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. 7
la Hotărârea Consiliului ARACIS nr. 318/H/22.10.2026

Anexa 7.4

DATE DE IDENTIFICARE	
Instituţia de învăţământ superior/organizaţia furnizoare de educaţie	Universitatea „Babeş-Bolyai“ din Cluj-Napoca
Şcoala(ile) doctorală(e)	Matematică şi Informatică
Domeniul de studii universitare de doctorat (DSUD)	*Informatică*
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 Exacte și Științe ale Naturii (CPS_C1) din 05.10.2026, propunerea de decizie fiind consemnată în PV **nr.** 5070/05.10.2026**.**

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

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: 0	**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: 0 N: 0
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: 0	**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: 0 N: 0
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: 0	**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: 0 N: 0

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 îndeplinit și 0 neîndeplinit*
- *26 standarde: 26 sunt îndeplinite, 0 neîndeplinite,*

*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 maintaining accreditation of Doctoral Study Domain

Higher Education Institution/Education Provider Organization:	**BABEȘ-BOLYAI UNIVERSITY, CLUJ-NAPOCA**
Doctoral School:	**Mathematics and Computer Science**
Doctoral Domain:	**Computer Science**
The objective of the external evaluation:	**Maintaining accreditation (MAC)**

Members of the ARACIS Evaluation Panel

No.	Last Name and First Name	Team role	Signature
	Zaharie Daniela	Expert evaluator	
2.	**Perjan Andrei**	International Expert	
3.	**Dincă Laurențiu-Gabriel**	PhD Student Evaluator	

I. Introduction

- the context in which the external evaluation report was drafted (the type of evaluation, the period covered by the evaluation, membership of the external quality experts' panel, etc.);

This report has been drafted according to the *procedure for maintaining accreditation* of the doctoral study domain of *Computer Science* at Babes-Bolyai University, Cluj-Napoca. The evaluation corresponds to the period from the previous external evaluation (in 2021) to the submission of the Internal Evaluation Report (IER) (in March 2026). The process is conducted by the Romanian Agency for Quality Assurance in Higher Education (ARACIS).
The members of the *External Quality Experts' Panel* are*:*

- **One expert evaluator (coordinator):** Prof. Daniela ZAHARIE PhD supervisor from the National Register (RNE–CD).
- **One international expert:** Prof. Andrei PERJAN from the International Register (RNE–RI).
- **One doctoral student evaluator:** Laurențiu-Gabriel DINCĂ member of the National Register of student evaluators (RNE–S).

- description of the higher education institution / Romanian Academy (establishment, evolution, mission, governance, structure, study programmes/domains, external quality evaluation procedures applied);

Babeș-Bolyai University of Cluj-Napoca (UBB) is the largest and most comprehensive higher education institution in Romania with a long tradition of excellence in many fields and with a particular multicultural and multilingual profile. Its mission, as stated in the UBB Charter, is to ensure knowledge generation through an intensive research-development-innovation process and to provide education in line with the requirements of a society based on knowledge and values. Currently, UBB consists of 23 faculties grouped in 6 academic schools. UBB is a member of the Eutopia alliance.
The doctoral studies are organised by Doctoral Schools, which are grouped in and coordinated by the Institute for Doctoral Studies (ISD). Doctoral Schools operate as departments within faculties or within UBB research/ development/ innovation units. Doctoral Schools are managed by a School Council and a director, both elected by the members of the doctoral school. Currently, ISD includes 32 doctoral fields. The last institutional evaluation of the doctoral study programs was in 2021 and the accreditation was maintained for all doctoral fields (ARACIS Council Decision No. 132/2021).

- general description of the doctoral study domain (why it was established - in the case of a provisional authorisation to operate; evolution and/or changes since the last external quality evaluation procedure - in the case of procedures intended for accreditation or maintaining accreditation, as applicable).

The Computer Science doctoral field was established in 2006 (OMEC no. 4843/2006) and since then it has functioned continuously in the framework of the Doctoral School of Mathematics and Computer Sciences (DS-MCS) which is part of the Faculty of Mathematics and Computer Science. Since the last external quality evaluation procedure, there are several changes that have been identified:

- the number of PhD supervisors increased with 6 (from 6 to 12);
- the number of research groups involved in the doctoral education increased, by including new directions, particularly related to software engineering which were less represented before;
- the curriculum was extended to include topics corresponding to the research directions of the newly affiliated supervisors and currently the educational offer consists of 9 elective subjects;
- the financial support for doctoral students increased (currently 9200 lei/year) leading to an increase of participation of the students to international mobilities.

II. Methods used

- Analysed documents (internal evaluation report and its annexes; additional documents requested before and during the on-site visit, if any; other documents or data);

The evaluation was based on the analysis of the **Internal Evaluation Report (IER)** finalized in **March 2026** and the additional documents accessible through the links included in the report. These documents included:

- **Regulations, methodologies, and procedures:** UBB Charter, ISD Regulations, and DS-MCS regulations.
- **Curricular documents:** study program (9 elective subjects in Computer Science and a mandatory subject on Ethics and Academic Integrity), and the corresponding syllabi.
- **Human Resources:** individual CVs, lists of papers, list of supervised PhD students, and CNATDCU verification sheets for the 12 doctoral supervisors, including Hirsch indices from Web of Science, Scopus, and Google Scholar.
- **Student Activity Records:** Data on student enrollment evolution, and a summary of research results for active PhD students.
- **Scientific Output:** A list of the 307 papers published by doctoral students and abstracts of the 30 theses successfully defended between 2021 and 2026 as are available on the corresponding web page of the Institute for Doctoral Studies.
- **Quality Assessment Reports:** Reports of the Qualitas Center.
- **Other publicly available data sources:** web site of the RIA Research Institute, web site of Eutopia alliance.

- On-site visit (general list of visited locations and categories of persons with whom debates have been organised);

The on-site visit included the presentation of the HPC infrastructure, lecture and lab rooms, as well as meetings (organized in room 9/I from the main building of UBB) with several groups of persons and stakeholders relevant to the activity of the Doctoral School of Mathematics and Computer Science (according to the annexed Evaluation Timetable):

- representatives of the management structures of the faculty (dean and vicedean of the Faculty of Computer Science, director of the Department of Computer Science) and doctoral school (director of the Doctoral School of Mathematics and Computer Science, members of the doctoral school council);

- members of the academic staff (doctoral supervisors, directors of research centers and leaders of research groups)
- representatives of the quality evaluation structures (Qualitas Center) and of the ethics committee
- representatives of the doctoral students and graduates
- representatives of the socio-economic environment (IT companies)

- Other relevant methods or aspects.

The contact person (director of DS-MCS) and the members of the doctoral school who were involved in the preparation of IER provided additional information as requested by the evaluation team. All relevant aspects, including the conclusions of the visit and the recommendations have been discussed with the representatives of the doctoral school.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Organizational components: UBB is an institution that can organize doctoral studies in compliance with the National Education Law (199/2023) and the UBB charter. The doctoral studies at UBB are organised in several Doctoral Schools, grouped in the Institute for Doctoral Studies (ISD). Doctoral Schools operate as departments within faculties or within UBB research units and are managed by a School Council and a director, both elected by the members of the doctoral school. The doctoral field of **Computer Science** is integrated in the **Doctoral School of Mathematics and Computer Science** (DS-MCS).

Management system: the management is regulated at each of the following levels:

- **University level:** the governance is ensured by the University Senate and the University Administrative Council, which establish the general administrative and academic directions.
- **ISD level:** The **Council for Doctoral Studies** oversees the strategic management of doctoral programs and includes representatives of both teaching staff and doctoral students.
- **Doctoral School level:** The Council of the Doctoral School of Mathematics and Computer Science manages operational activities, including the approval of curricula and affiliations of PhD supervisors. DS-MCS is assimilated as a department of the Faculty of Mathematics and Computer Science.

The operation of these components is based on a comprehensive set of methodologies, regulations, and procedures, including:

1. **UBB Charter,** which defines the institution's mission as a comprehensive university of advanced research and education.
2. **Institutional Regulations for Doctoral Studies** (last update in 2024), which provides the framework for organizing doctoral study programs in all doctoral fields.
3. **Regulations for Organisation and Functioning of the DS-MCS**, which include specific rules for the activity of DS-MCS, admission criteria, standards for acceptance of PhD theses in Computer Science, and affiliation of the doctoral supervisors within the Computer Science field.

4. Specific methodologies for admission, doctoral study contracts, thesis completion, and the recognition of supervisor status obtained abroad.

All these documents are publicly accessible on the UBB website and web pages of the DS-MCS.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The organizational structure of UBB-ISD and DS-MCS creates a functional environment that allows to reach high standards of doctoral education in Computer Science. The management system provides the guiding lines and ensures that the activity is in accordance with national and institutional regulations. All normative documents are publicly available on the UBB website and on the DS-MCS site. The tight relation between the DS-MCS and the Faculty of Mathematics and Computer Science and between the research groups in Mathematics and in Computer Science is beneficial for all involved parties and facilitates interdisciplinary research.

✓ Aspects that constitute best practice examples

- All processes are well regulated and the management levels are well coordinated
- The collaboration between the doctoral fields in Mathematics and Computer Science is well appreciated and represents a good example of an efficient collaborative environment.

✓ Recommendations

- Consider creating a consultative board (as support for the doctoral school council) of specialists from other national/international institutions, including IT companies with R&D departments and alumni who could be involved in establishing the development strategy.

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[1] and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Within the DS-MCS at UBB, the process of adopting and revising methodologies, regulations, and application procedures is based on an institutionalized consultation with internal and external stakeholders. Each doctoral field, including Computer Science, is represented in the ISD Council, ensuring that field-specific needs are addressed during regulatory updates.

