
CSUD and SD-TUIASI continuously monitor the affiliation of doctoral supervisors with national and international visibility, supporting teaching staff with the potential to become doctoral supervisors through the defense of their habilitation thesis.

Recommendations: none
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.

The members of SD-TUIASI have access to digital resources that provide support for scientific information/documentation, as well as for the hybrid/online organization of teaching activities, including components such as: (i) high-tech IT devices (computers, tablets, video conferencing equipment, and multimedia equipment); (ii) broadband internet access and access to applications/software such as

Microsoft Office, Microsoft Teams, MatLab, GitHub, Ansys, AutoCAD, Altium Education, etc., from various types of devices; (iii) specific digital resources (virtual library, including access to databases from off-campus computers, cloud services, dedicated websites, open educational resources); (iv) IT platforms configured in accordance with the specificity of the study program, accessible from different devices and operating systems.
TUIASI develops and provides doctoral students with guidelines for using implemented information and communication technologies. Furthermore, access to IT platforms and communication with doctoral students are conducted securely, using institutional email addresses. The university's educational platform represents a "single point of entry" for all applications and educational resources used, through which doctoral students have access to all courses in the curricula and to dedicated training sessions. In addition, SD-TUIASI has created two websites dedicated exclusively to informing and supporting doctoral students: site Council for University Doctoral Studies, encompassing all necessary information regarding procedural stages and documents required for the educational path, and the Talent Management Center, focusing on the development of research and transversal competences. Specific platforms exist for online doctoral enrollment from anywhere in the country, and TUIASI's digital resources allow for the hybrid or online defense of admission colloquia, research reports, and even the doctoral thesis.
Doctoral students have access to multiple information/documentation resources through the acquisition of full-text, bibliographic, and bibliometric databases via the Anelis Plus project. The creation of a virtual campus allows mobile access to internal online databases, open-access publications, and the national document repository. The IOSUD owns an anti-plagiarism software, www.sistemantiplagiat.ro, which ensures the generation of similarity reports for current doctoral theses, for doctoral theses defended between 1990 and 2016, as well as for other scientific outputs produced by TUIASI doctoral students and intended for publication.
Within SD-TUIASI, the record-keeping of doctoral students is managed through Single Matriculation Register (RMU) and through Excel databases maintained by the IOSUD. The Adservio platform has been implemented within TUIASI, through which students can access information regarding disciplines, courses, and their educational trajectory. In addition to the information shared with the RMU databases, the files dedicated to doctoral students, created by CSUD, include grades obtained in the Advanced University Training Program, the defense of research reports, interruptions of studies, extensions, changes in funding form, as well as other changes that may occur during the doctoral period, such as changes of the doctoral supervisor, thesis/research report title, etc.
Some teaching and/or research activities within the doctoral study programs can be conducted in a hybrid (synchronous) format. Using their institutional accounts, doctoral students have access to major platforms (Google Meet, Teams, Zoom, Webex).
At the CSUD and CSD levels, IT tools are utilized to ensure the management of schooling, student accommodation, access to bibliographic databases, anti-plagiarism verification, etc. Full-text database access via Anelis+; Educational platform access (Moodle); Applications/software access via institutional account; Application user manuals. The intention is to expand the digitalization process in the upcoming period, to improve access and ensure quality services for the institution's own community members and the indirect beneficiaries of education.

Recommendations: none

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.

The doctoral university study program (https://doctorat.tuiasi.ro/wp-content/uploads/2025/02/ghid-prezentare-doctorat_ro_18.01.25-1.pdf) has two components:
- The Advanced University Training Program (PPUA, 1st year), which involves participation in courses and seminars chosen by the doctoral student together with their doctoral supervisor, depending on the specifics of the research field. During the advanced university training program, the doctoral student elaborates the first scientific research report, entitled PPUA Completion Research Report, defended before the Guidance and Academic Integrity Committee.
- The Individual Scientific Research Program (years II, III, and IV), during which at least three research reports, assessed with a grade, are prepared and publicly defended at a maximum interval of 12 months from one another, and the doctoral thesis is elaborated.

The doctoral university study program is developed and structured in relation to the expected learning outcomes corresponding to qualification level 8 in the European Qualifications Framework (EQF/CEC) and the National Qualifications Framework (NQF/CNC), centered on the formation of advanced competences in scientific research and technological innovation.
The learning outcomes are defined in accordance with qualification level 8 and are structured across three dimensions: advanced knowledge, research skills, and autonomy and responsibility competences. These are correlated with training and research activities, being evaluated through rigorous academic mechanisms, ensuring the acquisition of the doctoral qualification in the Electrical Engineering field.
The doctoral university study program aims to train highly qualified specialists capable of generating original scientific knowledge and innovative solutions in the Electrical Engineering field.
The structure of the program ensures a direct correlation between learning outcomes and training, research, and evaluation activities. The advanced studies component provides the methodological and scientific foundation, while the research program leads to the realization of an original contribution, validated through annual evaluations, scientific publications, and the public defense of the thesis.
The allocation of ECTS credits is proportional to the complexity of the activities and supports the evolution from theoretical training to autonomous research.
The Electrical Engineering doctoral field offers doctoral students a training program based on advanced university studies, structured according to a curriculum that integrates disciplines meant to address, from a unitary perspective, the issue of researcher training.
The program aims to develop the competences necessary to conduct high-level research in accordance with the rigors of the scientific method, as well as to capitalize on the obtained results through the elaboration and implementation of projects, and their publication and dissemination in the academic and professional environment. The entire formative endeavor is conducted in accordance with the principles of academic ethics and integrity, research deontology, and the norms regarding the protection of intellectual property rights.
The essential knowledge for a doctoral student in Electrical Engineering includes: (i) understanding the concepts, methods, and specific stages of the scientific research process in electrical engineering; (ii)

* 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.

mastering techniques for collecting, processing, and interpreting experimental or simulated data; and (iii) relating the studied theory to practical applications and research topics.
The individual scientific research program, carried out throughout the entire duration of the doctoral studies under the coordination of the doctoral supervisor and the guidance and academic integrity committee, is monitored and evaluated through: (i) research reports; (ii) publication of research results; (iii) elaboration and public defense of the doctoral thesis.
The doctoral university study program coherently integrates: (i) advanced teaching and training activities; (ii) fundamental and applied research activities; (iii) participation in national and international research projects; (iv) documentation stages and academic mobilities; (v) periodic evaluations of scientific progress; (vi) activities for the dissemination and capitalization of results. The evaluation of doctoral students is carried out through: (i) annual evaluations of the research activity; (ii) analysis of published results; (iii) the defense of research reports; (iv) the public defense of the doctoral thesis.
The doctoral university study program is structured so that all learning, research, and evaluation experiences lead to obtaining a doctoral degree in the Electrical Engineering field. Through its advanced character and orientation towards original research, the program ensures the training of specialists capable of contributing significantly to the scientific and technological development of the field, as well as to innovation in the economic and industrial environment.
SD-TUIASI aims to consolidate the international dimension of the programs, periodically update the disciplines in the curriculum in relation to technological and scientific developments, increase the integration of doctoral students into competitive research projects, and develop mechanisms for monitoring the achievement of learning outcomes.

Recommendations: Increasing the international dimension by developing international cooperation, increasing international mobility of doctoral students and attracting foreign 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).

The expected learning outcomes for the doctoral university study program are defined in accordance with qualification level 8 of the European Qualifications Framework (EQF/CEC) and the National Qualifications Framework (NQF/CNC) and are correlated with the competences required by the relevant occupations in the Electrical Engineering field. This correlation was achieved by reference to national occupational standards and the European Skills, Competences, Qualifications and Occupations (ESCO) classification, developed by the European Commission. The targeted occupations primarily include: (i) scientific researcher, (ii) research and development engineer, (iii) technical expert, (iv) university teaching staff, (v) research project manager.
The competences formulated at the doctoral program level—original scientific research, advanced analysis and modeling, research project management, scientific dissemination, and compliance with ethical norms - correspond to the competences described in ESCO for the mentioned occupations. The abilities to design and implement research, as well as the capacity for technological innovation, are directly correlated with the requirements for research and development positions in both academic and industrial environments.

SD-TUIASI intends to periodically update the correlation with ESCO and national occupational standards, in line with the evolution of the labor market and research fields, as well as strengthen collaboration with the socio-economic environment for the continuous adaptation of the formed competences.

Recommendations: It is recommended to introduce into the curricula some optional in-depth disciplines specific to advanced electrical engineering, different from those in the master's curricula, not only in frontier fields.

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.

The organizational component of the doctoral university study program in the Electrical Engineering field is designed to support the principle of student-centered learning. The curriculum (https://doctorat.tuiasi.ro/studii-de-doctorat/planuri-de-invatamant/) includes advanced disciplines, thematic seminars, and scientific research activities, in which the doctoral student is actively involved in defining their own learning objectives and planning the stages of scientific projects.

