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Annex No. 3

The External Evaluation Report of a Doctoral Study Domain

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I. Introduction¹



Pitești is a city in Romania located on the Argeș River. It is Argeș County's capital and largest city, as well as a significant economic and industrial center with two institutions. Pitești is located on the A1 expressway, which connects it immediately to the national capital Bucharest. It is a key railway junction, with a classification yard in adjacent Băilești. The city houses the Arpechim oil refinery and

¹ Each time when applicable the information shall be presented gender-wise.

serves as a marketing hub for the automotive industry, namely Automobile Dacia. It has been inhabited since prehistoric times but was first documented in the 14th century. It grew into a commercial town in northern Wallachia and served as an informal palace for several Wallachian princes until the 18th century.



The POLITEHNICA Bucharest - Pitesti University Center , established in 1962, is a public higher education institution in Pitesti, Romania, with nearly 10,000 students. The institution offers high-quality, affordable education in various scientific fields and cultural and social experiences. It offers excellent degree programs in various fields, including Mathematics, Informatics, Chemistry, Environmental sciences, Biology, Physical education and Sports, Automotive engineering, Industrial engineering, Transport engineering, Computer Science, Electronics, Information and Communication Technologies, Law, Administration, Economics, Business, Accountancy, Management, Philology, History, Theology, Music, Drama, Communication sciences, Social Assistance, Psychology, Education, and teacher training. POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER is funded by the Romanian state and has a strong collaboration with over 230 universities from EU Member-States and Non-EU countries. It is a member of several notable international professional and academic institutions, including Agence Universitaire de la Francophonie, European University Association, Danube Rectors' Conference, European Forum of Technical and Vocational Education and Training, European Distance and E-Learning Network, and Association for Teacher Education in Europe.

The organization of bachelor's, master's and doctoral programs in the POLITEHNICA Bucharest - Pitesti University Center is based on the Regulation of university activity of students, the Regulation on the organization and development of master's university studies and the Regulation on the organization and development of doctoral university studies developed according to legal regulations. in force and approved by the University Senate.

The evaluation of the students' preparation is done both qualitatively - through the marks awarded at the exams, colloquia and the projects they take, and quantitatively - through the credit points awarded at the end of the disciplined activity (exam or colloquium). The introduction of the transferable credit system allows the standardization of the volume and quality of activities carried out by the student during the semester (partial exams or median exam, direct seminar activity, homework, direct laboratory activity, exam session) and tracking students' training in during the semester.



The activity of compulsory training of students has two main components: a component of frontal training during classes, seminar, laboratory or project and a component of individual training during individual study hours, documentation, information for homework, preparation on-the-spot verification exams, projects and other individual papers included in the Analytical Program of the discipline, activities that have different weights in granting the credit points allocated to the discipline.



II. Methods used

The logical framework, or log frame, is the most common and best-known planning tool used in international development. It is also the most hotly debated. Originally designed for use in simple time-bound projects, it is now the tool of choice for donors in interventions ranging from small projects to organizational core funding. The logical framework is often used as a basis for monitoring and evaluation.

A logical framework can have many different purposes depending on the context, and it is probably this that has made it so popular. It was originally conceived as a planning tool, aimed at supporting the management of planned processes. However, depending on the circumstances, a log frame can be:

- a planning tool.
- a tool for program management.
- the basis for M&E in a project or program.
- an accountability mechanism.
- a succinct summary of a piece of work.
- a 'window' into the work of an organization or complex program.
- a linear theory of change; or
- a mechanism for seeking fundin

This chapter will contain the methods and tools used in the external evaluation process, before and during the evaluation visit, including at least:

Narrative summary	Objectively Verifiable Indicators	Means of Verification	Assumptions
<i>Goal:</i>			
<i>Objectives:</i>			
<i>Outputs:</i>			
<i>Activities:</i>			
<i>Inputs:</i>			

Starting with the narrative summary column, the goal defines the longer-term impact that a project or program aims to contribute to. The goal may be designed to be achieved after completion of the project or program and may depend on the actions of many different agencies, as well as changes in the external environment. The next row down deals with the objectives or purpose of the project or program – the changes it hopes to directly influence over its lifetime. The outputs row includes the tangible products or services the project or program aims to produce. The last two rows deal with the activities of the project or program and the resources required (inputs).

The second column – objectively verifiable indicators – defines what information will be collected to indicate whether or how far the goal, objectives and outputs have been achieved. The third column – means of verification – indicates the sources that will be used to collect the indicators, such as interviews,



observation, or secondary sources. The final column identifies the key risks and assumptions that might influence the success or otherwise of the project or program.

III. Analysis of ARACIS's performance indicators

Domain A. INSTITUTIONAL CAPACITY

**general description of domain analysis.*

Criterion A.1. The administrative, managerial institutional structures and the financial resources

**general description of the criterion analysis.*

Standard A.1.1. The institution organizing doctoral studies (IOSUD) has implemented the effective functioning mechanisms provided for in the specific legislation on the organization of doctoral studies.

**general description of the standard analysis.*

Performance Indicator A.1.1.1. *The existence of specific regulations and their application at the level of the Doctoral School of the respective university doctoral study domain:*

- (a) the internal regulations of the Doctoral School;*
 - (b) the Methodology for conducting elections for the position of director of the Council of doctoral school (CSD), as well as elections by the students of their representative in CSD and the evidence of their conduct;*
 - c) the Methodologies for organizing and conducting doctoral studies (for the admission of doctoral students, for the completion of doctoral studies);*
 - d) the existence of mechanisms for recognizing the status of a Doctoral advisor and the equivalence of the doctoral degree obtained abroad;*
 - e) functional management structures (Council of the doctoral school), giving as well proof of the regularity of meetings;*
 - f) the contract for doctoral studies;*
 - g) internal procedures for the analysis and approval of proposals regarding the training for doctoral study programs based on advanced academic studies.*
- *University that takes a mission to generate and transfer knowledge towards society through initial and permanent training at the university and postgraduate level with the purpose of personal development, professional insertion of the individual, and through scientific research, development, innovation, and technological transfer, through individual and collective creation, as well as capitalizing on and disseminating their results.*
 - *POLITEHNICA Bucharest - Pitesti University Center accomplishes its mission by achieving the following objectives:*
 - a) *Has developed and implemented specific regulations following the legislation on the organization of doctoral studies. The institutional regulation for the organization and development of doctoral university study programs at the POLITEHNICA Bucharest - Pitesti*



University Center approved by the Senate of the POLITEHNICA Bucharest - Pitesti University Center.