[1] The faculty, department, subsidiary, extension - hereinafter “organisational components”

.
The university employs several mechanisms to ensure stakeholders participation:

- **Management level:** Regular meetings are held by the *Council of the Doctoral School (CSD)* and the *Council for Doctoral University Studies (CSUD)* to discuss proposals for changing or updating specific procedures.
- **Academic level:** Doctoral supervisors are informed and consulted regarding the content of the curriculum corresponding to the advanced training programs for students. Faculty and department opinions are collected through faculty councils and specialized committees.
- **Student level:** Students are represented in the management structures (Senate, ISD and doctoral school and faculty councils).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The existence of various consultation channels ranging from formal council representation to periodic meetings of the PhD supervisors and PhD students ensures that revisions of methodologies/ regulations/ procedures are informed by the practical experiences of supervisors and students.

The involvement of external stakeholders from the IT industry is particularly relevant for the Computer Science domain.

✓ Aspects that constitute best practice examples

- Good practices related to the engagement of relevant stakeholders in decision-making are transferred between the two fields corresponding to the doctoral school (Mathematics and Computer Science)

✓ Recommendations

- Continue the transparent and inclusive strategy of revising the methodologies and enhance the involvement of external stakeholders (alumni, representatives of the IT companies) in the consultation process.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UBB legally owns educational and research facilities distributed in several buildings in Cluj-Napoca as well as in 23 other localities. The facilities include:

- **Education facilities:** the university owns more than 85 buildings used as educational spaces (lecture halls, classrooms, seminar rooms, laboratories, and spaces for practical activities). Doctoral students have access to the lecture/seminar/lab rooms in the main building of UBB and in the building from FSEGA campus (floor 3). All working spaces are properly equipped and some of them are with digital access.
- **Research facilities:** UBB has a Strategic Research Infrastructure (rUBB Platform; InfrastructuraUBB) with over 100 research units (UC-UBB) out of which 16 are centers of excellence in research, development, and innovation. PhD students in Computer Science also have access to the HPC infrastructure of UBB. The access is requested by filling an online form and the academic staff and the doctoral students have priority.
- **Practice and training facilities:** UBB owns 5 practical training centres distributed over the country.
- **Documentation facilities:** the students have full access to the Lucian Blaga Central University Library (BCU), along with its network of 29 branch libraries, 4 special libraries, and 8 university branch campus libraries.
- **e-learning facilities:** UBB has an e-learning platform (ID Portal) managed by the Centre for Continuing Education, Distance and Part-Time Learning (CFCIDFR). Online access is offered from all locations.
- **Collaborative working facilities:** the PhD students in Computer Science have access to the IoTLab (Internet of Things Lab) laboratory that can be used as a co-working space. There are also labs equipped for research activities related to robotics and virtual reality.
- **Accommodation:** UBB offers access for students in 21 residence halls and 20 student restaurants and cafeterias
- **Facilities for students with disabilities:** the Centre for Students with Disabilities facilitates and supports the inclusion of students with diverse learning needs in university life
- **Additional facilities:** a sports centre (including a swimming complex, several sports halls, fitness rooms etc.), an astronomical observatory, several foreign cultural centers and a botanical garden.

✓ Analysis of the state of facts, in relation to the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The material resources owned by UBB cover the specific needs and are of high standards:

- The teaching and learning facilities are extensive, satisfy specific requirements and are well equipped.
- The research facilities are of a high standard and create the appropriate environment for high-quality research.
- The digital infrastructure provides high-quality conditions for distance education and for documentation.
- The students can benefit from good accommodation, access to various health and well-being facilities (e.g. medical offices, sports halls).
- There is considerable support for students with disabilities.

✓ Aspects that constitute best practice examples

- Prioritized access to HPC infrastructure.
- The network of practical training centers.
- The support offered to students with disabilities.

✓ Recommendations

- Ensure the continuous technical support for the HPC infrastructure and put in practice a systematic program for infrastructure upgrades to ensure continued competitiveness and alignment with international advances in high-performance computing and artificial intelligence.
- Consider the creation of additional collaborative research spaces for doctoral students (if possible with unlimited time access, i.e. 24/7) to accommodate the anticipated growth in the Computer Science PhD population and foster research interaction and collaboration.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The strategic development plan developed at the level of the Faculty of Mathematics and Computer Science includes measures related to the management of the material resources aiming to ensure sustainable development and usage at established standards of education spaces and computational infrastructure.
- The university adopted the “UBB Goes Green” strategy aiming to stimulate sustainable development that also takes into account environmental protection.

✓ Analysis of the state of facts, in relation to the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The sustainability programs implemented in recent years suggest that UBB is committed to ensuring high-level conditions for studying and living for all students, including doctoral students. The proactive maintenance and modernization policy allows the appropriate and efficient usage of all material resources

✓ Aspects that constitute best practice examples

- “UBB Goes Green” strategy represents a good practice that illustrates the commitment of the institution to contribute to the sustainable development of the educational environment and to

the increase, amongst the academic community, of the awareness on environmental challenges.

✓ Recommendations

- no specific recommendation (just continue to ensure specific maintenance and upgrading for AI-specialized hardware, e.g., GPU servers).

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The doctoral field in Computer Science is supported by a team of 12 PhD supervisors, all of them being part of the teaching staff at the Faculty of Mathematics and Computer Science.
- The information related to the expertise and scientific results of all PhD supervisors (the year of obtaining the habilitation, the Google Scholar identifier with reference to the Google indexed scientific activity, the CNATDCU standards verification sheet, the personal website) is public on the web page of the DS-MCS.
- All PhD supervisors satisfy the CNATDCU standards, in some cases the standards being significantly exceeded (for all supervisors the standards are exceeded by a factor of at least 2.5 and for 7 out of 12 supervisors the factor is larger than 5).
- All PhD supervisors coordinated several research projects obtained by national or international competition.
- The topics included in the doctoral advanced studies program are presented on the website of DS-MCS. Detailed information for each topic is available in the corresponding syllabus available on the same web page.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

- All PhD supervisors are actively involved in research activities, and coordinate research groups that are part of accredited research institutes (*Institute for Research in Artificial Intelligence, Virtual Reality and Robotics* coordinated by prof.dr. Horia F. Pop and the *Software Engineering*

Research Center coordinated by prof.dr. Simona Motogna). The supervisors are very active in research, being currently involved in national or international research projects and having a very good international visibility.
- There is a sustainable development strategy of the Computer Science doctoral field materialized in an increase of the number of PhD Supervisors with 6 (the number of doctoral supervisors doubled) after the previous evaluation visit in 2021.
- The curriculum of the doctoral advanced studies program contains 9 elective topics all of them being related to the expertise of the nominated teacher.

✓ Aspects that constitute best practice examples

- The scientific performance of the PhD supervisors, reflected in published papers and research projects is excellent.
- The PhD supervisors have a very good visibility both at national and international level as well as fruitful collaborations.
- The offer of topics included in the doctoral advanced program is variate and in line with the research expertise of the PhD supervisors and with the active research topics in Computer Science.

✓ Recommendations

- no specific recommendation (just maintain the the website Institute for Research in Artificial Intelligence, Virtual Reality and Robotics and the website of DS-MCS updated with information about the activity and recent results obtained by the members of the doctoral school).

The indicator is: fulfilled

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

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The institution has a strategy for human resources development that provides a framework to create and maintain a high motivation amongst the staff members and ensure a sustainable development of the staff level of expertise.
- The academic career of each staff member is guided by an Individual Career Development Plan (PIC) that is put in practice since 2020.
- There are periodically organized scientific events, e.g. scientific seminars, conferences of invited lecturers, that facilitate the contact of PhD supervisors and students with internationally renowned researchers and experts from IT companies.
- The institution implements a strategy to support the professional development, including the research activities (e.g. SEED grants, access to mobilities through Erasmus+, CEEPUS, Eutopia alliance).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The individual career planning (PIC) is used as a tool helping the staff to set short-term development goals, to allocate the human resources efficiently and to provide supporting data for (self)-evaluation of the staff members. Both the PhD supervisors and the PhD students can benefit from Erasmus+ mobilities as well as from the collaborative activities in the context of the Eutopia alliance.

✓ Aspects that constitute best practice examples

- The support offered to the staff through internal UBB grants for supporting research activities
- The professional development programmes that include workshops and trainings aiming to guide the staff in creating and maintaining a supportive working environment

✓ Recommendations

- no specific recommendation (just continue and extend the organization of scientific events that involve PhD supervisors and students, e.g. MaCS conference).

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The process of recruitment of teaching and academic staff is organized in a transparent manner and according to the legal regulations in force, as specified in the Methodology for Competitive Selection for Filling Vacant Academic and Research Positions and the Methodology for Organizing and Conducting Promotion Examinations in the Academic Career. The procedures are clear and publicly available on the webpage of the Qualitas Center.
- The recruitment process for doctoral supervisors takes place in two stages: obtaining habilitation, followed by the procedure of affiliation into a doctoral school within ISD. The process relies on the UBB Regulation on the Public Defense of Habilitation Theses and the Co-option of Doctoral Supervisors.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The recruitment processes (habilitation and affiliation) are well regulated and transparent, the legal aspects are carefully checked and the information related to the vacant positions and the recruitment process (including the legal context, the minimal requirements specific for each position and the required documents) are public. All processes are well documented.There is a clear procedure for recognizing the habilitation title obtained abroad.