The structure of the program highlights that the doctoral student benefits from constant feedback and formative evaluations that support the development of autonomy and professional competences, ensuring consistency between learning objectives and the final outcomes of the program.

The elements of educational effectiveness at SD-TUIASI highlight the existence of an educational offer that is continuously defined and promoted in relation to the requirements of beneficiaries and the labor market, supported by active partnerships with the economic and academic environment, a flexible and student-centered curriculum designed based on identified needs and implemented through modern teaching and assessment methods, transparent and periodic mechanisms for evaluating learning outcomes and doctoral progress, intense scientific and methodical activity by doctoral supervisors, and a transparent and responsible management of financial resources aimed at supporting research performance and the development of academic infrastructure.

For the Electrical Engineering doctoral field, educational effectiveness elements are explicitly correlated with institutional mechanisms for implementing student-centered learning principles through: (i) personalizing the doctoral path, (ii) integrating doctoral students into research teams and projects, (iii) using interactive and applied teaching methods, (iv) continuous monitoring of academic and scientific progress. The organizational component ensures the implementation of these principles through clear decision-making structures (CSUD, CSD, CCPD), operational procedures, and periodic feedback mechanisms from doctoral students and employers.

To consolidate student-centered learning, SD-TUIASI intends to expand interactive teaching methods, integrate new types of international mobilities, and develop digital resources that allow doctoral students to efficiently manage their individual learning and research paths.

Recommendations: none

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.

The Electrical Engineering doctoral field has a consolidated organizational framework that ensures systematic access for doctoral students to national and international academic mobilities, both physical

and virtual. Mobilities are carried out through: (i) inter-institutional agreements within the Erasmus+ KA131 program; (ii) bilateral; (iii) strategic partnerships with universities and research institutes from Europe and outside the EU; participation in international research projects; and scientific collaborations developed by doctoral supervisors.
The procedural framework includes: (i) institutional regulations regarding the organization and recognition of mobilities (ii) the integration of mobilities into the individual doctoral study plan; (iii) transparent selection and approval mechanisms; (iv) formal recognition of results obtained during the mobility period. Mobilities include: research stages in international laboratories; participation in INGENIUM summer/winter schools; participation in international conferences and workshops; and virtual mobilities (online courses, collaborative activities, international conferences).
To meet the specific quality standard for doctoral university studies as defined in the ARACIS Guide ("at least 20% of the funding from doctoral grants must be allocated to research activities carried out by doctoral students"), IOSUD-TUIASI has undertaken firm, permanent measures across all 13 accredited fields. These measures targeted financial support for participation in symposia/conferences, stages and mobilities, payment of publication fees for scientific articles, purchase of licensed software, and investments in research infrastructure.
A functional and coherent institutional mechanism exists that facilitates the effective participation of doctoral students in mobilities relevant to their doctoral research. These mobilities contribute to increasing scientific performance, developing advanced competences, and integration into international academic networks. The constant participation of doctoral students demonstrates that the opportunities offered are real and fully integrated into the doctoral path.

Recommendations: Increasing the mobility of doctoral students within the INGENIUM consortium.

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

A portion of the doctoral students have been included in the annual FDI (Institutional Development Fund) project teams, under the coordination of the CSUD-CSD team. Examples include: (i) the TechGo1 FDI project in 2022; (ii) the FDI TechGo2 project in 2023; (iii) the FDI TechGo3 project in 2024; (iv) in 2025, the Insert-Ing FDI project (FDI-2025-F-0069) was launched, titled "Successful professional insertion of TUIASI graduates supported through institutional development - Insert-Ing".
Another project developed for doctoral students was "DocTalent4EU credentials", intended to provide digital credentials, thus allowing wide recognition of the transferable skills and competences obtained by doctoral students and Early Career Researchers (ECR), with reference to the ESCO classification, https://doctorat.tuiasi.ro/proiecte/doctalent4eu/.
Institutional mechanisms allow each doctoral student to capitalize on their academic potential and follow the doctoral path at their own pace, without discrimination or barriers. Equity is reflected through: (i) a high degree of satisfaction among doctoral students (internal reports/feedback); (ii) equal access to research resources, laboratories, and infrastructure; (iii) the adaptation of teaching activities to individual competences and styles; (ivl the involvement of doctoral students in research activities and projects that correspond to their interests and aspirations. It is observed that the opportunities offered are real, individualized, and integrated into the doctoral path, respecting the diversity of learning styles.

Recommendations: Organizing teamwork activities that enhance technical and scientifical creativity.

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.

The organizational component of the doctoral university study programs ensures non-discriminatory access for students to educational resources and support services adequate to the study cycle and the specific nature of the organized fields. Doctoral students benefit from access to research infrastructure (specialized laboratories, equipment, analysis software), to the library and international scientific databases, as well as to digital platforms for learning and academic collaboration.
For students with special educational needs/disabilitiesț, OSUD-TUIASI in general, and SD-TUIASI in particular, ensure physical accessibility measures and reasonable accommodations for the teaching and assessment process, in accordance with internal regulations and national legislation, guaranteeing equal opportunities and educational inclusion.
The analysis of resource organization highlights their adequacy for the doctoral level of studies and the specific nature of the Electrical Engineering field, by ensuring the infrastructure necessary for research.

Recommendations: Joining to the national doctoral collaboration programs.

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.

The learning outcomes for the disciplines included in the curriculum of the doctoral program are explicitly formulated in terms of knowledge, skills, and competences, in accordance with qualification level 8 of the European Qualifications Framework (EQF/CEC) and the National Qualifications Framework (NQF/CNC). These are correlated with the objectives of the discipline, the thematic content, teaching methods, and assessment strategies, ensuring transparency and coherence in the educational process. Specific procedures exist to regulate the quality assurance of the advanced university training program in the Electrical Engineering field by defining the learning outcomes (knowledge, skills, responsibility, and autonomy) that doctoral students must acquire following the completion of the disciplines and research activities.
The formulation of learning outcomes allows doctoral students to clearly understand the expectations regarding performance levels and the competences to be acquired, while providing teaching staff with a structured framework for organizing teaching activities and evaluating progress.

Recommendations: none

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.

Verifying the achievement of learning outcomes within TUIASI doctoral programs is performed through ongoing assessments and the final evaluation of studies. Ongoing assessments include exams for the disciplines in the advanced university training program, the defense of the PPUA Completion Research Report, the defense of scientific research reports, and the evaluation of research activity by the doctoral supervisor and the guidance committee. The assessment methods are correlated with the learning outcomes formulated in the course descriptions and the individual research plan, ensuring the verification of the acquisition of advanced knowledge, research skills, and professional autonomy competences. The final evaluation consists of the public defense of the doctoral thesis, which certifies the achievement of an original scientific contribution and the attainment of the level of competence corresponding to the qualification of Doctor of Engineering. The procedures for organizing and conducting evaluations are regulated by the Doctoral School regulations and by internal methodologies approved at the institutional level.
As part of the Talent Management Center's actions, the 3MT (3 Minute Thesis) competition was organized with 14 doctoral students participating in the first edition held in 2025. This is a competition of synthesis power, eloquence, and fluent communication in English.
The analysis of the evaluation system highlights the progressive and integrated nature of verifying learning outcomes, from formative assessments throughout the program to the final summative evaluation.

Recommendations: none
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.

The organization of admission to doctoral university studies is the responsibility of IOSUD-TUIASI and is organized in accordance with the Regulation on the organization and conduct of doctoral university study activities. Admission to doctoral programs is carried out based on a procedure approved at the institutional level and a methodology developed by the CCPD, endorsed by the CSD, and approved by the CSUD. These establish the enrollment conditions, colloquium planning, committees, selection criteria, vacant positions, topics, and bibliography. The research topics for each vacant doctoral student position are proposed by the doctoral supervisor and approved by the CSD. The funding form for each doctoral student position proposed for occupancy is approved by the CSUD before being put out to contest, depending on the research topic proposed by the doctoral supervisor, in accordance with the TUIASI strategy for funding priority fields and areas of interest and based on its own regulations. Only graduates with a Master's degree or its legal equivalent, regardless of the field in which it was obtained, are entitled to participate in the admission contest, provided that the cumulative number of transferable study credits (ECTS) acquired for the Bachelor's and Master's cycles is at least 300. The methodology is published on the institution's website, ensuring transparency and equal access for candidates to relevant information.
Budgeted places (with/without scholarship) allocated by the Ministry of Education for IOSUD-TUIASI, as well as fee-paying places (approved by the TUIASI Senate), are distributed to each CCPD by the Administration Council (CA) upon the proposal of the CSUD, directly proportional to the number of supervisors affiliated with the doctoral fields coordinated by the respective CCPD.