The Interdisciplinary Doctoral School within IOSUD – POLITEHNICA Bucharest - Pitesti University Center coordinates the activity of doctoral supervisors and doctoral students in the fields:

- Mechanical Engineering,
- Industrial Engineering,
- Materials Engineering,
- Electronic Engineering,
- Telecommunications and Information Technologies,
- Mathematics,
- Computer Science,
- Biology material engineering
- The doctoral university studies carried out in the POLITEHNICA Bucharest - Pitesti University Center represents the third cycle of university studies, focused on learning through research, whose purpose is to develop competent human resource in conducting research.
- The doctoral university studies allow the acquisition of a level 8 qualification from the European Qualifications Framework (EQF) and the National Qualifications Framework.

- b) The Methodology for conducting elections for the position of director of the Council of doctoral school (CSD) at IOSUD-POLITEHNICA Bucharest, adopted by the Decision of the Senate of POLITEHNICA Bucharest -<https://upb.ro/alegeri-2024-2029>.
- c) The methodologies for organizing and conducting doctoral studies: (admission of doctoral students, completion of doctoral studies):
 - The methodology regarding the organization of the completion of doctoral studies and defense of the thesis doctorate within POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER <https://upb.ro/alegeri-2024-2029> .
- d) Existence of the mechanisms for recognizing the quality of doctoral supervisor and for equivalence of the doctorate obtained in other states;
 - According to the Order of the Minister of National Education and Scientific Research no. 6129/2016, Art. 3, through IOSUD, the POLITEHNICA Bucharest - Pitesti University Center can complete the minimum necessary and mandatory standards for conferring the habilitation certificate and the quality of doctoral supervisor in the various doctoral fields, including the fields managed by the Interdisciplinary Doctoral School..
 - Minimum entry requirements for COLLECTION the qualification certificate:
 - a) to meet the conditions required by the National Education Law no. 1/2011 with subsequent changes and additions;
- e) CSD - SDSI is constituted according to the Methodology for electing the members of the Doctoral School Council and appointing the director of the doctoral school.
- f) The doctoral studies contract give doctoral student-specific rights:

- *Doctoral students in IOSUD have the support of their doctoral supervisor and steering committee, participation in relevant seminars, representation in decision-making forums, access to resources, and participation in scientific communication sessions. They can also work with research teams from IOSUD or research units with institutional agreements or partnerships. The doctoral student can request changes in supervisors in legal situations. A grace period of up to two years is granted for failing to complete the thesis within the established term, with exceeding this period leading to expulsion. The public defense of the thesis must fall within the grace period, and in special situations, public support can be postponed for up to four years. (approved by HG no 681/2011), art. 40 paragraph.*

Recommendations:

The indicator is fulfilled.

Performance Indicator A.1.1.2. *The doctoral school's Regulation includes mandatory criteria, procedures and standards of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.*

- *The Interdisciplinary Doctoral School's regulation includes mandatory criteria, procedures, and standards, as outlined in Article 17 of GD 681/2011. It outlines the acceptance of new doctoral leading members, the methods to reduce the quality of a doctoral member, the decision-making processes for advanced university studies training programs, and procedures for changing doctoral supervisors or mentors. The regulation also outlines situations where the doctoral program can be interrupted, including actual interruption, extension, grace period, and postponement of thesis defense. It also emphasizes the importance of intellectual property respect and the prevention of fraud in scientific research. Doctoral students' access to research resources is regulated by Article 17 Para. 1-3.*
- *The SDSI Regulation addresses the aspects of art. 17 para. (5) of HG 681/2011 with subsequent amendments and completions.*
 - *The acceptance of new doctoral advisors are regulated, and the withdrawal of the quality of members of the doctoral school.*
 - *The training program based on advanced university studies is regulated.*
 - *the change of the doctoral supervisor is discussed, and the mediation of conflicts.*
 - *the interruption of the doctoral program has established*
 - *the prevention of fraud in scientific research, including plagiarism, is established,*
 - *the access of doctoral students to research and documentation resources is provided;*
 - *it is specified that the doctorate at SDSI is frequent or part-time it is specified that the doctoral student must carry out the activities provided in the individual plan of doctoral university studies under the conditions of frequency set by the doctoral supervisor.*

Recommendations:

The indicator is fulfilled.

Standard A.1.2. *The IOSUD has the logistical resources necessary to carry out the doctoral studies' mission.*

**general description of the standard analysis.*



Performance Indicator A.1.2.1. *The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic backgrounds.*

- *The computer program is <https://studenti.pub.ro/> and allows: records of doctoral students per year of study; composition of the mentor team for each doctoral student; advanced training program for the doctoral student (study disciplines, scientific reports, etc.); time planning of activities (exams, defenses, reports, etc.); management of situations of interruption of doctoral studies. The institution has an IT system for admission administration (<https://admitere.pub.ro/>). The description of this management system was additionally provided by the hosts at the request of the committee.*

Recommendations:

The indicator is fulfilled.