✓ Aspects that constitute best practice examples

- UBB fosters the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers, reflected in its ongoing commitment to renewing the "HR Excellence in Research" award.
- The principles governing the organisation and conduct of competitions for hiring researchers at UBB align with those outlined by CoARA (Coalition for Advancing Research Assessment), to which the university is a signatory.
- The information on the habilitation process is publicly available, including the archive with all habilitation thesis documents defended since 2013.
- Transparency and high standards of the habilitation and affiliation process.

✓ Recommendations

- no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The digitalization of education and management processes at UBB is implemented by the Information and Communications Technology Directorate (DTIC), which implements the Digital Transformation Strategy of Babeș–Bolyai University, so that, according to the strategy, the majority of academic and administrative processes are already digitalised.
- Most academic and administrative processes are digitalized, both for the staff (14 dedicated services) and for the students (12 dedicated services):
    - **Services for the academic and administrative staff:** FluxUBB, Email, Microsoft Teams, Online Admission, Teaching Degree Registration, AcademicInfo, Workload Planning, Events – Online Payments, Rector's Order (CMS UBB), Cloud UBB, EduRoam, Hosting UBB.
    - **Services for research:** Research Management, STAR-UBB Institute Evaluation.
    - **Services for students:** CTP Subscription Reimbursement Request, Email, Microsoft Teams, Graduation Procedures, Scholarship Applications, Online Admission, Doctoral Student Requests, Doctoral Student Clearance Form, AcademicInfo, STAR-UBB Institute Evaluation, Cloud UBB, EduRoam.

- **Support in using the digital systems:** for some of the services offered, there are detailed tutorials.

For doctoral students, there are specific services that allow the record-keeping of doctoral students and their integration with the national Unique Student Registry (REI – rei.gov.ro):

- **AcademicInfo:** records of enrolled doctoral students, including personal data, student ID numbers, and information regarding their doctoral program.
- **Online platform for public defenses** (https://teze.doctorat.ubbcluj.ro/doctorat/) for scheduling and displaying public thesis defenses.
- **Electronic clearance form platform** (https://fisadelichidare.doctorat.ubbcluj.ro) for generating clearance forms in digital format.
- **Platforms for online requests and appointments** (https://solicitari.doctorat.ubbcluj.ro, https://programari.doctorat.ubbcluj.ro)
- **Access to the TurnItIn/iThenticate** electronic system for checking the degree of similarity with other existing works.
- **Free access to academic databases** relevant to the doctoral fields (through the ANELIS program).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The institution follows a coherent digitalization strategy and all services are integrated in an easy-to-access platform managed by the Information and Communications Technology Directorate. By integrating diverse functions, from admission and financial management to academic monitoring and research documentation, into secure, online platforms, the institution has successfully improved access for all members of the community.

There are specific services for doctoral students supporting their specific activities for documentation, planning, reporting and submitting the documents for PhD defense.

✓ Aspects that constitute best practice examples

- The service related to the flow of documents inside the institution (FluxUBB) facilitates the communication between entities and between the community members.
- The online payment service for event organizers.
- The ticketing system allows the users to report on events related to the usage of various components.

✓ Recommendations

- no specific recommendations

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[2] 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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The doctoral program in **Computer Science** at UBB is organized based on transferable study credits (ECTS), totaling **240 credits** for a standard four-year course. The program for advanced doctoral studies includes 3 topics: 2 electives from a list of topics proposed by the doctoral supervisors and a mandatory topic on *Ethics and Academic Integrity*. Currently, the list of elective topics include 9 titles offered by the doctoral supervisors. The structure of the program encompasses both a training component and a research component:

- **Program of advanced doctoral studies:** consists of 30 ECTS credits. The curriculum includes one compulsory subject (*Ethics and Academic Integrity*) and two optional subjects chosen from a list updated annually to reflect current research trends. The current list contains 9 subjects: (1) *Advanced Data Mining Techniques* (prof.dr. Anca Andreica); (2) *Advanced Machine Learning Methods* (prof.dr. Gabriela Czibula); (3) *Search-based Software Engineering* (Prof.dr. Istvan Czibula); (4) *Computational Intelligent Methods for Social Good* (Prof.dr. Laura Diosan); (5) *Computational Intelligence Models in Solving Optimization Problems* (conf.dr. Noemi Gasko); (6) *Programming Paradigms: Basic and Advanced Concepts* (conf.dr. Florin Craciun); (7) *Special Chapters of Data Analysis* (prof.dr. Horia F. Pop); (8) *Quantitative and Qualitative Evaluation of Software Quality* (prof.dr. Simona Motogna); (9) *Empirical Research Methods for Computer Scientists* (conf.dr. Andreea Vescan)
- **Individual research program:** Consists of **210 ECTS** credits focused on the specific topic of the doctoral thesis. This program includes the drafting and presentation of the research project (at the end of the first year) and three periodic research progress reports.
- **Credit distribution and evaluation:** Credits are distributed as **60 ECTS per year**. Each of the subjects included in the curriculum has 10 ECTS credits and 28 hours for the lecture and 14 hours for the lab activity. The evaluation consists of exam/ colloquium or project, depending on the particularity of the subject.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

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

- The curriculum of the doctoral program is annually updated and publicly available on the DS-MCS web site.
- The list of offered electives is varied and covers most of the research directions that correspond to doctoral supervisors.
- The syllabi of all courses are provided in Romanian and in English and contain all relevant information (number of credits, number of hours, pre-requisites, learning outcomes, content, bibliography, evaluation rules).

✓ Aspects that constitute best practice examples

- The syllabi of all courses are provided in Romanian and in English.
- The integration of sustainable development goals in education by specifying SDG labels in syllabi.

✓ Recommendations

- no specific recommendations

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).

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The expected learning outcomes for the Computer Science doctoral program are defined in accordance with the **National Qualifications Framework (NQF/CNC) Level 8**. These outcomes are stated as knowledge, skills, responsibility, and autonomy in the syllabi of all subjects.

The program aligns these outcomes with the professional requirements of the primary occupations targeted by its graduates, which include:

- **Research, development and innovation (R&D&I) positions** in research institutes or companies (IT, banking, financial sector).
- **Academic careers** in the national education system.

The study program offers the skills for the targeted qualifications (systems and computer engineer (215214), computer system programmer (251204), computer project manager (251206), ICT research consultant (ESCO 2511.12), intelligent computer systems designer for ICT (ESCO

2511.11), data analyst (ESCO 2511.3), information analysis expert (ESCO 2511.3), university teachers specialized in computer science (2310.1.24), computer science teachers in secondary or high school education (2330.1.11)).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

Specific competencies targeted by the curriculum include advanced data analysis, critical thinking, mastery of current IT technologies, and high levels of autonomy in identifying research directions and disseminating scientific results. All of these are adequately related to the skills required for the positions targeted by the graduates of the doctoral program.

✓ Aspects that constitute best practice examples

- **Standardized Outcome Framework:** the adoption of the "knowledge, skills, responsibility, and autonomy" format directly facilitates the transparency and comparability of qualifications across the European Higher Education Area.
- **Industry-Relevant Skillsets:** Focusing on advanced competencies like applied research in Artificial Intelligence and Big Data directly addresses the "skills gap" identified in the IT industry.

✓ Recommendations

- Consider defining a matrix that explicitly relates the learning outcomes with the content of the subjects.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UBB implements student-centered learning principles at all education levels. The process is monitored by the UBB Teaching Council (CD-UBB). At the DS-MCS, these principles are implemented through:

- **Personalization of the learning process:** The curriculum allows the doctoral students to personalize their educational experiences and trajectory by choosing 2 out of 9 electives.

- **Flexible research planning:** The Individual Research Plan has a generic structure that allows each student to select activities specific to their doctoral topic.
- **Individual mentorship:** The activity of each student is monitored by a Guidance and Academic Integrity Committee (CIIA**)**, which includes specialists in the field who offer mentoring, assess the scientific outcomes, and provide feedback.
- **Student feedback:** according to the Students Rights and Responsibilities Code the doctoral students can provide feedback related to teaching and mentoring activities, the evaluation platform being accessible to all students.
- **Research integration:** The doctoral students are integrated into the working teams of national and international research projects.

Supporting documents/information are available on the website of DS-MCS.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

UBB is committed to ensuring the implementation of student-centred learning principles through a flexible curriculum and the use of innovative teaching strategies. These principles are integrated into teaching and learning activities and experiences through a well-structured institutional framework based on internal regulations, support mechanisms, and adequate infrastructure. The teachers can benefit of the training into using modern student-centered strategies through the services offered and events organized by Centre for Innovation in Teaching and Learning (CIPI).

The teaching staff involved in the doctoral program in Computer Science have the academic qualifications and educational skills to teach the topics included in the program of advanced doctoral studies and to offer mentorship focused on the learning and working particularities of each PhD student.

The role of the Guidance and Academic Integrity Committee is central to this indicator. The transition from traditional examination to a mentorship-based model through progress reports ensures that more focus is placed on the particularities and needs of each doctoral student.

✓ Aspects that constitute best practice examples

- **Customized curricula:** the extensive list of elective subjects allows each doctoral student to identify a learning path that suits them optimally and is well aligned with the doctoral research goals.
- **Integration in research teams:** the inclusion of doctoral students in the research teams of funded project (e.g. HRIA - Romanian Hub of Artificial Intelligence) provides them with hands-on, student-centered research experience within a professional environment.