The admission process includes the evaluation of the candidate's file, a contest test in the form of an interview - during which the candidate's level of preparation, scientific/professional concerns, research skills, and the proposed topic for the doctoral thesis are analyzed - and a language proficiency exam for a language of international circulation. Admission committees are established by institutional decision, and the results are communicated publicly, complying with data protection regulations. The procedure includes mechanisms for handling appeals, ensuring the fair and competitive nature of the selection.
The analysis of the admission process highlights the consistent application of the established procedures and the correlation of the number of places with the available coordination capacity and research infrastructure.

Recommendations: none
The indicator is: fulfilled

Indicator I.P.B.7.1.2	Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.

Admission to doctoral programs is conducted in compliance with the principles of equity, transparency, and equal opportunity, in accordance with the institutional methodology and applicable national regulations. The selection criteria are public, clear, and applied uniformly to all candidates, without discrimination based on gender, ethnicity, religion, disability, or socio-economic status.
The admission methodology provides transparent mechanisms for evaluation and the resolution of appeals, ensuring the objective nature of the selection (https://doctorat.tuiasi.ro/metodologii-admitere-studii-doctorale-2026/). TUIASI promotes access for vulnerable groups and candidates with special educational needs and/or disabilities through adequate support measures, such as reasonable accommodation of the contest tests, ensuring the accessibility of spaces, and providing information in digital format. Accordingly, places are provided for admission to doctoral university study programs for vulnerable groups at social and educational risk.
By applying these measures, the organizational component ensures an inclusive and fair admission process, correlated with the quality principles promoted by ARACIS and IOSUD-TUIASI.

Recommendations: none
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.

The professional activity of doctoral students in the Electrical Engineering field is carried out in accordance with the Doctoral School Regulations, the Institutional Methodology, and the internal Procedures and Norms regarding the organization of doctoral studies.
The academic path is structured into two components: (i) the advanced university training program and (ii) the individual scientific research program. The doctoral students' activity is systematically monitored through periodic progress reports, the evaluation of research results by the doctoral supervisor and the guidance and academic integrity committee, as well as through the analysis of scientific output (published articles, conference participations, patents, contributions to research projects).
Regulations regarding the interruption, withdrawal, or extension of studies, academic mobilities, participation in national/international projects, reimbursement of expenses, change of doctoral supervisor, thesis title, or research report are applied according to procedures approved at the institutional level, based on formal requests followed by corresponding administrative decisions. The consistent application of these

regulations reflects compliance with the quality standards promoted by ARACIS and supports scientific performance in the Electrical Engineering field.
Within the Electrical Engineering doctoral field, the academic record of each doctoral student is maintained, compliance with deadlines is monitored, and administrative support is provided in the conduct of research activities, ensuring the coherence and predictability of the academic path.

Recommendations: none

The indicator is: fulfilled

Criterion B.8. Internationalisation process

Standard S.B.8.1. Internationalisation Improving the quality of education and research through internationalisation actions.	
Indicator I.P.B.8.1.1	The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.

The organizational component of SD-TUIASI develops and applies an internationalization strategy aimed at increasing the quality of education and research by strengthening international academic cooperation.
he institution has concluded partnership agreements with universities and research centers from the European and extra-European areas (https://international.tuiasi.ro/ro/erasmus-2/informatii-generale/acorduri-erasmus-ue/, https://international.tuiasi.ro/ro/erasmus-2/informatii-generale/acorduri-erasmus-non-ue/, https://international.tuiasi.ro/ro/cooperari-internationale/acorduri-bilaterale/), which facilitate the mobility of doctoral students and teaching staff, the exchange of best practices, and the development of joint research projects. Mobility is supported through institutional programs and participation in European programs (e.g., Erasmus+ KA131 mobilities), where doctoral students have the opportunity to conduct research stages at partner universities, and teaching staff participate in teaching and research activities at foreign institutions.
International collaboration is reflected in scientific publications co-authored with external partners, participation in international research projects and the organization of scientific events with international participation: the Doctoral School Conference (CSD – Conferinta Scolii Doctorale) the EPEi International Conference, and the SIELMEN International Conference, as well as special issues in WoS-indexed journal (Mathematics (Q1), Applied Science (Q2). These actions contribute to the integration of SD-TUIASI into the European Education and Research Area and are in line with the quality standards promoted by ARACIS.
TUIASI is a member of the European University Association - Council for Doctoral Education. From Romania, alongside ARACIS and TUIASI, 12 other universities are members. TUIASI representatives actively participated between 2022 and 2025 in the annual EUA-CDE meetings, presenting materials regarding the doctoral activity within IOSUD-TUIASI. Furthermore, within the INGENIUM European University Alliance, SD-TUIASI is an actively involved presence, particularly in the activities of WP-6 (INGENIUM for Research). A main component of WP-6 activities is the development of the INGENIUM Research School, designed to support the development of joint doctoral programs. TUIASI is the coordinator for 3 Joint PhD programs, integrated into the Sustainable Development ecosystem and the Artificial Intelligence ecosystem, respectively.
Within SD-TUIASI, selection activities for students and teaching staff are carried out for mobilities through the Erasmus+ program.
Starting in 2023, TUIASI has been part of the "INGENIUM" Alliance, a European university alongside nine other prestigious higher education institutions in Europe. Within the alliance, TUIASI coordinates 3 Joint PhD programs integrated into the Sustainable Development and Artificial Intelligence ecosystems. One of these programs is within the Electrical Engineering doctoral field.

Recommendations: none

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.

The doctoral university study program in the Electrical Engineering field is centered on original scientific research, which represents the essential component of the educational process and the primary mechanism for acquiring learning outcomes corresponding to qualification level 8.
Inquiry-based learning is achieved through: (i) the implementation of the individual doctoral research project; (ii) the integration of doctoral students into grants and research projects; (iii) participation in national and international scientific events, exhibitions, and invention competitions; (iv) the elaboration and publication of scientific papers; (v) the defense of scientific research reports within SD-TUIASI before the guidance and academic integrity committee. Doctoral students in the Electrical Engineering field are involved in innovation and technology transfer activities within the research projects in which they participate.
The contents of the disciplines in the advanced university training program are updated in accordance with recent scientific research results and the priority directions of the field. Doctoral students utilize the available research infrastructure for conducting experimental, analytical, or theoretical activities.
Scientific research is structurally integrated into the doctoral training process, ensuring a direct correlation between learning activities and the targeted learning outcomes: developing the capacity to design and carry out original research, using advanced methodologies, critically analyzing specialized literature, and generating relevant scientific contributions.
The involvement of doctoral students in research and dissemination activities confirms the investigative nature of the doctoral university study program in the Electrical Engineering field and contributes to increasing the academic visibility of SD-TUIASI. The educational model is centered on scientific autonomy, professional responsibility, and academic integrity.
The future actions to support students in acquiring learning outcomes are: (i) increasing the proportion of publications authored by them in journals indexed in relevant international databases; (ii) intensifying the participation of doctoral students in competitive research projects; (iii) expanding international collaborations and research mobilities; (iv) strengthening the mechanisms for monitoring the scientific performance of doctoral students; (v) developing interdisciplinary initiatives and partnerships with the socio-economic environment.

Recommendations: none

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.

The scientific research activity carried out within the Electrical Engineering doctoral field is correlated with the objectives of the doctoral university study program and the institutional strategic directions for development and innovation. The research directions of the doctoral supervisors are aligned with current scientific and technological trends and provide the foundation for doctoral thesis topics, ensuring

coherence between doctoral training and scientific performance. Research results are visible at national and international levels through: (i) publishing articles in journals indexed in (Web of Science, Scopus, Elsevier, Springer); (ii) publishing papers in the proceedings of prestigious international scientific conferences; (iii) authoring books and chapters at recognized publishing houses; (iv) participating in and coordinating research projects funded through national and international competitions; (v) obtaining patents and filing patent applications; (vi) executing research and technology transfer contracts with the economic environment; (vii) participating in international research networks and partnerships. International visibility is supported by collaborations with academic institutions and research centers abroad, academic mobilities, and involvement in research consortia.
The national and international visibility of the doctoral supervisors is convincingly supported by the full list of indexed works, pecifying the number of citations and the Hirsch index according to WoS, Scopus, and Google Scholar.
During the evaluated period, doctoral supervisors, together with students in the Electrical Engineering field, contributed substantially to the publication of a significant number of papers in WoS and IDB (International Databases) indexed conference proceedings and journals. Through research grants/projects, the doctoral supervisors contributed to the development of research laboratories that provide doctoral students with the best conditions for producing original and internationally relevant doctoral theses.
Scientific research in the Electrical Engineering field presents a high level of competitiveness and relevance, reflected in publications in journals with international visibility, participation in project competitions, and the development of innovative solutions with practical applicability. The correlation of doctoral topics with consolidated research directions ensures: (i) the strategic coherence of the doctoral program in the Electrical Engineering field; (ii) the formation of advanced research and innovation competences; (iii) the increased scientific and technological impact of the Electrical Engineering field; (iv) the strengthening of the relationship with the industrial and socio-economic environment. A growing trend in international visibility and interdisciplinary collaborations is observed, contributing to the consolidation of the Electrical Engineering field's position within the national and European research space.