Performance Indicator A.1.2.2. *The existence and use of an appropriate software program and evidence of its use to verify the percentage of similarity in all doctoral theses.*

- *The POLITEHNICA Bucharest - Pitesti University Center employs an appropriate software program for verifying the percentage of similarity in doctoral theses. As of the current evaluation period, the anti-plagiarism system used is sistemantiplagiat.ro. Prior to 2020, the SEMPLAG program was utilized for this purpose. For theses defended in the field of Computer Science, the Turnitin system is specifically used by the CNATDCU Commission to verify the originality of the work.*
- *This system allows doctoral students to check the degree of similarity of their own work, ensuring adherence to academic integrity standards and the prevention of plagiarism. The use of these tools is documented and integrated into the university's quality assurance processes, reflecting the institution's commitment to maintaining high standards in doctoral research.*

Recommendations:

- *Using an international expert in commission for PhD study and always translate doctoral thesis into English. In this way similarity on English and translation part of the thesis will be reduced to the minimum.*

The indicator is fulfilled.

Standard A.1.3. *The IOSUD makes sure that financial resources are used optimally, and the revenues obtained from doctoral studies are supplemented through additional funding besides governmental funding.*

**general description of the standard analysis.*

Performance Indicator A.1.3.1. *Existence of at least one research or institutional/human resources development grant under implementation at the time of submission of the internal evaluation file, per doctoral study domain under evaluation or existence of at least 2 research or institutional development / human resources grant for the doctoral study domain, obtained by doctoral thesis advisors operating in the evaluated domain within the past 5 years. The grants address relevant themes for the respective domain and, as a rule, are engaging doctoral students.*

- *The internal evaluation report for the doctoral studies in Computer Science at the POLITEHNICA Bucharest - Pitesti University Center indicates that the doctoral supervisors are active in several national and international research projects both as project directors and as members. Information regarding the research projects is available in CVs, CNATDCU files and on the research results management platform, <https://crescdi.pub.ro>, of the institution.*

Recommendations:

- *University must use more EU grants for foreign PhD and postdoctoral students to have the possibility to be excellent in education and to increase the internationality of the study of Computer Science.*

The indicator is fulfilled.

Performance Indicator *A.1.3.2. *The percentage of doctoral students active at the time of the evaluation, who for at least six months receive additional funding sources besides government funding, through scholarships awarded by individual persons or by legal entities, or who are financially supported through research or institutional/human resources development grants is not less than 20%.*

- *40% of students at the time of assessment receive funding from sources other than the government for a minimum of six months, such as scholarships from individuals or legal entities or research or institutional development/human resources grants. There are 5 students in last 5 years in the doctoral domain, 2 of them were funded on research grants.*

Recommendations:

The indicator is fulfilled.

Performance Indicator *A.1.3.3.² *At least 10% of the total amount of doctoral grants obtained by the university through institutional contracts and of tuition fees collected from the doctoral students enrolled in the paid tuition system is used to reimburse professional training expenses of doctoral students (attending conferences, summer schools, training, programs abroad, publication of specialty papers or other specific forms of dissemination, etc.).*

- *The indicator is fulfilled - the percentage is 10%.*
- *The POLITEHNICA Bucharest - Pitesti University Center provides access to ANELIS, which is a national electronic access project for scientific literature and research resources in Romania. This platform offers a wide range of electronic resources, including journals, eBooks, and databases, to support the academic and research community.*

Recommendations:

The indicator is fulfilled.

² The indicators marked with an asterisk (*) hold a special status, referring exclusively to the evaluation of doctoral studies domains, as per Article 12 from the annex No.1 of the Order of the minister of education No. 3651/12.04.2021 approving the Methodology for evaluating university doctoral studies and the system of criteria, standards and performance indicators used in the evaluation. In case they are not met, the Agency extends a period of maximum 3 years to IOSUD to correct the respective deficiencies.



Criterion A.2. Research infrastructure

**general description of the criterion analysis.*

Standard A.2.1. The IOSUD has a modern research infrastructure to support the conduct of doctoral studies' specific activities.

**general description of the standard analysis.*

Performance Indicator A.2.1.1. *The venues and the material equipment available to the doctoral school enable the research activities in the evaluated domain to be carried out, in line with the assumed mission and objectives (computers, specific software, equipment, laboratory equipment, library, access to international databases etc.). The research infrastructure and the provision of research services are presented to the public through a specific platform. The research infrastructure described above, which was purchased and developed within the past 5 years will be presented distinctly.*

- *The POLITEHNICA Bucharest - Pitesti University Center has several research centers, each focusing on different areas of study and research. These centers include the Auto Engineering Research Center, Center for Calculation Methods and Programming Methodologies, Center of Applied Theological Studies, Human Performance Research Center, Littera Research and Training Center for Education, Linguistics, and Communication, Imagination Studies, Modeling and Simulation of Processes and Systems Research Center, Electron Research Center, Biotechnological Research in Horticulture and Environmental Protection, Analysis and Economic Modeling, Research Center for Promoting Excellence in Professional Training, Natural Protection, Legal and Administrative Studies, Intangible Cultural Heritage, Scientific Research in Applied Psychopedagogy, Logos Center, and Optomat Research Laboratory.*
- *The Research Center "Computational Models and Programming Methodologies" (MCMP) is located in the Department of Mathematics and Computer Science at the POLITEHNICA Bucharest - Pitesti University Center . Established in 2008, the center's research activities focus on computer science and mathematics, with specializations in WEB and E-learning applications, computational models, advanced database systems, artificial intelligence, pattern recognition, neural networks, and more. The center also conducts research in computational algebra, geometry, numerical computation, optimizations, code theory, and cryptography.*
- *The research areas include WEB and E-learning applications, computational models and programming methodologies, information theory, artificial intelligence, pattern recognition, neural networks, and more. The research directions include designing distributed systems, implementing extreme programming, specifying program systems using X-machines, testing methodologies in aspect-oriented systems, processing XML documents, and more. The center also studies inverse problems in seismology, image analysis, communications, medicine, multi-phase fluid flow, numerical schemes for boundary problems, stability, robustness, accessibility, and optimizability for complex dynamic systems in mechatronics, and non-metric methods in fluid mechanics and magnetohydrodynamics.*

Recommendations:

The indicator is fulfilled.



Criterion A.3. Quality of Human Resources

**general description of the criterion analysis.*

Standard A.3.1. At the level of each domain, there is sufficient qualified staff to ensure the conduct of a doctoral study program.