✓ Recommendations

- no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The students at UBB, including the PhD students, benefit from several opportunities to participate in mobilities:

- **Erasmus+ programme:** the doctoral students may apply for research stages at universities in one of the partner countries (more than 85).
- **Eutopia alliance:** in the framework of Eutopia alliance there is a project (DISCOVER Student Experiences at EUTOPIA Innovation Challenges) dedicated to students that aims to foster creativity, innovation, and entrepreneurial thinking among alliance students.
- **Blended Intensive Programmes:** UBB students can attend in-person and/or remote mobilities through Blended Intensive Programmes (BIP) and other summer schools. The ECTS credits earned during these activities are recognized according to the specific regulations and procedures corresponding to BIP or international research stages.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The doctoral students at DS-MCS have several opportunities to participate in academic mobilities of different types (study, placement, short term) and with different financement sources (the main financial support is ensured by ISD, i.e. 9200 lei/year per doctoral student). There is a well established methodology for recognizing the credits obtained during the mobility. The information on these opportunities is available on the web page of the International Cooperation Center. From the information collected during the visit, the number of students that benefited from mobilities increased significantly since the last evaluation (mainly due to the increase of the financial support).

✓ Aspects that constitute best practice examples

- UBB has a large number of partnerships with academic institutions across the world

✓ Recommendations

- Strengthen the strategy for co-supervised doctorates (co-tutelle) and institutionalize international research stages as a standard path for doctoral students in Computer Science.

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

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- At UBB, there is a Department of Career Counseling and Guidance that aims to encourage the students to think critically about the process of professional development, to make responsible decisions, to reflect and act in accordance to their interests and values.

- UBB implemented inclusive institutional policies, updating and supplementing two essential guidelines: the UBB Gender Equality Guideline and the Guideline for Combating Discrimination (including the *Code of Conduct Against Antisemitism*, the *Guide on Preventing and Combating Sexual Harassment and Moral Harassment in the Workplace*, and the *Code of Conduct for Preventing and Sanctioning Xenophobia, Radicalisation, and Hate Speech*).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

- UBB provides free support services aiming to facilitate the achievement of maximum academic and professional performance by organizing coaching and personal development workshops, academic writing workshops, and sessions dedicated to the development of critical thinking. These services effectively address the diversity of learning styles and abilities by providing differentiated support where necessary.

- Through the Department of Career Counseling and Guidance the doctoral students benefit from support in clarifying professional options and developing a personalized career plan, identifying opportunities to develop skills required on the labor market, as well as support for self-knowledge and stress management.

- The inclusive institutional policies implemented at UBB ensure equal opportunities for all students and staff and create a safe working environment.

- Furthermore, the selection process during admission, which considers professional background and original research projects, ensures that opportunities are granted based on merit and potential.

✓ Aspects that constitute best practice examples

- The *UBB Gender Equality Guidelines* and the *Guideline for Combating Discrimination* are examples of the institutional commitment to ensure fair treatment of all students, regardless of gender, origin, and learning particularities
- The Department of Career Counseling and Guidance has a various portfolio of services, including specific services for PhD students (including trainings and workshops on academic writing, decision-making, goals planning).

✓ Recommendations

- no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UBB has put in practice several strategies to ensure that all doctoral students, including those with special educational needs or disabilities, have access to a comprehensive range of resources and services tailored to the **Computer Science** domain. Several of these directions are:

- **Support services:** students benefit from integrated services including accommodation, medical services, recreation/sports facilities, and specialized psychological and career guidance through the Department of Career Counseling and Guidance.
- **Support for students with disabilities:** The Centre for Students with Disabilities (CSD) identified effective solutions for evaluating students with disabilities under optimal conditions, as well as in addressing accessibility issues. The CSD has regularly provided faculty members with recommendations for adapting study materials to the needs of students with disabilities..
- **Access to documentation and research resources:** doctoral students in Computer Science have extensive access to the "Lucian Blaga" Central University Library and to electronic scientific resources through the ANELIS Plus program. The specialized scientific resources for doctoral students can be accessed directly from the UBB buildings, or through the E-information portal with authentication from anywhere outside the campus.
- **Research integration:** most doctoral students in Computer Science are directly included in teams for research projects, providing them with practical, high-level learning opportunities; currently 25 PhD students are involved in the HRIA (Romanian Hub of Artificial Intelligence) project and more than 15 are involved in other national and international projects (as results from the web page of DS-MCS).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The provided documents, the online information accessible on the UBB web pages and the evidence observed during the visit confirm that the institution provides a favorable environment for living and studying that is highly sensitive to individual learning needs. The combination of physical infrastructure adjustments and specialized support services like those offered by the Department of Career Counseling and Guidance demonstrates a holistic approach to student welfare.

For the Computer Science domain, remote access, regardless of the place of access, to international scientific databases is a critical resource that aligns with the requirements of Level 8 (doctoral) studies, where high-level documentation is essential. However, during the visit, some doctoral students mentioned that there are databases relevant for Computer Science (e.g. IEEE repositories) that are not freely available.

✓ Aspects that constitute best practice examples

- The various support services, including for students with disabilities, offered by specialized departments and centers.

✓ Recommendations

- Maintain the subscriptions to the documentation resources and databases in order to ensure access to updated information that is critical in fast-evolving fields of Computer Science and, if possible, extends the subscription to include other databases relevant for Computer Science (e.g. IEEE repository).

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The learning outcomes, expressed as knowledge, skills, responsibility and autonomy, are explicitly specified in the syllabus of each subject published on the website of DS-MCS.
- The evaluation details and grade components are clearly presented in each subject syllabus.
- In cases where students feel unfairly evaluated at Babeș–Bolyai University, they may appeal the results of assessments in accordance with the regulations outlined in the Guide on Assessment Appeals.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The details on the learning outcomes included in the syllabus of each subject allow the informed choice (by the doctoral student, based on the supervisor's recommendations) of the subjects to be studied. The access to the evaluation criteria allows the students to self-assess the level of meeting the learning outcomes, to reflect on the learning achievements and to identify, with the support of the teaching staff, corrective measures. The students have the right to issue an appeal on the awarded grade if they consider that the evaluation does not fairly reflect their knowledge and skills.

✓ Aspects that constitute best practice examples

- The syllabi corresponding to all subjects describe in detail the learning outcomes

✓ Recommendations

- no specific recommendation (just continue to periodically update the list and the content of the offered subjects and the information on the usage of AI tools in the preparation of projects and reports).

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The learning outcomes are periodically assessed, the evaluation style depending on the assessed activity:

- **Advanced doctoral studies** (first semester): the verification of learning outcomes corresponding to the 3 subjects included in the study program is based on written/oral exams and/or project presentation as specified in the corresponding syllabus. The evaluation is based on qualifications (accepted/rejected).

- **Individual research activity** (second semester, years 2-4): during the doctoral studies, the doctoral student has to prepare reports that are orally presented in front of the Guiding and Academic Integrity Committee. In the first year, the doctoral student presents the scientific research project. If accepted, this project leads to the accumulation of 30 ECTS credits. In the second, third and fourth years, the doctoral student has to present a research report on the progress and results of the scientific activity carried out. Each report evaluated with the grade "Accepted" is credited with 60 ECTS credits. The rejected reports can be rescheduled during the same academic year.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The doctoral student activity is continuously monitored and assessed in accordance with the Methodology of student evaluation. The continuous evaluation ensures that the student is not only evaluated on their final thesis, but is also guided through a series of intermediate quality evaluation stages. The involvement of the Guiding and Academic Integrity Committee in every stage of progression and pre-defense provides an effective mechanism for maintaining scientific standards and academic integrity.

✓ Aspects that constitute best practice examples

- **Structured feedback:** The requirement for the supervisor and the guidance committee to provide written reports after every progress report defense ensures that students receive qualitative, actionable feedback rather than just a pass/fail grade.
- **Digital tracking:** The academic progress of each student, including their ECTS accumulation and exam results, is managed through the digital platform

✓ Recommendations

- no specific recommendations (just continue the established practice of providing personalized feedback after each evaluation stage, with a particular focus on the constructive remarks and suggestions for improvement).

The indicator is: fulfilled.

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

Standard S.B.7.1. Admission The admission procedures and principles ensure access to higher education.	
Indicator I.P.B.7.1.1	The organisational component applies the admission procedures.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The admission process is regulated through the Admission Methodology for Doctoral Studies, which is annually updated and adopted by the UBB Senate.
- For the candidates for doctoral studies in Computer Science, the admission criteria as well as the subjects are presented on the website of the DS-MCS, where the admission calendar and the registration conditions are also available.
- The application documents are uploaded on the UBB online admission platform.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The admission process is well regulated, the relevant information is publicly available for candidates, and the admission process ensures a fair selection. The written test ensures a merit-based selection as it focuses on the candidate's professional background. The aggregation of three grades (for the written exam, the presentation of the research project, grade corresponding to master studies) provides a comprehensive image of the potential of the candidate. The methodology provides clear tie-breaking rules. Both the doctoral supervisors and the doctoral students consider that the written exam, organized according to the current rules, allows a selection of candidates with an appropriate background and with high potential for research and for finalizing the doctoral stage.

✓ Aspects that constitute best practice examples

- **Digital integration:** The fully integrated admission platform facilitates the application process as well as the evaluation of the candidate documents.
- **Comprehensive admission information:** The admission methodology provides detailed information for all categories of candidates (Romanian, EU, non-EU)
- **High admission standards:** for Computer Science field, the written exam allows checking if the candidates have the required background to conduct successful research in Computer Science.

✓ Recommendations

- Intensify the promotion of specific doctoral research topics through broader professional networks (e.g., LinkedIn) and specialized academic platforms (e.g. Informatics Europe) to attract a more diverse and high-performing pool of candidates.

The indicator is: fulfilled.