Recommendations: none

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

The quality assurance system at the SD-TUIASI level is integrated into the university's quality management structure. The supreme authority in this system is the TUIASI Senate, composed of teaching staff and students elected through a universal, direct, and secret majority vote.
Activities are managed by the permanent committees of the Senate:
C1 – Committee for Study Programs, Evaluation, and Quality Assurance
C2 – Committee for Research-Development, Entrepreneurship, and Public-Private Partnership
C3 – Committee for International Relations, University Image, and Honorary Titles
C4 – Committee for Student Activities and Social Services
C5 – Committee for Institutional Strategy, Infrastructure, and Financial Management

C6 – Committee for Computerization and Digital Communications
C7 – Committee for the Charter, Ethics, Regulations, and Incompatibilities
The quality assurance system at the SD-TUIASI level possesses concrete structures, policies, strategies, and procedures for managing the quality of research activities and student services, fostering a distinct Quality Culture. This refers to the values and activities practiced for initiating, approving, evaluating, and monitoring the quality of teaching and research.
SD-TUIASI understands its market position, its strengths and weaknesses, and those of its competitors under current conditions: fierce competition (both internal and external) ranging from attracting candidates to labor market insertion.

Recommendations: none
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 implementation procedure process.

The elaboration, analysis, and revision of procedures and work instructions are carried out by consulting the academic community, the involved departments within the university and/or interested groups, the specialized committees of the Senate, the Monitoring Commission (Internal Managerial Control System Commission, CSCIM), the Legal Office, and with the endorsement of the Administration Council of the University and the Quality Evaluation and Assurance Commission (CEAC). The elaboration and drafting of procedures and work instructions must generally be carried out by the person responsible for the respective process; the person responsible, in collaboration with CEAC / CSCIM, can designate another competent person to carry out this activity. Within TUIASI, the methodology and responsibilities regarding the elaboration of system procedures, operational procedures, regulations, codes, and work instructions are regulated by the system procedure for elaborating procedures and work instructions. The procedures and activities for the evaluation and quality assurance of education were elaborated by the process managers under the coordination of the CMC, endorsed by the CEAC and CA, and approved by the University Senate. The CEAC elaborates the annual internal evaluation report on the quality of education, which it makes public by posting or publishing, including in electronic format, and formulates proposals for improving the quality of education (https://www.tuiasi.ro/comisia-pentru-evaluarea-si-asigurarea-calitatii-ceac/). TUIASI continuously implements measures for improving the quality of education proposed by the commission and collaborates with other universities in the country or abroad to identify and adopt good practices in quality management. In this context, TUIASI has participated in joint projects in which new methodologies, standards, and indicators for evaluation and quality assurance were identified. Also, the CEAC members and the ARACIS evaluators of the university participate in national and international scientific events in the field of quality, as well as in numerous programmatic trainings in the field.
The TUIASI website structurally respects the organizational complexity of the university (11 faculties, each with its own site, plus the web page of the doctoral studies (www.doctorat.tuiasi.ro) and publishes, in Romanian and English, permanently verified and updated information regarding: (i) the activity reports of the university management; (ii) the offer of study programs; (iii) the curricula of the academic programs; (iv) the qualifications obtained by students, the education plans; (v) the teaching and research staff; (vi) the procedures manual; (vii) facilities offered to students; (viii) information regarding admission to doctoral studies; (ix) vacancies; (x) financial statements; (xi) cultural events, etc. TUIASI uses specialized public relations services, coordinated by the Vicerector responsible for international relations, through the International Relations – Erasmus+ Department and the University Marketing Department.
The protection of natural people with regard to the processing of personal data and on the free movement of such data complies with the legislation in force.

Recommendations: none
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.

Specific measures for promoting professional ethics and deontology are implemented in TUIASI. The University Professional Ethics and Deontology Commission is a component of the general quality assurance framework. It brings together prestigious teaching staff and carries out its activity autonomously, at the request of the academic community members. The ethical references and its functioning rules are registered in the Code of university ethics and deontology, respectively in the Regulation of organization and functioning of the University Ethics and Deontology Commission.
The specific measures for promoting professional ethics and deontology are based on academic freedom, competence and professionalism, honesty, integrity, responsibility and collegiality. The main specific measures for promoting professional ethics and deontology: (i) The mandatory ethics course for all first-year doctoral students, according to the education plan of all faculties coordinating doctoral fields; (ii) the information transmitted to doctoral students by all doctoral supervisors regarding ethics and deontology in the carried out research activities (research objectives, elaboration of scientific papers and of the doctoral thesis); (iii) the information transmitted to doctoral students through the guides and procedures elaborated by the CSUD regarding ethics and academic integrity..
Within the CSUD, the Academic Ethics and Integrity Department was created by Senate Decision 288 of October 22, 2021, with attributions in operating the anti-plagiarism software and verifying all doctoral theses from the 1990-2016 period, as well as the training of trainers in ethics and integrity. By the end of 2025, the verifications of the doctoral theses defended in the 1990-2007 period were finalized, through the www.sistemantiplagiat.ro software.

Recommendations: none
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.

The implementation of the internal quality assurance system, over the last five years, has had beneficial effects on quality management, the improvement of education, and other related activities, manifesting itself through: (i) the implementation, at the level of all doctoral supervisors and doctoral students, of a professional and responsible approach to the procedural activity and the identification of procedural activities; (ii) the identification of ignored or insufficiently detailed procedural activities with effects on the university's involvement in legal conflicts with its own employees or third parties; (iii) enforcing strict compliance with the procedure for elaborating procedures and work instructions PS.01, in order to ensure the completeness of the information transmitted to users; (iv) resizing by eliminating redundant information

from the organization and functioning regulations, and drafting them according to a new operational-managerial procedure - Instructions for the unitary elaboration of the organization and functioning regulation of the faculties within the "Gheorghe Asachi" Technical University of Iaşi, code PO.POM.02 The evaluation of the doctoral university study programs is a systematic, independent, and documented process, carried out annually upon drafting the Quality Report, which also contains information about: (i) the doctoral programs; (ii) doctoral topics, publication of specialized articles, research projects, and (iii) the admission of students to doctoral studies, etc. Maintaining the accreditation of the doctoral fields and of the SD-TUIASI is carried out once every five years to obtain evidence regarding the quality of education and to objectively analyze this evidence, determining the extent to which the standards and performance indicators regarding educational quality are met. For this purpose, the Procedure for the initiation, approval, monitoring and periodic evaluation of doctoral university programs was drafted. In 2009, the "Gheorghe Asachi" Technical University of Iaşi was institutionally evaluated by ARACIS, and the ARACIS Council issued the Certificate granting the university the "High degree of confidence" rating. Also in 2009, TUIASI was accredited as an institution of interest for the Romanian research system, as recognition of the scientific results obtained at the national level for the 2003–2007 period, ranking, in terms of performance level, among the top five research universities in the country. Following the independent evaluation (National Research Evaluation Exercise, ENEC) conducted by UEFISCDI, through a project financed from structural funds, the "Gheorghe Asachi" Technical University of Iaşi obtained very good results in the evaluation of research and doctoral programs (3 fields in 1st place, 5 fields in 2nd place, and 6 fields in 4th place). In 2012, with the support of a project financed from structural funds ("Performance in research, performance in teaching quality, diversity and innovation within Romanian universities"), coordinated by UEFISCDI, the "Gheorghe Asachi" Technical University of Iaşi was externally evaluated institutionally, internationally, and by the European University Association (EUA) through the Institutional Evaluation Programme (IEP) included in the European Quality Assurance Register. In 2015, the "Gheorghe Asachi" Technical University of Iaşi went through the periodic institutional evaluation process by ARACIS, and the ARACIS Council issued the Certificate granting it the "High degree of confidence" rating. In 2021, the Electrical Engineering doctoral field (along with the other fields in SD-TUIASI) was subjected to the external evaluation process by ARACIS, the decision being Maintenance of Accreditation (MAC).

Recommendations: none

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.