Performance Indicator A.3.1.1. *Minimum three doctoral thesis advisors within that doctoral domain and at least 50% of them (but no less than three) meet the minimum standards of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU) in force at the time when the evaluation is carried out, which standards are required and mandatory for obtaining the enabling certification.*

- *The POLITEHNICA Bucharest - Pitesti University Center 's Doctoral School of Computer Science indeed meets the minimum standards set by doctoral advisors in the field of Computer Science. The school ensures that its doctoral programs are in line with the university's mission and objectives, providing high-quality education and research opportunities in areas such as Artificial Intelligence, Machine Learning, Computational Models, and Software Engineering.*
- *The program is supported by a team of qualified doctoral supervisors from the POLITEHNICA Bucharest - Pitesti University Center and other institutions, ensuring a diverse range of expertise. Notable supervisors include:*
 - *Prof. Tudor Bălănescu*
 - *Prof. Horia Georgescu*
- *The school affiliation decisions are as follows:*
 - *HS_325_2024 Approval of the appointment of doctoral supervisor at the Interdisciplinary Doctoral School – Prof.dr. Marius Dan LEORDEANU*
 - *HS_285_2024 - Prof. Dr. Eng. Elena-Simona Apostol*
 - *HS_285_2024 - Dr. Eng. Ciprian-Octavian Truică*

Recommendations:

The indicator is fulfilled.

Performance Indicator *A.3.1.2. *At least 50% of all doctoral advisors have a full-time employment contract for an indefinite period with the IOSUD.*

- *The indicator is fulfilled with 60% - 5 doctoral thesis advisors having a full-time employment contract for an indefinite period with IOSUD -POLITEHNICA BUCHAREST - , 3 are tenured.*

Recommendations:

- *In the future, university need more advisors with indefinite contract periods.*

The indicator is fulfilled.

Performance Indicator A.3.1.3. *The study subjects in the education program based on advanced higher education studies about the doctoral domain are taught by teaching staff or researchers who are doctoral thesis advisors / certified doctoral thesis advisors, professors / CS I or lecturer / CS II, with proved*



expertise in the field of the study subjects they teach, or other specialists in the field who meet the standards established by the institution in relation with the aforementioned teaching and research functions, as provided by the law.

- *Specification, Verification and Formalized Validation of Software Systems: teaching staff: Prof. Dr. Tudor Bălănescu. Computational models and programming methodologies: teaching staff: Prof. Dr. Tudor Bălănescu.*
- *Concurrent programming; teaching staff: Prof. Dr. Horia Georgescu.*
- *Parallel and Distributed Algorithms, Computer Security, Security Protocols, Distributed Software Systems, Advanced Distributed Algorithms: teaching staff Assoc. Prof. Dr. Eng. Elena-Simona Apostol*
- *Distributed Databases, Advanced Database Systems, Distributed Database Systems, Data Mining and Data Warehousing, Data Mining for Computational Finance, Enterprise Datawarehouses and Information Systems: lecturer Șl.Dr.Eng. Ciprian-Octavian Truică.*
- *Computer Vision: teaching staff Prof. Dr. Marius Leordeanu*

Recommendations:

The indicator is fulfilled.

Performance Indicator *A.3.1.4. *The percentage of doctoral thesis advisors who concomitantly coordinate more than 8 doctoral students, but no more than 12, who are themselves studying in doctoral programs³ does not exceed 20%.*

- *The indicator is fulfilled. No doctoral advisor guides more than 8 PhD students. More precisely, T. Bălănescu guides 4 PhD students, Bold Nicolae, Țurcanu Cristina Nicoleta, Ileana Marian, Popescu Alexandru doctoral students.*
- *Assoc. Prof. Dr. Eng. Elena-Simona Apostol coordinates doctoral students: 1. Vișan Ana Maria; The percentage is 0%.*

Recommendations:

The indicator is fulfilled.

Standard A.3.2. *The Doctoral advisors within the domain are carrying out a scientific activity visible at the international level.*

**general description of the standard analysis.*

Performance Indicator A.3.2.1. *At least 50% of the doctoral thesis advisors in the evaluated domain have at least 5 Web of Science- or ERIH-indexed publications in magazines of impact, or other achievements of relevant significance for that domain, including international-level contributions that indicate progress in scientific research - development - innovation for the evaluated domain. The aforementioned doctoral thesis advisors enjoy international awareness within the past five years, consisting of membership on scientific boards of international publications and conferences; membership*

³ 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No.1/2011 with subsequent amendments and additions, with additional extension periods approved as per Article 39, paragraph (3) of the Code of doctoral studies approved by the GD No. 681/2011 with subsequent amendments and additions.



on boards of international professional associations; guests in conferences or expert groups working abroad, or membership on doctoral defense commissions at universities abroad or co-leading with universities abroad. For Arts and Sports and Physical Education Sciences, doctoral thesis advisors shall prove their international visibility within the past five years by their membership on the boards of professional associations, membership in organizing committees of arts events and international competitions, membership on juries or umpire teams in artistic events or international competitions.

- According to the CVs and list of papers for each doctoral coordinator, this indicator is met.

Recommendations:

The indicator is fulfilled.

Continuing the effort to publish scientific results in relevant forums

Performance Indicator *A.3.2.2. At least 50% of the doctoral thesis advisors in a specific doctoral study domain continue to be active in their scientific field, and acquire at least 25% of the score requested by the minimal CNATDCU standards in force at the time of the evaluation, which are required and mandatory for acquiring their enabling certificate, based on their scientific results within the past five years.

- The indicator is satisfied with 60%: 3 out of the 5 doctoral supervisors exceed, based on the scientific results of the last five years, 25% of the score of the minimal standards (Annex 5).

Recommendations:

The indicator is fulfilled.

Domain B. EDUCATIONAL EFFECTIVENESS

**general description of domain analysis.*

Criterion B.1. The number, quality and diversity of candidates enrolled for the admission contest

**general description of the criterion analysis.*

Standard B.1.1. The institution organizing doctoral studies has the capacity to attract candidates from outside the higher education institution or a number of candidates exceeding the number of seats available.