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

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- As specified in the Methodology for admission to doctoral study programmes at UBB, all principles of equity and equal opportunity are respected (there are no selection criteria related to age, sex, ethnicity, mother tongue, religion, race, political affiliation, chronic illnesses that do not pose a risk to the community, etc.) .
- UBB allocates special places to ensure equal opportunity for the following categories: Romanians from abroad and candidates of Roma ethnicity.
- UBB offers, during the admission process, additional personalized support to candidates with different types of disabilities (e.g. locomotor impairments).

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The admission procedures at UBB demonstrate a clear commitment to inclusiveness and focus on merit-based selection. By combining a highly standardized, performance-based selection process with institutionalized equality policies (such as the Gender Equality Plan and support for candidates with disabilities), the institution ensures that potential is recognized regardless of a candidate's background or impairments that do not alter the potential in conducting research activities.

The admission methodology contains specific information for candidates with disabilities or belonging to vulnerable groups. Furthermore, the transparency provided through the digital admission portal ensures that all candidates, domestic or international, have equal access to the necessary steps and documentation requirements, which minimizes administrative barriers to entry.

✓ Aspects that constitute best practice examples

- High standards for admission for doctoral studies in Computer Science
- There are provided specific information for Eutopia PhD co-tutelle program

✓ Recommendations

- no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UBB, through ISD**,** applies a comprehensive set of regulations that govern the professional and academic activity of doctoral students in the Computer Science field. These regulations are designed to ensure a structured and successful progression from admission to the final thesis defense. The main components/documents are:

- **Doctoral study contract:** it establishes the legal relationship, rights, and obligations between the student, the coordinator, and the university.
- **Individual research plan:** it acts as a dynamic roadmap, specifying the required training courses, the timeline for research reports, and the expected milestones for the doctoral thesis.
- **Periodic progress monitoring:** students are required to present research progress reports to their guidance committee, a process that is used to monitor academic advancement.

It should be also mentioned that at UBB the students' academic activity is organized in accordance with the Regulation on Students' Academic Activity based on the European Credit Transfer and Accumulation System (ECTS), as well as the Code of Students' Rights and Responsibilities. The Student Council is a representative structure for all students, which operates under its own regulations, in compliance with the provisions of the University Charter and the Higher Education Law. Doctoral students in Computer Science are represented at all levels: council of the Faculty of Mathematics and

Computer Science, council of the Doctoral School in Mathematics and Computer Science, council of the Institute of Doctoral Studies.

All templates and regulations, including information for newly admitted students and the stages for completing doctoral studies, are publicly visible on the ISD website and on the webpage of the DS-MCS.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The Doctoral School of Mathematics and Computer Science ensures the consistent and transparent application of all regulations regarding the professional activity of doctoral students, in accordance with the national legislation and the internal regulations of the institution.

- There are clear and accessible procedures for doctoral students. All regulations and procedures are made available to students through: the doctoral school's website, student guidelines, and periodic information by email or administrative meetings. PhD students are informed about academic requirements, deadlines, responsibilities, and evaluation criteria.
- The periodic evaluations are carried out according to the methodologies approved by the Doctoral School Council.
- The academic situation of doctoral students is managed using a digital platform that contains registers, databases and administrative documents. All relevant documents concerning the doctoral students trajectory are properly archived.
- There is well-established administrative support in solving doctoral students' requests, in providing information on scholarships, social rights and funding opportunities.

✓ Aspects that constitute best practice examples

- The activity of each doctoral student is closely monitored and recorded in the individual plan allowing early identification of the risk to not reach the research milestones (e.g. presentation of the progress report).

✓ Recommendations

There are no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The internationalization process at the level of the institution is reflected through some relevant indicators:

- Erasmus partnerships with more than 700 universities worldwide, placing UBB on the first position in national rankings
- Strong institutional and community ties with the Republic of Moldova, German-speaking countries, and Hungary, reflecting the multicultural dimension of the institution
- Institutional and cultural partnerships with Francophone, Anglophone, Hispanic, Lusophone countries, as well as Italy, China, and Japan
- Member of Eutopia Alliance that aims to create integrated thematic networks in which professors, researchers, and students collaborate in knowledge-based activities.

At the level of the Doctoral School in Mathematics and Computer Science, particularly the Computer Science field, the main facts, related to the period 2021-2025, as specified on the web page related to the international dimension are:

- one PhD thesis in co-tutelle
- one international doctoral student (enrolled in 2023)
- one international member in the guiding committees
- participation of the doctoral supervisors at the defense of 5 PhD theses at universities abroad
- involvement in 5 international projects
- participation of the teaching staff in 11 Erasmus+ mobilities
- 2 international mobilities of PhD students
- 2 research stages hosted by a research team at DS-MCS
- 19 research papers co-authored with researchers affiliated at institutions from abroad
- bilateral agreements with more than 40 universities and research institutions abroad

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

UBB achieved a high internationalization level being top-ranked at the national level from this point of view. The UBB internationalization strategy is very effective and sustainable and the institution is well-recognized internationally as having high standards in education and research being constantly the best ranked Romanian university. As a member of the Eutopia alliance, UBB offers to its students and teaching staff the opportunity to be involved in various collaborative activities with the partner institutions, including co-tutelle doctoral studies.

The doctoral supervisors in Computer Science have a very good international experience and visibility, reflected through the involvement in international projects, collaborative research materializes in co-authored scientific papers, participation in evaluation and/or defense committees of PhD theses at universities abroad. Most of the PhD theses are written in English.

However, the international dimension is not reflected at the same level in the case of doctoral students. There is only one international student, one thesis in co-tuttelle, and one international member in the guiding committee.

✓ Aspects that constitute best practice examples

- Participation in the Eutopia alliance
- Involvement of doctoral supervisors in research activities in international teams

✓ Recommendations

- Increase the number of doctoral studies in co-tutelle, by also using the framework and opportunities offered by Eutopia alliance.
- Consider to involve international researchers in the Guiding and Academic Integrity Committees and in the evaluation committees of PhD theses.

The indicator is: fulfilled.

Criterion B.9. Scientific research results

Standard S.B.9.1 Scientific research in the education process Scientific research activities support students in achieving the learning outcomes.	
Indicator I.P.B.9.1.1	Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The individual activity plan of doctoral students in Computer Science includes coordinated research activities that are periodically assessed. The doctoral school and the teaching staff offer support to the students in their research work through mentoring and involvement in the activity of the research teams. In the period 2021-2025, at least 19 students have participated in the research teams of around 20 international and national projects as it is mentioned on the corresponding web page of DS-MCS. Besides these, 25 doctoral positions were open in the HRIA project (Romanian Hub of Artificial Intelligence, 2024-2029) and for these have been selected PhD students in Computer Science.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The doctoral students in Computer Science are integrated in research teams from the related research institutes and centers (Research Institute of Artificial Intelligence, Virtual Reality and Robotics) and conduct collaborative research.

✓ Aspects that constitute best practice examples

- A significant number of PhD students (25) are involved in the HRIA (Romanian Hub of Artificial Intelligence) project
- The doctoral supervisors are principal investigators in research projects related to the doctoral topics and involve the doctoral students in the corresponding research teams

✓ Recommendations

- no specific recommendations

The indicator is: fulfilled.

Standard S.B.9.2. Scientific research pertaining to the objectives of the study programme The organisational component carries out scientific research activities aligned with the objectives of the evaluated study programme.	
Indicator I.P.B.9.2.1	The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The research results at UBB are leveraged through scientific publications, technology transfer via consultancy centres, science parks, the development of new products, etc. The outcomes of research activities are collected through the UBB Academic/Scientific Activity Management application, which provides a continuous tracking of the number of publications (all categories), as well as the degree of national and international recognition of the academic community members (awards, honours, membership in academies, professional societies, etc.). In 2021, following an extensive audit by the Quacquarelli Symonds (QS) platform, UBB was awarded the status of a 5-star world-class university. This status was reconfirmed in 2025. The audit also evaluated UBB's international visibility in terms of research performance.

The key facts related to the scientific production of the 69 doctoral students enrolled in the period 2021-2025, as reflected on their Google Scholar profiles are as follows:

- 307 publications (an average of 4.5 publications per doctoral student);
- 1033 citations (an average of 15 citations per doctoral students, but with a rather large standard deviation - more than 35 - caused by two exceptional cases when the number of citations is close or larger than 200).

The list of enrolled doctoral students and their Google Scholar profiles is available on the corresponding web page of the DS-MCS

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The research activity of the doctoral students is consistent and well disseminated. All doctoral students have public Google Scholar profiles and most of them have a significant number of publications and even citations. The fact that the publications are indexed in international databases and cited by peers confirms that the research produced is relevant and contributes to the advancement of the field. All these demonstrate the program's ability to train researchers who can communicate complex scientific results effectively to diverse audiences.

✓ Aspects that constitute best practice examples

- The outcomes of research activities are submitted in the UBB Academic/Scientific Activity Management application, which provides a continuous tracking of the number of publications,

as well as the degree of national and international recognition of the academic community members (awards, honours, membership in academies, professional societies, etc.).

✓ Recommendations

- no specific recommendations

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

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The quality assurance and competitiveness are regulated through a series of internal regulations and procedures, developed by the Quality Council and are published in the Quality Manual, and on the Qualitas Centre website.