At the university level, through Senate Decision no. 359 / 28.11.2025, the commission for evaluation and quality assurance at the TUIASI level was established. The Commission for Quality Evaluation and Assurance also functions within the IEEIA Faculty. The quality assurance and evaluation sub-commission within CCPD-IEEIA has the following composition: Prof. univ. dr. eng. Gheorghe Grigoraş – President, Prof. univ. dr eng. Cristian Foşalău – member, Prof. univ. dr eng. Marcel Istrate – member, student doctorand Cosmin Despa – member. Further on, several specific aspects and objectives regarding quality assurance at the Electrical Engineering field level are presented: (i) Maintaining traditional research directions, complemented by the flexibility of newly assumed research projects; (ii) Supporting relevant initiatives for promoting the doctoral field, to increase its attractiveness and national and international visibility; (iii) Ensuring the quality of doctoral research programs in the context of the current level of knowledge and society development; (iv) Accessing superior positions in the hierarchy of universities in Romania and internationally is conditioned by the Doctor of Engineering title; (v) Computerization of research activities and advanced studies; (vi) Active and consistent involvement of doctoral research in social and economic life at the local, regional, and national levels. Within IOSUD-TUIASI, the application of Procedure PO.CSUD.12 – Evaluation of doctoral supervisors by management structures is carried out in a way that

actively involves both the teaching staff (supervisors) and the collegiate structures responsible for managing the doctoral programs. The doctoral supervisors prepare a self-evaluation according to established criteria, and this is subjected to a peer evaluation within the CCPD and with the endorsement of the faculty deans. The evaluation results are centralized, distributed, and analyzed transparently, and the proposals resulting from these analyses are registered and subjected to discussion at the CSUD level. The entire process is documented through evaluation sheets and minutes, thus ensuring the involvement of all relevant stakeholders in the application of procedures and in making decisions regarding academic performance. The evaluation sheets of the doctoral supervisors by the management. At the same time, the evaluation of doctoral supervisors also includes a component carried out by the doctoral students through an annual satisfaction questionnaire applied at the doctoral study field level. The questionnaire is administered in a format that ensures the anonymity of the respondents, so that the doctoral students can freely express their opinions regarding: the quality of scientific guidance, the availability of the doctoral supervisor, the clarity of the provided feedback, support in the research activity, and support for participating in conferences or publishing results. In addition, the instrument also includes open sections, which allow the formulation of concrete suggestions for improving the mentoring relationship and the academic climate. The responses are centralized at the CSUD level, where a synthetic analysis of the results is carried out: identifying trends, possible recurrent dysfunctions, or good practices. The conclusions are discussed during the monthly CSUD meetings, and, when necessary, recommendations, support measures, or proposals for improving internal procedures are formulated. This mechanism completes the evaluation carried out by the management structures, offering a direct perspective from the beneficiaries of the doctoral program and consolidating the participatory and quality-oriented character of the evaluation process.

Recommendations: none

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.

Among the measures strictly related to the Doctoral School's activity, the following can be mentioned: (i) Organizing meetings with representatives of important companies in Iași to analyze cooperation and financing possibilities; (ii) Popularizing good practices regarding the selection of the members of the guidance and analysis commissions for doctoral theses; (iii) Introducing the concept of convergence in doctoral studies; (iv) Encouraging interdisciplinary cooperation between doctoral students from different fields within IOSUD-TUIASI; (v) Inviting personalities from the University or outside it to present topics of interest for doctoral students; (vi) Promoting ethics and good practices in research, as well as the consistent application of measures for detecting possible plagiarism; (vii) Encouraging the publication of doctoral students' results in journals edited by TUIASI, primarily the IPI Bulletin, with the sections associated with the Electrical Engineering doctoral field; (viii) Constantly updating the CSUD web page to attract as many doctoral students as possible and facilitate quick access to information; (ix) Increasing the scientific production of doctoral students.

The results of the evaluation process by the doctoral students are analyzed in CSUD and SD-TUIASI. If necessary, measures for improving the quality of the doctoral programs, their deployment, and implementation are proposed and applied. The percentage of doctoral students participating in the evaluation of teaching staff is very low.

Recommendations: Encouraging doctoral students to evaluate their doctoral coordinators annually.

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.

During the doctoral training period, evaluation mechanisms are implemented within SD-TUIASI aimed at identifying needs, as well as the general level of satisfaction with the doctoral university study programs, in order to continuously improve academic and administrative processes. Following the analysis and processing of the obtained results, concrete, specific improvement measures are elaborated and updated. The satisfaction questionnaires took into consideration the following aspects: (i) Administrative services; (ii) The training program based on advanced university studies; (iii) Evaluation and grading; (iv) Communication with the doctoral supervisor; (v) Research infrastructure; (vi) Other criteria (at the doctoral student's choice).

Following the analysis of the answers provided by the doctoral students, it is observed that the satisfaction level regarding the previously stated criteria is "very satisfied" and "satisfied". In conclusion, following the analysis of the questionnaires received from the doctoral students affiliated with the Electrical Engineering field, the elaboration of a special action plan is not required, as the satisfaction degree is high. There are, however, requests for continuous supplementary investments in the research infrastructure.

Also, at the SD-TUIASI level, online questionnaires were generated every year (2021-2025), without collecting the personal data of the doctoral students, the results of which are presented on the Transparency page of the official CSUD website. The most frequent questions were: (i) How do you evaluate the collaboration relationship with your doctoral supervisor? (ii) How is the doctoral activity carried out: deadlines, regular meetings, established schedule, etc.? (iii) What is the reason that determined you to enroll in a doctorate? (iv) The web page dedicated to doctoral studies in TUIASI is www.doctorat.tuiasi.ro. The web page is constantly updated, containing templates for the documents that need to be prepared, announcements regarding organized events, procedures in force, etc. How often do you access this page? (v) Have you used the services of the CMT-TUIASI Talent Management Center? (vi) Are you currently employed? (vii) What difficulties do you encounter in carrying out your doctoral studies: no difficulties, lack of time, hard-to-access resources, lack of feedback, risks regarding completion? (viii) Do you think organizing training seminars for doctoral students is useful? If so, do you want specific topics addressed? (ix) Does your doctoral supervisor always give you constructive feedback? (x) How do you evaluate the research infrastructure you need to successfully carry out your studies? (xi) How do you evaluate your interaction with the CSUD Secretariat? (xii) How do you evaluate your assessment and grading during your doctoral studies? (xiii) Do you consider an institutional online learning platform useful? (xiv) Other comments/suggestions you wish to convey.

Recommendations: none

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.

SD-TUIASI offers complete, updated, and easily accessible public information on: the organization/deployment of doctoral university study activities; the organization and deployment of admission; the public defense of doctoral theses; the doctoral studies contract; the content of training programs based on advanced university studies; the academic and scientific profile, thematic areas/research themes of the doctoral supervisors in the field, as well as their institutional contact data; the list of doctoral students, with basic information (year of enrollment, supervisor); information about the standards for elaborating the doctoral thesis; links to the summaries of the doctoral theses to be publicly defended, at least 20 days before the defense.
SD-TUIASI constantly aims to diversify and complete the public interest information offered to all stakeholders.

Recommendations: none
The indicator is: fulfilled

Indicator I.P.C.6.1.2	The organisational component ensures transparent decision-making processes.

The transparency of decision-making processes in SD-TUIASI is supported by the application of a documented governance framework: regulations, operational procedures, and work instructions, with controlled versions (code, date, revision, responsible person, modification history). For every decision-making process in the Doctoral School, such as: admission to a vacant position associated with a supervisor and a theme, approval of the PPUA for the first year or the research plan for years II-IV, periodic evaluations, mobilities, extensions/interruptions of the doctoral program, inputs/outputs are defined through the TUIASI Registry. Each document receives a unique identifier that the ELO document/flow management system assigns upon official registration in TUIASI. Transparency is verified through traceability, decisions being recorded in minutes/records, justified by generally valid and publicly transparent criteria, and communication to stakeholders is carried out on official channels, within established deadlines. In SD-TUIASI, integrity and transparency measures are applied, such as conflict-of-interest declarations, anti-plagiarism checks of doctoral theses from the 1990-2016 period, standardized evaluation criteria, and uniform treatment of similar cases. The transparency rules are GDPR compliant, through the controlled publication (anonymization/access limitation) of information.
Members of the academic community are informed about all activities carried out within SC-TUIASI, which ensures the transparency of decision-making processes by publishing and permanently updating the regulations, procedures, and evaluation criteria (admission, program rollout, evaluations, mobilities, funding) on the TUIASI website and on the dedicated site, www.doctorat.tuiasi.ro.

Recommendations: none
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.

The sub-commissions for quality evaluation and assurance at the CCPD level consist of 2-3 members (including a doctoral student), from which one Person Responsible for drafting the Evaluation Report is appointed, with project manager attributions. For CCPD IEEIA, which coordinates the Electrical Engineering doctoral study field.