**general description of the standard analysis.*

Performance Indicator *B.1.1.1. The ratio between the number of graduates of masters' programs of other higher education institutions, national or foreign, who have enrolled for the doctoral admission contest within the past five years and the number of seats funded by the state budget, put out through contest within the doctoral domain is at least 0.2 or the ratio between the number of candidates within the past five years and the number of seats funded by the state budget put out through contest within the doctoral studies domain is at least 1,2.

- In the last 5 years, there have been 4 subsidized places and two master's graduates from the University of Bucharest, resulting in a ratio of 0.5.



Recommendations:

The indicator is fulfilled.

Standard B.1.2 Candidates admitted to doctoral studies demonstrate academic, research and professional performance.

**general description of the standard analysis.*

Performance Indicator *B.1.2.1. *Admission to doctoral study programs is based on selection criteria including previous academic, research and professional performance, their interest for scientific or arts/sports research, publications in the domain and a proposal for a research subject. Interviewing the candidate is compulsory, as part of the admission procedure.*

- *The POLITEHNICA Bucharest - Pitesti University Center 's doctoral study programs for 2021-2022 are organized and developed using a methodology. The admission contest involves an oral presentation of scientific research concerns, a bibliography, and a thesis direction. The process includes discussions with the admission commission. In cases of face-to-face teaching suspensions, the admission session is conducted according to the methodology. Candidates are evaluated based on their level of training, knowledge, ability to highlight research guidelines, and ability to formulate solutions*

Recommendations:

POLITEHNICA Bucharest - Pitesti University Center must have more PhD students

The indicator is fulfilled.

Performance Indicator B.1.2.2. *The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission⁴ does not exceed 30%.*

- *Within the field of Computer Science, only one student (Marin Răzvan) gave up his doctoral studies; in conclusion, the required rate is 20%.*

Recommendations:

The indicator is fulfilled.

Criterion B.2. The content of doctoral programs

**general description of the criterion analysis.*

Standard B.2.1. The training program based on advanced university studies is appropriate to improve doctoral students' research skills and to strengthen ethical behavior in science.

**general description of the standard analysis.*

⁴ 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No. 1/2011 with subsequent amendments and additions.

Performance Indicator B.2.1.1. *The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing.*

- *Specification, Verification and Formalized Validation of Software Systems (Prof. Dr. Tudor Bălănescu)*
- *Concurrent Programming (prof. dr. Horia Georgescu)*
- *Computational models and programming methodologies (prof. dr. Tudor Bălănescu)*
- *Management of scientific research projects, research methods (Assoc. Prof. Dr. Doru Anastasiu Popescu)*
- *Parallel and Distributed Algorithms (ass. dr. eng. Elena-Simona Apostol)*
- *Data, Text, Graph and Web Mining (prof. dr. eng. Ciprian-Octavian Truică)*
- *Database Management Systems (prof. dr. eng. Ciprian-Octavian Truică)*
- *Artificial Intelligence (prof. dr. Marius Leordeanu, associate professor dr. eng. Elena-Simona Apostol, assistant professor dr. eng. Ciprian-Octavian Truică)*
- *Social Media Analysis (prof. dr. Marius Leordeanu, associate professor dr. eng. Elena-Simona Apostol, assistant professor dr. eng. Ciprian-Octavian Truică)*
- *Big Data Analysis (Assoc. Prof. Dr. Eng. Elena-Simona Apostol, Asst. Prof. Dr. Eng. Ciprian-Octavian Truică)*
- *Advanced Topics on Security for Cyberinfrastructure (conf. Dr. Eng. Elena-Simona Apostol)*
- *Federated Learning (Assoc. Prof. Dr. Eng. Elena-Simona Apostol, Asst. Prof. Dr. Eng. Ciprian-Octavian Truică)*
- *Natural Language Processing Federated Learning (conf. dr. eng. Elena-Simona Apostol, sl. dr. eng. Ciprian-Octavian Truică)*
- *Performance Modeling and Design of Computer Systems*
- *Doctoral students in Computer Science should be trained in disciplines such as software system specification, concurrent programming, calculation models, and research methods, as well as project management.*

Recommendations:

The indicator is fulfilled.

Performance Indicator B.2.1.2. *At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program.*

- *In addition to the Ethics and Academic Integrity course, Research Methodology in the Doctoral School -SD IEE contains the subject of Ethics and academic integrity, intellectual property rights Assoc. Prof. Dr. Doru Constantin .*
- *Information technology in research and documentation, development of scientific research papers (Assoc. Prof. Dr. Costel Bălcău CV in Annex I.2.3.2. CV of Ethics, Management, Technologies course holders*



- *The theme of the course includes introductory notions on ethics and morals, research ethics in Romania, the correct writing of an academic paper, plagiarism and auto plagiarism, the use of computer programs to detect plagiarism, the code of ethics and professional ethics.*

Recommendations:

The indicator is fulfilled.

Performance Indicator B.2.1.3. *The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses „the learning outcomes”, specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities⁵.*

- *At the level of the Doctoral in Computer Sciences, mechanisms are developed to ensure that the training program based on advanced university studies, related to the evaluated fields, aims at "learning outcomes", specifying the knowledge, skills and abilities that Doctoral students should acquire after going through each subject.*
- *The files of the courses in the curriculum specify the competencies, responsibility and autonomy acquired by the doctoral students after completing the related training program. The course sheets are analyzed and approved by the SD-SFI Committee.*
- *The training program based on advanced university studies includes Ethics and academic integrity, Research Methodology and 3 specialized courses recommended by the doctoral supervisor depending on the subject of the thesis and the background of the PhD student (master courses or individual study based on a recommended bibliography with recent scientific papers). For each discipline, doctoral students have a colloquium in which the acquisition of skills is verified (knowledge of the field, synthesis capacity, critical analysis, ability to evaluate results.*
- *The curriculum also provides three Progress reports of the research which are presented before the guidance committee. CSD-SDSI recommends that PhD students' publications be included in these reports, allowing the guidance committee to analyze the evolution of the doctoral student in problems statement, formulating hypotheses, analytical skills, handling of the mathematical apparatus, writing and presentation.*
- *IOSUD-POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER has developed a training program for advanced university doctoral studies aiming for learning outcomes at level 8 EQF / CNC, following the European Union's Recommendation on the European Framework of qualification. Each discipline in the curriculum is detailed in a discipline sheet, outlining the competencies, skills, and attitudes that doctoral students should acquire after completing their studies. Credit points are provided for each subject, and exams are used for evaluation at the end of the semester.*