There are strategic directions, actions and procedures at all relevant levels:

- **Institutional level:** there is an updated Strategy for Quality Assurance. as well as quality related strategic objectives included in the annual Operational and Strategic Plans annual stating the commitment of UBB to ensure the continuous improvement of the quality of teaching and research activities, the relationship with students and the external environment, as well as the improvement of university management.
- **Faculty level:** at the level of Faculty of Mathematics and Computer Science there is active a Commission for Quality Assessment and Assurance which monitor and periodically evaluate the quality of the programs and activities within the faculty
- **Doctoral school level**: at the level of the DS-MCS there are internal procedures for analyzing the content of doctoral study programs and evaluating their quality, as well as procedures for the internal evaluation of doctoral supervisors and doctoral students. More specifically:
    - all doctoral supervisors have to provide, at the beginning of each academic year, the CNTADCU verification sheet stating that the minimum standards are satisfied;
    - all doctoral students provide a self-evaluation report of the research activity.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

UBB aims to ensure the continuous improvement of the quality of teaching and research activities, the relationship with students and the external environment, as well as the improvement of university management. The quality monitoring at the level of the Faculty of Mathematics and Computer Science contributes to the development of a culture of quality in the faculty, both at the level of academic staff and students. The monitoring actions put in practice at the level of the Doctoral School ensure that the high-quality standards are maintained in the activity of doctoral supervisors as well as in the activity of doctoral students.

✓ Aspects that constitute best practice examples

- Annual assessment of the doctoral supervisors represents a monitoring tool that stimulates the maintenance of high-quality teaching staff

✓ Recommendations

- no specific recommendations

The indicator is: fulfilled / partially fulfilled / unfulfilled.

Standard S.C.1.2. Stakeholder engagement The HEI proves that it engages the stakeholders who have relevant activity in applying the procedures.	
Indicator I.P.C.1.2.1	The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- At UBB the professional activity of teaching and research staff is evaluated by the management, as well as through a peer review process. The results of the evaluation process are summarized in a publicly available report and further operationalized to ensure that the collected feedback is put into practice.

- The teaching performance of doctoral supervisors is evaluated by doctoral students each semester, according to specific procedures that also include measures to leverage the results. The surveys are accessible through the online AcademicInfo platform. The Qualitas Center produces annual reports on these evaluations.

- At the SDMI level, the feedback provided by doctoral students is continuous, with regular meetings between them, their doctoral supervisors and the members of their advisory committees.

- The doctoral students in the field of Computer Science have representatives in the Doctoral School Council.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

Both the doctoral supervisor and the doctoral student are involved in the process of preparing and implementing the procedures aiming to ensure that the activity satisfies the required level of quality. The involvement is both direct and through their representatives in the corresponding entities (Doctoral School Council, Faculty Council, Senate etc.)

The feedback collected through the evaluation processes is analyzed at the level of the Qualitas Centre and the results are made available to the relevant stakeholders.

✓ Aspects that constitute best practice examples

- There is a specific evaluation form for the doctoral students that allows the collection of students feedback on essential aspects of their activity without being too complex

✓ Recommendations

- No specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The academic integrity and ethics aspects are addressed at each level by adequate structures:

- **Institution level:**
  - there is a Code of Ethics and Professional Conduct, updated in 2025, and the institution has practices and mechanisms in place to ensure and monitor its application.
  - the Ethics Commission operates, according to the Education Law, as an independent structure in relation to the Senate and the Rector's Office and elaborates annual reports that are publicly available.
- **Faculty of Mathematics and Computer Science level:** there is a functional Commission for Analysis and Counseling in Academic Integrity which monitors and analyzes situations of deviation from university ethics within the faculty, including at the level of the doctoral school. The Commission benefits from the same independence from the faculty management as the Ethics Commission in relation to the Senate and the Rectorate of UBB.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The ethics and academic integrity aspects are well monitored at all relevant levels. At the institutional level the entities and mechanisms related to quality assurance and academic ethics are functional and well monitored.

At the level of the doctoral school the ethic-related aspects are pro-actively addressed by:

- inclusion in the curriculum of a mandatory subject related to academic integrity and ethics aiming to increase the awareness concerning ethical conduct rules in research
- usage of tools (e.g. iThenticate) that allow the identify the potential plagiarism cases and avoid the acceptance of reports or theses that might break the rules.

✓ Aspects that constitute best practice examples

- The strategy for avoiding the plagiarism and the practical guide for students available on the web page of the Ethics commission represent a useful source of information related to what plagiarism is and how to avoid academic misconduct in written work.
- Publicly available reports of the ethics commission.

✓ Recommendations

- Consider including in the guidelines for reports and thesis preparation specific recommendations on how AI tools can be used in making the research activity more efficient without replacing the proper research endeavour.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- UBB has a specialized entity (Curriculum Committee of the University Senate) responsible for the internal accreditation, regulation, and monitoring of doctoral study programmes, in line with UBB's development strategy and the requirements of national and international external accreditations.
- The curriculum corresponding to each domain is periodically evaluated in the context of the current legal regulations.
- The Doctoral School updates annually the curricula in accordance with the objective needs related to the scientific trajectory of doctoral students. The curricula are validated by the Doctoral School Council (CSD) and the Faculty Council, the Curriculum Committee and subsequently approved by the Council for University Doctoral Studies (CSUD), after which they are made public so that the candidates have access to all relevant information.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The management of the Computer Science doctoral domain demonstrates a consistent application of quality assurance procedures that go beyond mere administrative compliance. The annual update cycle is particularly critical in a dynamic field like Computer Science, where research directions evolve rapidly. By linking course offerings directly to the current topics of the doctoral research the institution ensures that the curriculum is always relevant and high performing.

Both at the level of DS-MCS and UBB ISD, the evaluation of the scientific activity of doctoral students is carried out by monitoring their progress, mainly by quantifying the results of the annual research activities within the doctoral program in the form of the number and quality of scientific publications. The impact of such procedures is evidenced by the program's ability to maintain a high level of national and international confidence, as noted in previous external evaluations.

✓ Aspects that constitute best practice examples

- The practice of performing annual reviews rather than waiting for multi-year accreditation cycles allows the program to integrate emerging technologies into the training program in real-time.
- Allowing the supervisors who are active in research to propose the course list for the incoming cohort ensures a perfect fit between the training program and the individual research needs.
- The institution level entities act as support structures and ensure that implementing the quality assurance procedures is not an administrative burden for the scientific staff.

✓ Recommendations

No specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At UBB the process of initiation, authorisation, accreditation, monitoring, and periodic evaluation of doctoral fields/ schools involves clearly specified steps in which all interested parties are involved according to the level:

- **Doctoral School:** the documents are prepared at the level of the doctoral school and are approved by the Doctoral School Council and Faculty Council.
- **Institute of Doctoral Studies:** the documents are submitted to ISD for verification and approval by the Council for Doctoral Studies (CSUD).
- **UBB Administrative Council, Curriculum Committee, Senate:** final endorsements and approvals.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

All actors involved in the development of doctoral study programmes (doctoral supervisors, members of the guiding committees and doctoral students) carry out their work in strict compliance with the applicable institutional procedures. There are established collaborations with the RDI departments of partner IT companies which allows the identification of specific research topics suitable for professional doctorates.

✓ Aspects that constitute best practice examples

- The preparation, validation and approval process are well documented.

✓ Recommendations

- no specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

- The professional activity of academic staff and researchers is evaluated at several levels: management, colleagues, students. UBB implements a comprehensive evaluation system based on well established regulation and procedures available on the website of Qualitas Centre
- The results of the evaluation process are analyzed at the level of the Qualitas Centre and the results are public on the center website:
  - reports on the evaluation of the professional activity of academic staff and researchers by management,
  - reports on peer evaluation,
  - report on the evaluation of the doctoral stage by doctoral students
  - summary reports on the management evaluation of the professional activity of academic staff and researchers and on peer evaluation.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

There is a systematic monitoring of teaching activities within the advanced study program and the feedback received from doctoral students is aggregated, published and used in implementing the changes that ensure improvements of the doctoral program.

✓ Aspects that constitute best practice examples

- The evaluation forms for doctoral students are tailored for specific aspects of the doctoral studies and are available in 4 languages (Romanian, Hungarian, German and English).
- All summary reports are publicly available.

✓ Recommendations

- No specific recommendations.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At UBB, the administrative activities are supported by three integrated IT systems developed within the Centre for Information Systems. These systems bring together services for both employees and students and are accessible via login credentials (username, password).

- Departments within the General Administrative Directorate use the *ManageAsist* application, which offers managerial assistance functionalities at various levels.
- Faculty secretariats use *AcademicInfo*, a suite of programs that enables tracking of students' academic trajectories and the online evaluation of courses by students.
- The Centre for Scientific Research Management, along with UBB's academic and research staff, uses the *UBB Academic/ Research Activity Management* application to submit the results of their professional activities.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The integrated IT platforms allow the collection and analysis of the data related to academic and administrative activities of the institution. This allows the identification of research trends and infrastructure needs.

✓ Aspects that constitute best practice examples

- The IT applications are integrated into a digital ecosystem which is accessible across all levels and departments of UBB's organisational structure and provide centralised reports that ensure the efficiency of the University's operational and managerial activities.

✓ Recommendations

- No specific recommendations

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At UBB, the information of public interest is disseminated through several channels:

- official editorials signed by the University spokesperson,
- press releases issued by the Communication and Public Relations Directorate,
- press conferences,
- bulletin boards located in University buildings,
- the University's official website,
- social media accounts (Facebook, X, LinkedIn, Youtube, Instagram, etc.),
- faculty websites,
- admission brochures detailing bachelor's and master's programmes.

The communication between the institution and all interested parties is ensured by the Communication and Public Relations Directorate.

In relation to the doctoral studies, the relevant information on research topics, curriculum, research activities of doctoral supervisors and doctoral students are provided on the website of the Institute of Doctoral Studies and on the web pages of the Doctoral School of Mathematics and Computer Science.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The open access to relevant information is ensured in a coherent manner being coordinated by the Communication and Public Relations Directorate.