The teaching staff representatives are teachers with proven skills in quality assurance activities (teachers registered in the ARACIS evaluators register, teachers who coordinated/drafted self-evaluation reports for study programs, teachers who completed training courses in the field of education quality). With the exception of the President of the Commission for Quality Evaluation and Assurance and the sub-commission responsible, CEAC members and sub-commission members cannot hold management positions in the university. SD-TUIASI had a consistent involvement in quality assurance activities during the 2021-2025 period. Doctoral supervisors and doctoral students from SD-TUIASI were involved in external evaluation and quality assurance processes at the national level. The organization and deployment of the internal and external evaluation of the doctoral fields are carried out in accordance with the Procedure for the initiation, approval, monitoring and periodic evaluation of doctoral university programs.
The 13 doctoral fields within SC-TUIASI were externally evaluated in 2021, for the 2016-2020 period, and the External Evaluation Report for the Electrical Engineering doctoral study field can be found on the ARACIS website, the decision being maintenance of accreditation: https://www.aracis.ro/dsud/inginerie-energetica-iosud238/. The external evaluation was carried out following the analysis of the Internal Evaluation Reports and the visit of the ARACIS commissions (last time in September 2021), in order to verify the conformity of the information in the report.
In May 2025, the 13 doctoral fields in IOSUD-TUIASI underwent an external progress evaluation by drafting and sending 13 Progress Reports and conducting exclusively online clarification meetings. This intermediate evaluation aimed to analyze the extent to which the recommendations formulated following the periodic external evaluation were implemented by SD-TUIASI, specifically by the Electrical Engineering doctoral study field, as well as to verify the progress regarding the partially fulfilled indicators, as established during the 2021 external evaluation. Following the analysis of the external progress evaluation report, the decision for the Electrical Engineering doctoral study field was: Implementation of recommendations.
The Electrical Engineering doctoral study field was subjected to periodic evaluations according to ARACIS requirements: September 2021. https://www.aracis.ro/wp-content/uploads/2022/02/IOSUD238_Raport-coordonator_16.12.2021.pdf
Following the drafting of the external progress evaluation report, the ARACIS decision for the Electrical Engineering doctoral study field was the implementation of recommendations:
(https://www.aracis.ro/wp-content/uploads/2022/02/IOSUD238_C11_03.07.2025.pdf)

Recommendations: none
The indicator is: fulfilled

IV. SWOT Analysis

Strengths:		Weaknesses:
✓ The Electrical Engineering doctoral field (DD-IEL) stands out through a well-established tradition, a clearly defined identity, as well as continuity and high academic standards; ✓ DD-IEL benefits from significant scientific potential, supported by a multidisciplinary and autonomous team with national and international visibility and recognition, reflected	INTERNAL FACTORS ↑	✓ Relatively low mobility of doctoral students, particularly within Erasmus programmes; ✓ Limited involvement of the industrial sector in defining doctoral research topics and in their co-funding; ✓ A small number of candidates for admission to doctoral studies from other universities in Romania and abroad; ✓ A small number of EU projects and

in the active involvement of PhD supervisors in the editorial boards of prestigious journals and in the scientific committees of established conferences; ✓ DD-IEL covers a vast field of scientific research interests, attractive to the labor market, and approaches transdisciplinary research themes in accordance with international research priorities; ✓ There are many scientific research results disseminated in Q1/Q2 ranked journals and in the proceedings of WOS-indexed conferences; ✓ DD-IEL has representation in national (ARACIS, ASRO, CNATDCU, etc.) and international (IEEE SM, CIGRE, IAEG) bodies, which confirms the prestige of the academic community; ✓ The research infrastructure is well developed, with numerous laboratories having been modernized and equipped to high standards, as a direct result of the contribution of the PhD supervisors; ✓ Doctoral students use the services of structures designed to counsel them during their doctoral university studies, such as: CSUD, CSD, CEAC, and student organizations; ✓ The involvement in national and international research projects (Horizon Europe, PNCDI, etc.) supports both the funding and the visibility of scientific activities; ✓ The integration of emerging technologies (digitalization, artificial intelligence, intelligent systems) into research topics;		international grants; ✓ A small number of research scholarships originating from public/private partnerships; ✓ Low degree of economic valorization of research results (patents, technology transfer, spin-offs); ✓ The need to develop entrepreneurial and research management skills among doctoral students; ✓ The need for clearer and more effective communication, starting from the initial stage of doctoral studies, regarding the available financial support opportunities and mechanisms for doctoral students and research teams; ✓ The absence of theses completed under international co-supervision during the analysed period, despite favourable conditions for their development through future initiatives and programmes (e.g., INGENIUM); ✓ A relatively low level of participation in European projects and of securing international research grants.

✓ The international conference dedicated to doctoral studies has significant participation from DD-IEL doctoral students; ✓ Supporting academic performance through scholarships, grants, and awards for scientific achievements.		
SWOT analysis		
Opportunities: ✓ The development of emerging fields (smart electrical grids, applied artificial intelligence, autonomous systems), which open new research and funding directions; ✓ The growing interest in sustainable solutions and electrification (electric transport, smart cities), which increases the relevance of the field; ✓ The possibility of expanding co-tutelle programmes and joint degrees with prestigious foreign universities through international projects in which the university is involved; ✓ Access to international mobilities, research placements, and global academic networks; ✓ The digitalization of educational and research processes, enabling remote collaboration and access to advanced scientific resources; ✓ Increasing interest from the private sector in innovation, which may lead to additional funding and joint projects; ✓ The development of innovation ecosystems (incubators, technology hubs) that can support	EXTERNAL FACTORS	**Threats:** ✓ The intensification of international competition for attracting top students and researchers, in the context of more attractive offers from foreign universities; ✓ The exodus of specialists toward better-paid external markets, with a negative impact on the available human resources; ✓ The accelerated pace of technological change, which requires the continuous adaptation of the curriculum and research directions; ✓ Bureaucracy and legislative instability in the field of education and research, which may hinder the efficient implementation of doctoral programmes; ✓ Economic fluctuations and financial uncertainties, which may reduce investments in research and innovation; ✓ Limited involvement of the private sector in supporting advanced research, compared to other countries; ✓ Potential limitations in accessing state-of-the-art research infrastructures in the absence of sustained investment;

doctoral students' entrepreneurial initiatives; ✓ The potential increased international visibility through participation in research consortia and networks.		✓ The declining interest of young people in technical fields, in favour of careers perceived as more rapidly profitable, which may affect the attractiveness of electrical engineering.

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 operates based on methodologies, regulations and procedures that are periodically reviewed as required by law.	Fulfilled	There are no recommendations
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.	Fulfilled	Taking on industry topics to be solved through the doctoral program.
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.	Fulfilled	Setting up a workspace dedicated to doctoral students where they can work together, discuss and collaborate on common projects of interest.
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.	Fulfilled	There are no recommendations
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.	Fulfilled	Limiting the number of doctoral students coordinated by a supervisor to 8 during the training period.
6.	I.P.A.3.1.2 The HEI ensures professional and personal development for its staff.	Fulfilled	There are no recommendations
7.	I.P.A.3.2.1 Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.	Fulfilled	There are no recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
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.	Fulfilled	There are no recommendations
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.	Fulfilled	Increasing the international dimension by developing international cooperation, increasing international mobility of doctoral students and attracting foreign 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).	Fulfilled	It is recommended to introduce into the curricula some optional in-depth disciplines specific to advanced electrical engineering, different from those in the master's curricula, not only in frontier fields.
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.	Fulfilled	There are no recommendations
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.	Fulfilled	Increasing the mobility of doctoral students within the INGENIUM consortium.
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.	Fulfilled	Organizing teamwork activities that enhance technical and scientifical creativity.
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.	Fulfilled	Joining to the national doctoral collaboration programs.
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.	Fulfilled	There are no recommendations
16.	I.P.B.5.1.2 Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.	Fulfilled	There are no recommendations
17.	I.P.B.7.1.1 The organisational component applies the admission procedures.	Fulfilled	There are no recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
18.	**I.P.B.7.1.2** Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.	Fulfilled	There are no recommendations
19.	**I.P.B.7.2.1** The organisational component applies the regulations concerning the students' professional activity.	Fulfilled	There are no recommendations
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.	Fulfilled	There are no recommendations
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.	Fulfilled	There are no recommendations
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.	Fulfilled	There are no recommendations
	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.	Fulfilled	There are no recommendations
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.	Fulfilled	There are no recommendations
25.	**I.P.C.2.2.2.** The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.	Fulfilled	There are no recommendations
26.	**I.P.C.3.1.1** The organisational component consistently applies the procedures, and proves their impact on quality assurance.	Fulfilled	There are no recommendations
27.	**I.P.C.3.1.2** Members of its own community and other stakeholders are involved in the procedure implementation process.	Fulfilled	There are no recommendations
28.	**I.P.C.4.1.1** The organisational component analyses the results of the students' biannual evaluation of teachers.	Fulfilled	Encouraging doctoral students to evaluate their doctoral coordinators annually.
29.	**I.P.C.5.1.1** The organisational component systematically collects and analyses data required for the internal quality assurance process.	Fulfilled	There are no recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
30.	**I.P.C.6.1.1** The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.	Fulfilled	There are no recommendations
31.	**I.P.C.6.1.2** The organisational component ensures transparent decision-making processes.	Fulfilled	There are no recommendations
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.	Fulfilled	There are no recommendations

Summary Table of Performance Indicators – Degree of Fulfillment

Evaluation Domain	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

The evaluation of the performance indicators shows that 32 indicators are fulfilled.