⁵ Or by what the graduate should know, understand and to be able to do, according to the provisions of the Methodology of 17 March 2017 regarding inscription and registration of higher education qualifications in the National Register of Qualifications in Higher Education (RNCIS) approved by the Order No.3475/2017 with subsequent amendments and additions.



Recommendations:

The indicator is fulfilled.

Performance Indicator B.2.1.4. All along with the duration of the doctoral training, doctoral students in the domain receive counseling/guidance from functional guidance commissions, which is reflected in written guidance and feedback or regular meeting.

- All doctoral students benefit during the entire doctoral training period from the counseling/guidance of Advisory committees composed of the doctoral supervisor and three specialists in the field/fields in which the doctoral student carries out his / her activity.
- Based on this questionnaire, the insertion of graduates on the labor market is monitored, as well as the evolution of their level of satisfaction. The questionnaires are processed by the Career Counseling and Guidance Center.
- The guidance commissions are made up of specialists in the field, teachers in POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER , with whom the doctoral student meets regularly (face to face or online).
- PhD student Bold Nicolae
Professor Horia Georgescu
Associate Professor Dr. Costel Bălcău
Associate Professor Dr. Doru Constantin
- PhD student Ileana Marian
Professor Horia Georgescu
Associate Professor Dr. Costel Bălcău
Associate Professor Dr. Doru Constantin
- PhD student Țurcanu Nicoleta Cristina
Professor Horia Georgescu
Associate Professor Dr. Costel Bălcău
Associate Professor Dr. Doru Constantin
- PhD student Popescu Alexandru Ion
conf. Dr. Eng. Elena-Simona Apostol
Associate Professor Dr. Costel Bălcău
Associate Professor Dr. Doru Constantin
- PhD student Vișan Ana-Maria
Prof. Dr. Eng. Florin Pop
Prof. Dr. Eng. Ciprian-Octavian Truică
prof. Dr. Adrian Paschke (Freie Universität Berlin)

Recommendations:

The indicator is fulfilled.

Performance Indicator B.2.1.5. For a doctoral study domain, the ratio between the number of doctoral students and the number of teaching staff/researchers providing doctoral guidance must not exceed 3:1.



- 5 doctoral students, Bold Nicolae, Nicoleta Cristina, Popescu Alexandrion Ion, Ana-Maria Vișan and Ileana Marian, and several teachers/researchers, including Prof. Tudor Bălănescu, Prof. Horia Georgescu, Assoc. Dr. Costel Bălcău, and Assoc. Dr. Doru Constantin, are working in Computer Science, with a required ratio of 1:1..

Recommendations:

The indicator is fulfilled.

Criterion B.3. The results of doctoral studies and procedures for their evaluation.

**general description of the criterion analysis.*

Standard B.3.1. Doctoral students capitalize on the research through presentations at scientific conferences, scientific publications, technological transfer, patents, products and service orders.

**general description of the standard analysis.*

Performance Indicator B.3.1.1. *For the evaluated domain, the evaluation commission will be provided with at least one paper or some other relevant contribution per doctoral student who has obtained a doctor's title within the past 5 years. From this list, the members of the evaluation commission shall randomly select 5 such papers / relevant contributions per doctoral study domain for review. At least 3 selected papers must contain significant original contributions in the respective domain.*

- *POLITEHNICA Bucharest - Pitesti University Center has a system for the periodic evaluation of teaching, research and management activities that is constantly used, improved from year to year and which has become a basic component in the culture of quality.*
- *There are competent human resources, organized pyramidally, for each study program; University research has international and national recognition, transparency in the university's ranking among top research universities, based on a large number of research contracts, ISI listed publications, investment in infrastructure and involvement of young researchers, PhD students, postdocs extended;*
- *This document contains lists of papers for the last two PhD students, including Adrian Turcanu, Talal Shaikh, and Cristina Nicoleta Mazilu. They have published works on model checking, process mining, and assessment tests using image-based items. Popescu, Doru Anastasiu, Constantin, and Bold have also presented papers on integrated assessments for students within academic consortiums. The document recommends periodic collection of doctoral students' achievements and presentation of the most relevant ones on the doctoral school website. The document also includes a paper on determining learning performance based on assessment item analysis.*

Recommendations:

- *Recommendation for Computer Science to have more papers on WOS, ISI, Springer, IEEE or Scopus.*

The indicator is fulfilled.



Performance Indicator *B.3.1.2. *The ratio between the number of presentations of doctoral students who completed their doctoral studies within the evaluated period (past 5 years), including posters, exhibitions made at prestigious international events (organized in the country or abroad) and the number of doctoral students who have completed their doctoral studies within the evaluated period (past 5 years) is at least 1.*

- *All five PhDs presented (see Annex II.B.3.1.1 List of PhD papers in Computer Science in the last 5 years).*

Recommendations:

The indicator is fulfilled.

Standard B.3.2. *The Doctoral School engages a significant number of external scientific specialists in the commissions for public defense of doctoral theses in the analyzed domain.*

**general description of the standard analysis.*

Performance Indicator *B.3.2.1. *The number of doctoral theses allocated to one specialist coming from a higher education institution, other than the evaluated IOSUD should not exceed two (2) in a year for the theses coordinated by the same doctoral thesis advisor.*

- *References from other IOSUD sources include Laurențiu Mierlă, Radu Nicolescu, Gheorghe Păun, Gheorghe Stefanescu, Mircea Sebastian Serbanescu, Denis Enăchescu, Smaranda Belciug, and Cristina Nicoleta Mazilu, with additional sources from the University of Bucharest and University of Bradford.*

Recommendations:

The indicator is fulfilled.