✓ Aspects that constitute best practice examples

- UBB is highly visible at national level and the web page of the Institute of Doctoral Studies as well as the web page of DS-MCS contain all relevant information for candidates, PhD students and all interested parties.
- For the doctoral programs there are brochures presenting the educational offer as well as the research opportunities in the corresponding field.

✓ Recommendations

- No specific recommendations

The indicator is: fulfilled.

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

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

ISD ensures the transparency of decision-making processes for all doctoral fields through the systematic publication and communication of decisions made by its governing bodies. All decisions affecting doctoral studies are based on consultation with the academic community. The doctoral students are actively involved, through their representatives in the corresponding commissions, in decision-making processes.

Key facts related to transparent decision-making include:

- **Publication of Decisions:** Formal decisions from the ISD Council are publicly accessible on the institutional websites.
- **Communication Channels:** Decisions regarding admission, resource allocation, performance evaluation, and international mobility are disseminated through official institutional emails, online platforms, and the ISD and DS-MCS websites.
- **Stakeholder Participation:** Doctoral students in Computer Science are represented in all university management structures, including the University Senate and the Doctoral School Council, ensuring their involvement in the governance of the Computer Science domain.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The previously mentioned facts confirm that decision-making within the Computer Science doctoral domain is a transparent and participatory process rather than a purely top-down administrative function. By making the decisions of high-level bodies like the ISD and the Senate publicly available, the institution ensures that all stakeholders (doctoral supervisors, researchers, and PhD students) can track the evolution of institutional policies and resource management. The representatives of the students have well established roles and responsibilities, thus the decisions involving the students are made in a transparent way.

✓ Aspects that constitute best practice examples

- **Student-Governed Elections:** The practice of having the student organization independently organize elections for doctoral student representatives in the ISD and Doctoral School Councils ensures the autonomy of student representation.
- **Consultative Reporting:** Involving doctoral supervisors and students from both domains (Mathematics and Computer Science) in the drafting and validation of the Internal Evaluation Report ensures that the strategic directions of the field are determined through a consensus-based approach.

✓ Recommendations

- It is recommended that at least one of the student members of the University Ethics Committee be a doctoral student, preferably designated to the sub-committee for research ethics.

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.

✓ Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UBB is committed to carry out all necessary steps pertaining to the external quality evaluation process as it was the first university in Romania to be evaluated by international specialised institutions as early as in the beginning of 2000.

- In 2021, following a comprehensive audit by the Quacquarelli Symonds (QS) platform, UBB became the first five-star university - an international university of excellence - confirmed in Romania through the QS Stars international audit. This status was reconfirmed in 2025 with a higher score than in 2021. The audit also assessed the institution's quality assurance processes.
- In 2018, UBB received the “HR Excellence in Research” award, granted by the European Commission to institutions that implement the principles of the “European Charter for Researchers” and the “Code of Conduct for the Recruitment of Researchers.”
- In line with all legal provisions, UBB has also requested institutional accreditation evaluation from the Romanian Agency for Quality Assurance in Higher Education (ARACIS), receiving the rating “High Degree of Confidence” in 2009, 2014, and 2020. UBB periodically submits study programmes/fields for evaluation by ARACIS for authorisation or (re)accreditation.

At the previous external evaluation of the doctoral study program in Computer Science in November 2021, all indicators were evaluated as being fulfilled, the field of Computer Science receiving the qualification of maintaining accreditation by the ARACIS Council Decision no. 132/16.12.2021. The measures recommended during this evaluation were implemented in the period 2021-2024, the implementation being detailed in a Progress Report sent to ARACIS. They were considered to be all properly implemented, this fact being validated by the ARACIS Council Decision no. 193/H/07.08.2025. They are also included in section IV of the current IER.

✓ Analysis of the state of facts, in relation with the state of facts acknowledged from documents and considering the analysed performance indicator, to justify judgement on the extent to which the indicator was fulfilled

The Doctoral School of Mathematics and Computer Science at UBB constantly and documented carries out all the necessary procedures for external quality assessment, in accordance with the legislation in force and the ARACIS methodology. The proper organization of the doctoral study program is ensured, making available the resources and documents required in the evaluation process. In this regard, the Doctoral School collaborates institutionally with the administrative structures of the faculty and university for:

- permanent updating of internal quality procedures and regulations specific to cycle III;
- collecting and providing the data necessary for the external evaluation;
- management of relevant academic documents (study plans, discipline sheets, annual reports, databases on doctoral students, situations regarding doctoral supervisors, etc.);
- ensuring transparency and access for assessors to all information required for the external audit;
- monitoring the implementation of the recommendations resulting from previous evaluations.

Properly addressing the previous recommendations illustrate the commitment of DS-MCS, particularly the Computer Science field to offer a doctoral education at high standards of quality.

✓ Aspects that constitute best practice examples

- UBB is proactive in providing the relevant information to quality assessment entities and organisms in order to be periodically audited and obtain “seals” of excellence

✓ Recommendations

- No specific recommendations

The indicator is: fulfilled.

IV. SWOT Analysis

Strengths: • The doctoral program in Computer Science offers doctoral students a high-quality scientific training, at international standards, results validated by the presence of the scientific field of Computer Science in leading positions (for Romania) in the most important international rankings by fields. • Outstanding performances in scientific research and high international visibility of the academic staff. • Theses of high scientific quality with results published in top-ranked journals and conferences. • Significant involvement of doctoral supervisors and doctoral students in national and international research projects. • Large number of scientific papers published by doctoral supervisors and doctoral students.	**INTERNAL FACTORS** ⑨	**Weaknesses:** • The number of theses in co-tutelle and the number of international PhD students is rather low
SWOT analysis		
Opportunities: • Eutopia alliance offers collaboration opportunities and potential for mobilities of doctoral students and doctoral supervisors. • The interest of IT Companies and other institutions in conducting collaborative research with the members of the research groups and in identifying topics for doctoral research that can lead to real-world applications. • The increased interest of master graduates to continue with doctoral studies.	⓪ **EXTERNAL FACTORS**	**Threats:** • The lack of clear national regulations concerning the professional doctorate limits the interest of IT companies in being involved in such collaborations. • The inappropriate use of Artificial Intelligence in the research process might impact the quality of the research and the attainment of the learning outcomes. • The low number of budgeted places forces some doctoral students to be employed and this might increase the risk of failure.

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
)MAIN A. Institutional capacity			
1.	**I.P.A.1.1.1** For delivering the study programme/domain, the HEI has adequate organisational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.	F	Consider creating a consultative board (as support for the doctoral school council) of specialists from other national/international institutions, including IT companies with R&D departments and alumni who could be involved in establishing the development strategy.
2.	**I.P.A.1.2.1** The opinions of the faculty and department members, of the subsidiary or extension and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.	F	-
3.	**I.P.A.2.1.1** The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.	F	Ensure the continuous technical support for the HPC infrastructure and put in practice a systematic program for infrastructure upgrades to ensure continued competitiveness and alignment with international advances in high-performance computing and artificial intelligence.
4.	**I.P.A.2.2.1** The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.	F	-
5.	**I.P.A.3.1.1** The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.	F	-
6.	**I.P.A.3.1.2** The HEI ensures professional and personal development for its staff.	F	-

7.	**I.P.A.3.2.1** Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.	F	-
8.	**I.P.A.4.1.1** The organisational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.	F	-
)MAIN B. Educational efficacy			
9.	**I.P.B.1.1.1** The study programme is developed and structured according to the expected learning outcomes, and organised based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.	F	-
10.	**I.P.B.2.1.2** The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).	F	-
11.	**I.P.B.3.1.1** The organisational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.	F	-
12.	**I.P.B.3.1.2** The organisational component ensures opportunities for students to participate in academic mobility programmes organised in person and/or virtually.	F	Strengthen the strategy for co-supervised doctorates (co-tutelle) and institutionalize international research stages as a standard path for doctoral students in Computer Science.
13.	**I.P.B.3.2.1** The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities.	F	-
14.	**I.P.B.4.1.1** The organisational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organisation of the study programme.	F	Maintain the subscriptions to the documentation resources and databases in order to ensure access to updated information that is critical in fast-evolving fields of Computer Science and, if possible, extends the subscription to include other databases relevant for Computer Science (e.g. IEEE repository).

15.	**I.P.B.5.1.1** Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.	F	-
16.	**I.P.B.5.1.2** Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.	F	-
17.	**I.P.B.7.1.1** The organisational component applies the admission procedures.	F	Intensify the promotion of specific doctoral research topics through broader professional networks (e.g., LinkedIn) and specialized academic platforms (e.g. Informatics Europe) to attract a more diverse and high-performing pool of candidates.
18.	**I.P.B.7.1.2** Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.	F	-
19.	**I.P.B.7.2.1** The organisational component applies the regulations concerning the students' professional activity.	F	-
20.	**I.P.B.8.1.1** The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.	F	Consider to involve international researchers in the Guiding and Academic Integrity Committees and in the evaluation committees of PhD theses.
21.	**I.P.B.9.1.1** Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.	F	-
22.	**I.P.B.9.2.1** The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.	F	-
)MAIN C. Quality management			
23.	**I.P.C.1.1.1** The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	-
24.	**I.P.C.1.2.1** The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.	F	-

25.	**I.P.C.2.2.2.** The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.	F	Consider including in the guidelines for reports and thesis preparation specific recommendations on how AI tools can be used in making the research activity more efficient without replacing the proper research endeavour.
26.	**I.P.C.3.1.1** The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	-
27.	**I.P.C.3.1.2** Members of its own community and other stakeholders are involved in the procedure implementation process.	F	-
28.	**I.P.C.4.1.1** The organisational component analyses the results of the students' biannual evaluation of teachers.	F	-
29.	**I.P.C.5.1.1** The organisational component systematically collects and analyses data required for the internal quality assurance process.	F	-
30.	**I.P.C.6.1.1** The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.	F	-
31.	**I.P.C.6.1.2** The organisational component ensures transparent decision-making processes.	F	It is recommended that at least one of the student members of the University Ethics Committee be a doctoral student, preferably designated to the sub-committee for research ethics.
32.	**I.P.C.8.1.1** The organisational component carries out the procedures pertaining to the external quality evaluation process, aiming to organise the evaluated study programme as provided by the law.	F	-

Summary Table of Performance Indicators – Degree of Fulfillment

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

Other, general recommendations that were not given within the analysis of a specific performance indicator can be presented here.