VI. Conclusions

Following the evaluation of the documentation provided and the on-site visit, the following conclusions can be drawn regarding the activity of the Electrical Engineering Domain belonging to the Doctoral School of the Gh. Asachi Technical University of Iasi:

- The Electrical Engineering Domain is well integrated into the national educational and research environment by educating highly qualified specialists who are well prepared to address the challenges of modern technologies.
- The Faculty of Electrical Engineering provides the Electrical Engineering Domain with modern, well-equipped laboratories and excellent learning resources, including access to up-to-date scientific literature and documentation.
- The domain benefits from highly competent PhD supervisors with strong academic and research achievements, contributing significantly to the quality of doctoral education and scientific excellence.
- Greater emphasis should be placed on expanding international collaborations and strengthening the integration of the Electrical Engineering Domain into scientific European research networks addressing topics of strategic scientific and technological importance.

Following the completion of the maintaining accreditation procedure, the decision of the evaluation panel shall be one of the following: maintaining accreditation (MAC);

VII. Annexes

On-site visit timetable
Meeting minutes

Comprehensive Registry of Reviewed Documents with Direct Links

The following list contains official university, national, and international documents reviewed during the evaluation process that are accessible electronically:

Legal framework for organization and operation

https://www.tuiasi.ro/comisia-pentru-evaluarea-si-asigurarea-calitatii-ceac/
https://www.tuiasi.ro/wp-content/uploads/2025/04/Anexa-I.1.1.b-Monitorul-Oficial-nr.-284-din-08.121937_UT-Iasi-1.pdf
https://www.tuiasi.ro/wp-content/uploads/2025/04/Anexa-I.1.1.c-HG-nr.-209-din-17-mai-1993_UT-Iasi-1.pdf
https://www.tuiasi.ro/wp-content/uploads/2025/04/Anexa-I.1.1.d-HG-nr.-1030-din-23_august_2024.pdf
(https://www.tuiasi.ro/wp-content/uploads/2023/12/Carta-TUIASI-15.12.2023_final_adoptata.pdf
https://www.tuiasi.ro/wp-content/uploads/2025/04/Anexa-I.1.3-Obiective-strategice-TUIASI.pdf
https://www.tuiasi.ro/raport-privind-starea-universitatii/
https://www.tuiasi.ro/wp-content/uploads/2025/04/Anexa-I.1.5.3%E2%80%93-Digitalizare-proiecte-PICD.pdf
https://ingenium-university.eu/
https://international.tuiasi.ro/
https://www.tuiasi.ro/wp- ontent/uploads/2025/04/Anexa-I.1.5.4-TUIASI-Mobilitati-ERASMUS-2024.pdf
(https://www.tuiasi.ro/manualul-procedurilor/#proceduri-operationale-manageriale
https://campus.tuiasi.ro/
https://www.tuiasi.ro/wp-content/uploads/2025/12/COD.01-E4R1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/07/Reg11.pdf
https://doctorat.tuiasi.ro/descopera/csud/
http://tuiasi.ro/biblioteca
http://www.bulipi-eee.tuiasi.ro/index_ro.html
https://www.epe.tuiasi.ro/2024/
https://www.sielmen.tuiasi.ro/
http://www.eemj.icpm.tuiasi.ro/
https://doctorat.tuiasi.ro/studii-de-doctorat/regulamente/
https://doctorat.tuiasi.ro/descopera/scoala-doctorala/
https://doctorat.tuiasi.ro/alegeri/
https://doctorat.tuiasi.ro/wp-content/uploads/2024/06/PO.CSUD_.09-2.pdf
https://cmt.tuiasi.ro/alumni/
https://www.consiliere.tuiasi.ro/
https://campus.tuiasi.ro/
https://doctorat.tuiasi.ro/wp-content/uploads/2025/03/Chestionar-satisfac%C8%9Bie-studen%C8%9Bi-doctoranzi-2025.pdf
https://cmt.tuiasi.ro/descopera-cmt-tuiasi/

Description of the doctoral university study field: Electrical Engineering

https://www.aracis.ro/wp-content/uploads/2022/02/Hotararea-Consiliului-ARACIS-nr.-123-din-16.12.2021.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/10/Planuri-invatamant-2025-2026.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/12/PO.CSUD_.10-E1R2.pdf
https://doctorat.tuiasi.ro/studii-de-doctorat/contracte-de-doctorat/
https://doctorat.tuiasi.ro/descopera/scoala-doctorala/
https://doctorat.tuiasi.ro/wp-content/uploads/2025/09/PO.CSUD_.01-E3R2.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/06/PO.CSUD_.02.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/07/Reg11.pdf

https://doctorat.tuiasi.ro/descopera/transparenta/
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/13-1.pdf
https://www.tuiasi.ro/manualul-procedurilor/#proceduri-prorectorat-studenti
https://doctorat.tuiasi.ro/studii-de-doctorat/regulamente/
https://doctorat.tuiasi.ro/wp-content/uploads/2025/03/Chestionar-satisfac%C8%9Bie-studen%C8%9Bi-doctoranzi-2025.pdf
https://doctorat.tuiasi.ro/conducatori-de-doctorat/
http://www.bulipi-eee.tuiasi.ro/index_ro.html
https://doctorat.tuiasi.ro/wp-content/uploads/2024/04/Procedura-abilitare-PO.CSUD_.05..pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/12/PO.CSUD_.03-E2R1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/6.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/06/PO.CSUD_.09-2.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/02/ghid-prezentare-doctorat_ro_18.01.25-1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/14.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2026/03/IEEIA.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/09/PO.CSUD_.01-E3R2.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/02/ghid-prezentare-doctorat_ro_18.01.25-1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/11.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/13-1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/14.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/17.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2025/07/Reg11.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/12/REG.38-E3R1_Senat.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/02/REG.42-Regulament-Centrul-demanag-talente-E1R0.pdf
https://doctorat.tuiasi.ro/proiecte/doctalent4eu/
https://doctorat.tuiasi.ro/contact/
https://www.consiliere.tuiasi.ro/wp-content/uploads/2024/11/01-Brosura-reteaua-de-suport-26.05.2024.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2026/03/IEEIA.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2026/03/PO.CSUD_.02_E5R2-1-1.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/12/REG.38-E3R1_Senat.pdf
https://doctorat.tuiasi.ro/studii-de-doctorat/planuri-de-invatamant/
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/11.pdf
https://doctorat.tuiasi.ro/wp-content/uploads/2024/03/13-1.pdf
https://www.aracis.ro/wp-content/uploads/2022/02/IOSUD238_C11_03.07.2025.pdf

Calendarul vizitei de evaluare externă a calităţii domeniului de studii universitare de doctorat/ The timetable for the evaluation of the external quality evaluation visit for the doctoral university study domain

Instituţia de învăţământ superior/Organizaţia furnizoare de educaţie/ Higher Education Institution / Education Provider Organization: Universitatea Tehnică ”Gheorghe Asachi” din Iaşi

Şcoala doctorală/ Doctoral School:

Domeniul de doctorat/ Doctoral Domain: Inginerie electrică / Electrical Engineering

Obiectivul evaluării externe/ The objective of the external evaluation: *(autorizare de funcționare provizorie/acreditare/menținerea acreditării domeniului de doctorat) Menținerea acreditării domeniului de doctorat / Maintaining the accreditation of the doctoral field*

Perioada vizitei de evaluare/ The evaluation period: *01.09.2026-02.09.2026*

Comisia de experţi evaluatori ai ARACIS/Evaluation panel:

Nr./No.	Numele şi prenumele/ Last Name and First Name	Calitatea/Team role
2.	*Milici Laurenţiu Dan*	*Membru - Cadru didactic RNE*
3.	*Ferrao de Paiva Martins Rodrigo*	*Membru - Evaluator internațional RNE-I*
4.	*Ilie Ana Lavinia*	*Membru - Student doctorand RNE-S*

Reprezentantul IÎS/OFE:

Nr./No.	Numele şi prenumele/ Last Name and First Name	Calitatea/Team role
1.	*Olariu Marius Andrei*	*Persoană de contact/Contact person*

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
01 septembrie 2026			
08:30-09:30	Discuții tehnice în cadrul comisiei de experți în evaluarea externă a calității/ *Technical discussions within the expert committee for external quality evaluation*	- Comisia de experți evaluatori ai ARACIS/ *Panel members*	Sala/Locația/ **Room/Location** Sala Consiliu - IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof. Univ.Dr.Ing. O.M. Prof. Univ.Dr.Ing. F.C. Prof. Univ.Dr.Ing. G.G. Drd.Ing. O.C.P.
09:30-10:30	Întâlnirea comisiei de experți în evaluarea externă a calității cu **reprezentanții conducerii componentei organizatorice/** *Meeting of the external quality evaluation experts' panel with the representatives of the management of the organisational component*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Reprezentanți ai conducerii componentei organizatorice aferente domeniului de studii de doctorat evaluat/ *Representatives of the management of the organisational component* - Persoana de contact/ *Contact person*	Sala/Locația/ **Room/Location** Sala Consiliu - IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof. Univ.Dr.Ing. A.S. – Director Prof. Univ.Dr.Ing. G.A. – Director Prof. Univ.Dr.Ing. D.L. – Dean Prof. Univ.Dr.Ing. G.G. – CCPD Director
10:30-11:20	Întâlnirea comisiei de experți evaluatori în evaluarea externă a calității cu **echipa care a realizat raportul de evaluare internă (REI)/** *Meeting of the external quality evaluation experts' panel with the team that has drafted the internal evaluation report*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Echipa care a realizat REI/ *Team that has drafted the IER*	Sala/Locația/ **Room/Location** Sala Consiliu - IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof. Univ.Dr.Ing. O.M. Prof. Univ.Dr.Ing. F.C. Drd.Ing. O.C.P.

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
11:20-11:30	Pauză/ *Break*		
11:30-12:30	Vizitarea bazei materiale/ *Visiting the material resources*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Reprezentanți ai instituției / *Representatives of the HEI*	Conversia energiei şi controlul mişcării (CECM) Laborator de roboți inteligenți, interfețe creier-calculator şi controlul neuroprotezelor (ROBBCI) Laborator Maşini electrice de putere Laborator Calculul numeric al maşinilor electrice Laborator de Modelarea, Simularea şi Regimuri Tranzitorii ale Maşinilor Electrice, Automate Programabile Monitorizare, diagnosticare, testare, echipamente si aparate electrice (MODITEST) Laborator Plasmă non-termică şi aplicaţii Laborator de măsurare a parametrilor de mediu (MEDIOLAB) Laborator de sisteme moderne de măsurare (SMM) Laborator de compatibilitate electromagnetică şi descărcări electrostatice LIDES Laborator de calitate, fiabilitate şi materiale avansate
12:30-13:30	Pauză de prânz/ *Lunch*		
13:30-14:30	Întâlnirea comisiei de experți în evaluarea externă a calității cu **studenți**[1] **doctoranzi** din cadrul DSUD/	- Comisia de experți evaluatori ai ARACIS/ *Panel members*	Sala/Locația/ **Room/Location** Sala Consiliu - IEEIA

[1] Nu este obligatorie în cazul autorizării domeniilor de studii universitare de doctorat/ It is not mandatory in the case of authorization of doctoral university study domain.

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
	Meeting of the external quality evaluation experts' panel with doctoral students of the DSUD	- Studenți doctoranzi/ *Doctoral students*	Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: S.D./ 1st year C.P.O./ 4th year A.S./ 1st year G.P./ 1st year I.C./ 2nd year G.C.B./ 2nd year A.A./ 2nd year C.S./ 3rd year P.B.A./ 3th year S.L.A. S.I. D.I.M. L.R.C. G.S.S. T.G. F.M.A.
14:30-14:40	Pauză/ *Break*		
14:40-15:30	Întâlnirea comisiei de experți în evaluarea externă a calității cu **personalul didactic** implicat în activitățile din cadrul DSUD/ *Meeting of the external quality evaluation experts' panel with the teaching staff involved in the activities within the DSUD*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Cadre didactice conducători de doctorat/ *Teaching staff who are PhD supervisors*	Sala/Locația/ **Room/Location** Sala Consiuliu Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting:** Toti conducatorii de doctorat

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
15:30 - 16:20	Întâlnirea comisiei de experți în evaluarea externă a calității cu **responsabilii centrelor/laboratoarelor de cercetare** / *Meeting of the external quality evaluation experts' panel with the staff in charge with the research centres/laboratories*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Responsabilii centrelor/laboratoarelor de cercetare/ *Staff in charge with research centres/laboratories*	Sala/Locația/ **Room/Location** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - Prof. univ. dr.ing. M.S.P. - Prof. univ. dr.ing. C.R.C. - Prof. univ. dr.ing. A.S. - Prof. univ. dr.ing.. M.A. - Prof. univ. dr.ing. C.D.
16:20-16:30	Pauză/ *Break*		
16:30-17:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **absolvenți**[2],[3] ai DSUD/ *Meeting of the external quality evaluation experts' panel with alumni*[4] *of the DSUD*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Absolvenți ai domeniului de studii evaluat/ *Graduates*	Sala/Locația/ **Room/Location** Sala Consiliu/IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: R.F./ 2023 T.F./ 2025 A.M./ 2026 A.M./ 2024

[2] Se va evita invitarea absolvenților care sunt angajați ai IÎS sau ai OFE, după caz.
[3] Nu este obligatorie în cazul autorizării domeniilor de studii universitare de doctorat

[4] Avoid inviting alumni who are also staff of the HEI or members of the Romanian Academy, as applicable.

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
17:00-18:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **angajatori** ai absolvenților DSUD/ *Meeting of the external quality evaluation experts' panel with employers[5] of the DSUD alumni*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Angajatori/ *Employers*	Sala/Locația/ **Room/Location** Sala Consiliu/IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: Apavital SA / M.S. Aumovio / M.S. PHINIA SA / O.G. PHINIA SA / M.R. Turck SRL / S.U.
02 septembrie 2026			
09:00 - 09:30	Întâlnirea comisiei de experți în evaluarea externă a calității cu reprezentanți ai structurilor organizatorice în domeniul asigurării calității/ *Meeting of the external quality evaluation experts' panel with representatives of the quality assurance organisational structures*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Reprezentanți ai structurilor organizatorice în domeniul asigurării calității/ *Representatives of quality assurance organisational structures*	Sala/Locația/ **Room/Location** CSUD Secretariat/Rectorate TUIASI Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: Prof. univ. dr. I.M. – Director Conf.univ.dr. E.S. A.P. - Officer
09:30 - 10:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu membri ai **Comisiei de etică universitară**/ *Meeting of the experts panel with members of the University Ethics Committee*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Membri ai Comisiei de etică universitară/ *Members of the University Ethics Committee*	Sala/Locația/ **Room/Location** CSUD Secretariat/Rectorate TUIASI Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof.Univ.Dr.Ing C.G. – Member of University Ethics Committee Conf.Univ.Dr.Ing. F.S. – Member of University Ethics Committee

[5] Avoid inviting employers who are also staff of the HEI or members of the Romanian Academy, as applicable.

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
10:00- 11:00-	**Întâlnirea tehnică** a comisiei de experți evaluatori (Activitate în colaborare pentru clarificarea aspectelor prezentate în REI)/ *Technical meeting of the expert evaluation panel (Collaborative activity for clarifying the aspects presented in the Internal Evaluation Report - IER)*	- Comisia de experți evaluatori ai ARACIS/ *Panel members*	Sala/Locația/ **Room/Location** Sala Consiliu/IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof. Univ.Dr.Ing. O.M. Prof. Univ.Dr.Ing. F.C. Drd.Ing. O.C.P.
11:00- 12:00	Întâlnirea membrilor comisiei de experți evaluatori cu reprezentanții conducerii IÎS sau a OFE, după caz și ai conducerii componentei organizatorice pentru comunicarea concluziilor procesului de evaluare/ *Meeting of the members of the expert evaluators' panel with representatives of the management of the HEI or the EP, as applicable, and management of the organisational component, to communicate the conclusions of the evaluation process*	- Comisia de experți evaluatori ai ARACIS/ *Panel members* - Reprezentanți ai conducerii și ai domeniului de studii evaluat/ *Representatives of the management* - Persoana de contact/ *Contact person*	Sala/Locația/ **Room/Location** Sala Consiliu/IEEIA Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: Prof. Univ.Dr.Ing. O.M. Prof. Univ.Dr.Ing. F.C. Prof. Univ.Dr.Ing. G.G. Drd.Ing. O.C.P.