Performance Indicator *B.3.2.2. *The ratio between the doctoral theses allocated to one scientific specialist coming from a higher education institution, other than the institution where the defense on the doctoral thesis is organized, and the number of doctoral theses presented in the same doctoral study domain in the doctoral school should not exceed 0.3, considering the past five years. Only those doctoral study domains in which a minimum of ten doctoral theses have been presented within the past five years should be analyzed.*

- *The researchers have conducted a study on the correlation between the number of students and their academic performance. The results show that the correlation coefficients of the students were all equal except Gheorghe Paun with Ratio $2/5=0.4$, with a ratio of $1/5=0.20$. The researchers also found that the correlation coefficients of the students were similar across different institutions, indicating a strong correlation between the number of students and their academic performance.*

Recommendations:

The indicator is fulfilled.



Domain C. QUALITY MANAGEMENT

**general description of domain analysis.*

Criterion C.1. Existence and periodic implementation of the internal quality assurance system

**general description of the criterion analysis.*

Standard C.1.1. There are an institutional framework and procedures in place and relevant internal quality assurance policies, applied for monitoring the internal quality assurance.

**general description of the standard analysis.*

Performance Indicator C.1.1.1. *The Doctoral School in the respective university study domain shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the IOSUD, the following assessed criteria being mandatory:*

- (a) the scientific work of Doctoral advisors;*
- (b) the infrastructure and logistics necessary to carry out the research activity;*
- (c) the procedures and subsequent rules based on which doctoral studies are organized;*
- d) the scientific activity of doctoral students;*
- e) the training program based on advanced academic studies of doctoral students;*
- f) social and academic services (including participation at different events, publishing papers etc.)*

and counseling made available to doctoral students.

- *The scientific activity of doctoral supervisors was carried out during an academic year. This is the number of publications in relevant journals and the degree of fulfillment of the minimum standards for the award of the habilitation certificate, in force in the academic year subject to evaluation, the number of doctoral students who have completed their studies within three years from the date of enrolment out of the total number of doctoral students and who have publicly defended the thesis.*
- *IOSUD and SDSI follow the quality assurance policy implemented at the POLITEHNICA Bucharest - Pitesti University Center . The objectives of IOSUD are in line with the objectives of the university, namely, in the field of the quality management system, continuing education and training, scientific research and international cooperation.*
- *Infrastructure and facilities necessary for carrying out the research activity is analyzed how the funds of the doctoral school were used to improve the infrastructure and facilities necessary to carry out the research activity in the academic year subject to evaluation like the number of doctoral students financially supported to publish/participate in conferences; organizing symposia, summer schools, etc.*

- Subsequent procedures and rules based on which doctoral studies are organized like analysis of the degree of fulfillment of the obligations mentioned in the curriculum by the doctoral students coordinated by each doctoral supervisor.
- Analysis of the reasons why the doctoral students could not be complete the doctoral program within three years from the date of enrolment.
- Within IOSUD–POLITEHNICA Bucharest - Pitești University Center there is and applies a methodology (<https://www.upit.ro/ro/academiareorganizata/studii-de-doctorat/regulamente-silegislatie-nationala-iosud>)
- - The doctoral supervisors within the Interdisciplinary Doctoral School report annually, on the SIIMADC platform of POLITEHNICA Bucharest - Pitești University Center (<https://www.upit.ro/profesor/home>)

Recommendations:

The indicator is fulfilled/.

Performance Indicator *C.1.1.2. Mechanisms are implemented during the stage of the doctoral study program to enable feedback from doctoral students allowing them to identify their needs, as well as their overall level of satisfaction with the doctoral study program to ensure continuous improvement of the academic and administrative processes. Following the analysis of the results, there is evidence that an action plan was drafted and implemented.

- In the POLITEHNICA Bucharest - Pitesti University Center , there is a Quality Council (CC) Prof. univ. dr. ing. Viorel Nicolae. He serves as the Prorector for Quality of Education, with quality problems, which has in its structure the Commission for evaluation and quality assurance (CEAC) and the Quality Department (CoC). The Commission for quality evaluation and assurance and the Quality Department is structured with composition and attributions in the field of quality, approved by the Senate.
- The POLITEHNICA Bucharest - Pitesti University Center has a system for the periodic evaluation of teaching, research and management activities that is constantly used, improved from year to year and has become a basic component in the culture of quality.
- A questionnaire was designed at the level of the Interdisciplinary Doctoral School, by the Commission for Evaluation and Quality Assurance, together with the head of the doctoral study program, to identify the needs of doctoral students and to assess their general level of satisfaction with the doctoral study program they are following, with a view to continuously improving academic and administrative processes.

For Informatics:

https://docs.google.com/forms/d/1h5y6wLyjlfEavkcHCSxwFz70yIUBD_-yHU6XX6hKcyk/edit

Recommendations:

The indicator is fulfilled.

Criterion C.2. Transparency of information and accessibility of learning resources

**general description of the criterion analysis.*



Standard C.2.1. Information of interest to doctoral students, future candidates and public interest information is available for electronic format consultation.

**general description of the standard analysis.*

Performance Indicator C.2.1.1. The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection, information such as:

(a) the Doctoral School regulation;
(b) the admission regulation;
(c) the doctoral studies contract;
(d) the study completion regulation including the procedure for the public presentation of the thesis;

(e) the content of training program based on advanced academic studies;
(f) the academic and scientific profile, thematic areas/research themes of the Doctoral advisors within the domain, as well as their institutional contact data;

(g) the list of doctoral students within the domain with necessary information (year of registration; advisor);

(h) information on the standards for developing the doctoral thesis;
(i) links to the doctoral theses' summaries to be publicly presented and the date, time, place where they will be presented; this information will be communicated at least twenty days before the presentation.