Sum up the number of analysed performance indicators, and specify how many were assessed as fulfilled, partially fulfilled, and unfulfilled, if any.

Based on the IER, the additional documents and the meetings organized during the visit it follows that all indicators are fulfilled. Several recommendations have been made aiming to improve the quality of the activity in the Doctoral School. The most relevant recommendations are summarized as follows:

- enhance the international dimension of the Computer Science doctoral program by increasing the number of doctoral stages in co-tutelle, the number of international students, the number of international research stages, and the number of international members of guiding and academic integrity committees;
- put in practice a systematic program for infrastructure upgrades in order to ensure access to performant computational resources for all doctoral students in Computer Science.

VI. Conclusions

A number of important aspects noted during the evaluation are reiterated here, and general conclusions are made about the quality of education delivered within the evaluated doctoral study domain.

The doctoral domain Computer Science from the Doctoral School in Mathematics and Computer Science demonstrates a good level of compliance with national and international quality standards. The recommendations specified during the previous visit have been properly addressed and mentioned in the progress report.

The main conclusions which followed the external evaluation process are:

- Very active group of doctoral supervisors who are also leading research groups organized in research centers accredited at the level of university.
- Significant number of high quality scientific publications authored by the doctoral supervisors and doctoral students.
- Very good international visibility of the doctoral supervisors reflected through international collaborations and of doctoral students and alumni reflected through participation in international conferences and involvement in international projects.
- Very good collaboration with researchers from the research centers in Mathematics but also other fields, as well as with IT companies.
- Significant institutional support for doctoral students reflected through support for mobility and publication.

Propose and substantiate a decision.

Following the completion of the accreditation[3]/maintaining accreditation procedure, the decision of the evaluation panel shall be one of the following:

a) **maintaining accreditation** (MAC);

[3] When the external quality evaluation for accreditation is performed with undergoing the procedure for obtaining a provisional authorisation to operate.

VII. Annexes

Enclose the schedule of the on-site visit, the list of the documents reviewed, as well as any other documents that are relevant for the evaluation procedure, which are referred to in the EER and cannot be accessed through links.

1. Program of the evaluation visit.
2. Minutes of the mandatory meetings scheduled during visit at the Babes-Bolyai University, Cluj Napoca, Doctoral School of Mathematics and Computer Science, doctoral domain Computer Science

Intervalul orar/ ***Hour***	**Activități de evaluare/** ***Evaluation activities***	**Participanți/** ***Participants***	**Locație/*Location* /Listă participanți/*List of Participants***
Marți/ ***Tuesday*****, 1.09.2026**			
9:00-9:30	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 9/I**
9:30-10:20	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: - Prof. univ. dr. C. P.-Director SDMI - Prof. univ. dr. H. P.– member of SDMI council - Prof. univ. dr.S. C.- member of SDMI council -Drd. D P. (online) - member of SDMI council -Drd. M. D. - member of FMI council
10:20-11:10	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - Prof. univ. dr. H. P. - Conf. univ. dr. N. G.
11:10-12:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **personalul didactic** implicat în activitățile din cadrul DSUD/	- Comisia de experți evaluatori ai ARACIS/ ***Panel members***	Sala/Locația/ **Room/Location 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending**

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 the teaching staff involved in the activities within the DSUD	- Cadre didactice conducători de doctorat/ ***Teaching staff who are PhD supervisors***	**the meeting**:: - Prof. univ. dr. H. P. - Prof. univ. dr. C. C - Prof. univ. dr I C - Prof. univ. dr. L D - Prof. univ. dr. S M - Conf. univ. dr. G N - Conf. univ. dr. B Z
12:00 - 12:50	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - Prof. univ. dr. H P - director of RIA Institute - Prof. univ. dr. L C - director of Data Mining research group - Prof. univ. dr. G C - director Machine Learning research group - Prof. univ. dr. L D - director of Metaheuristics for Complex Systems research group - Prof. univ. dr. S M - director of Research Center on Software Engineering - Conf. Univ. Dr. V N - director of HPC-based Interdisciplinary Applications research group
12:50-14:00	Pauză de prânz/ ***Lunch***		

Intervalul orar/ *Hour*	Activități de evaluare/ *Evaluation activities*	Participanți/ *Participants*	Locație/*Location* /Listă participanți/*List of Participants*
14:00-14:30	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: - A B - data analyst at the Quality Center
14:30-15:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **reprezentanți ai conducerii componentei organizatorice/persoana de contact/reprezentanți ai CEAC/reprezentanți ai structurilor organizatorice în domeniul asigurării calității**[1]**/** ***Meeting of the external quality evaluation experts' panel with representatives of the organisational component / contact person / representatives of the CEAC / representatives of quality assurance organisational structures***	- Comisia de experți evaluatori ai ARACIS/ ***Panel members*** - Reprezentanți ai conducerii / reprezentanți ai CEAC / reprezentanți ai structurilor organizatorice în domeniul asigurării calității/ ***Representatives of the management / representatives of the CEAC / representatives of the quality assurance organisational structures*** - Persoana de contact/ ***Contact person***	Sala/Locația/ **Room/Location 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: - Conf. Univ. dr. M Ș - dean of the Faculty of Mathematics and Computer Science - Conf. Univ. dr. D S - dean of the Faculty of Mathematics and Computer Science - Conf. Univ. dr. A S - director of the Department of Computer Science - Prof. univ. dr. C P - director of the Doctoral School of Mathematics and Computer Science - Prof. univ. dr. H P- member of the SDMI council
15:00-16:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **studenți**[2] **doctoranzi** din	- Comisia de experți evaluatori ai ARACIS/ ***Panel members***	Sala/Locația/ **Room/Location 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending**

[1] Clarificarea unor aspecte rezultate din activitățile și discuțiile desfășurate pe parcursul efectuării vizitei, dacă se impune

[2] 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*
	cadrul DSUD/ ***Meeting of the external quality evaluation experts' panel with doctoral students of the DSUD***	- Studenți doctoranzi/ ***Doctoral students***	**the meeting**:: - D P – year of study 3 - M D –year of study 1 - T T – year of study 3 - A B year of study 1 - M C (Dicu)–year of study 5 (extension) - M N – year of study 1 - V M – year of study 3 - C S – year of study 2 - B I - year of study 3
16:00-16:10	Pauză/ ***Break***		
16:10-17:00	Întâlnirea comisiei de experți în evaluarea externă a calității cu **absolvenți**[3],[4] ai DSUD/ ***Meeting of the external quality evaluation experts' panel with alumni***[5] ***of the DSUD***	- Comisia de experți evaluatori ai ARACIS/ ***Panel members*** - Absolvenți ai domeniului de studii evaluat/ ***Graduates***	Sala/Locația/ **Room/Location 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - Lect. dr. M A – an absolvire/ year of graduation 2021 - Lect. dr. A C – an absolvire/ year of graduation 2018 - dr. S L – an absolvire/ year of graduation 2024 - Lect. dr. S C – an absolvire/ year of graduation 2019

[3] Se va evita invitarea absolvenților care sunt angajați ai IÎS sau ai OFE, după caz.

[4] Nu este obligatorie în cazul autorizării domeniilor de studii universitare de doctorat

[5] 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[6] of the DSUD alumni***	- Comisia de experți evaluatori ai ARACIS/ ***Panel members*** - Angajatori/ ***Employers***	Sala/Locația/ **Room/Location 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - R A - Altom - B W - Codespring - B M - JWX - C N N, Garmin - A M - Transilvania IT Cluster - C M - BMW Techworks - B A - Computacenter Romania
18:00-19:00	**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 9/I**
Miercuri/ *Wednesday*, 2.09.2026			
8:30 -10:30	Vizitarea bazei materiale/ ***Visiting the material resources***	- Comisia de experți evaluatori ai ARACIS/ ***Panel members*** - Reprezentanți ai instituției sau Academiei Române, după caz/	Sala/Locația/ **Room/Location 9/I** - Prof. univ. dr. C P – Director SDMI - Prof. univ. dr. H P – member of SDMI council - drd. A K - HPC infrastructure administrator

[6] 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*
		Representatives of the HEI or the Romanian Academy, as applicable	- M C - system engineer
10:30-11:00	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**:: - Lect. univ. dr. A-D F
11:00-13.00	Finalizarea activităților de evaluare/ ***Completion of evaluation activities***	- Comisia de experți evaluatori ai ARACIS/ ***Panel members***	Sala/Locația/ **Room/Location 9/I**
13:00-14:00	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 9/I** Lista persoanelor care vor participa la întâlnire/ **List of participants attending the meeting**: - Conf. univ. dr. M Ș – decan - Prof. univ. dr. C.P – Director SDMI - Prof. univ. dr. H P – member of CSDMI - Prof. univ. dr. I T - Drd. D P- member of CSDMI