The Interdisciplinary Doctoral School has the following address: <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat> , and for the field of Computer Science:<https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat/scolidoctorale/scoala-doctorala-interdisciplinara/informaticadoctorat>

a) The Interdisciplinary Doctoral School Regulations can be found at <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat>

b) The admission methodology for doctoral studies is available at <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat>

c) The doctoral study contract is available at <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat>

d) The regulations for completing studies can be found at <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat> and the procedure for the public defense of the doctoral thesis at

https://www.upit.ro/_document/111710/methodologia_de_finalizare_studii_doctorale_si_sustinere_a_tezei_de_doctorat_in_cadrul_universitatii_din_pitesti_inclusiv_in_situatii_de_urgenta_sitate.pdf

e) The subject sheets can be found at https://upit.ro/_document/172626/i.2.2.5._fise_discipline_informatica.pdf

f) The CVs of the doctoral supervisors were presented during the visit.

g) The list of current doctoral students can be accessed at https://upit.ro/_document/172629/studenti_doctoranzi_01.10.2021.pdf

h) The standards for writing a doctoral thesis can be found at

i) https://upit.ro/_document/172898/standardele_de_elaborare_a_tezei_de_doctorat.pdf



- Information about thesis summaries and the date and place of the defense is available at
- <https://www.upit.ro/ro/academia-reorganizata/studii-de-doctorat/tezelor-de-doctorat>

Recommendations:

- More PhD and postdoctoral PhD study of Computer Science based on the English language.
- The indicator is fulfilled.**

Standard C.2.2. The IOSUD/The Doctoral School provides doctoral students with access to the resources needed for conducting doctoral studies.

*general description of the standard analysis.

Performance Indicator C.2.2.1. All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of their thesis.

- SDSI doctoral students have access to **Online databases:**
 - ANELIS PLUS - National Electronic Access to Scientific Literature for Supporting the Research and Education System in Romania - scientific databases for study and research in various fields
- Teachers and students of the POLITEHNICA Bucharest - Pitesti University Center can access the subscribed databases from the University's computer network, based on IP or remotely, through mobile access.

Recommendations:

The indicator is fulfilled.

Performance Indicator C.2.2.2. Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.

- All doctoral students POLITEHNICA Bucharest - Pitesti University Center are granted access to the system of verifying the degree of similarity with other scientific creations through the verifying system of. having an electronic system for verifying the degree of similarity: with sistemantiplagiat.ro

Recommendations:

The indicator is fulfilled.

Performance Indicator C.2.2.3. All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.

- All doctoral students have access to scientific research laboratories or other facilities specific to the field of Computer Science, according to internal rules.
- All doctoral students are granted access to scientific research laboratories within the Research Centres mentioned at the criterion A.2.1.1.
- Some doctoral students have access to research laboratories or testing laboratories within companies with which some doctoral supervisors have concluded research contracts



Recommendations:

- *Build virtual joint access laboratory for better online activities of PhD students. This means virtualizing real laboratories and giving access to students to training in virtual space, before starting real laboratory work.*

The indicator is fulfilled.

Criterion C.3. Internationalization

**general description of the criterion analysis.*

Standard C.3.1. There is a strategy in place and it is applied to enhance the internationalization of doctoral studies.

**general description of the standard analysis.*

Performance Indicator *C.3.1.1. *IOSUD, for every evaluated domain, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at mobility periods abroad, up to at least 20%, which is the target at the level of the European Higher Education Area.*

- *POLITEHNICA Bucharest - Pitești University Center has an Erasmus+ mobility agreement for doctoral studies with Vilnius University, Lithuania and Aarhus University, Denmark. The agreement manager is Lect.univ.dr. Laurențiu Deaconu, and the agreement manager is Ș.I.Dr.Ing. Ciprian-Octavian Truică, from 2020-present.*
- *The university has participated in several international conferences, including the IEEE 41st International Conference on Software Testing, Verification and Validation, the Proceedings of the IEEE International Conference on Software Testing, Verification and Validation Workshops (ICSTW), and the 4th Crowd Science Workshop on Collaboration of Humans and Learning Algorithms for Data Labeling co-located with the ACM International WSDM Conference (WSDM 2023).*
- *Doctoral student Marian Ileana completed the training internship for the Erasmus+ Mobility: Key Action 1 - Learning Mobility of Individuals (KA131) in the academic year 2022-2023. Of the three doctoral students who obtained their doctorate during the evaluated period, 2 participated in international conferences, i.e., 66%. Of the total of six doctoral students, 5 participated in international conferences, i.e., 71%.*
- *The university has also established an Erasmus+ mobility agreement with Vilnius University, Lithuania, and Aarhus University, Denmark, for doctoral studies from 2014-2022. The university's research has been published in various academic journals, such as IEEE Transactions on Software Testing, Verification and Validation, and IEEE International Conference on Software Testing, Verification and Validation Workshops.*



- Overall, the university's commitment to its students and their research has contributed significantly to the development of the field of learning mobility.

Recommendations:

- The institution must increase the number of PhD students in Erasmus projects incoming and outgoing abroad. Internationalization is a key to educational success in the future.

The indicator is fulfilled.

Performance Indicator C.3.1.2. In the evaluated doctoral study domain, support is granted, including financial support, to the organization of doctoral studies in international co-tutelage or invitation of leading experts to deliver courses/lectures for doctoral students.

- The invitation of top experts to give courses/lectures to PhD students is supported. Professors Marian Gheorghe from Bradford University (UK), Radu Nicolescu from Auckland University (NZ) and Raluca Lefticaru from the University of Sheffield (UK) have collaborated with PhD students (Laurențiu Mierlă, Ionuț Niculescu). Adrian Paschke from Freie Universitaet Berlin (DE) collaborates with PhD student Ana-Maria Vișan.

Recommendations:

The indicator is fulfilled.

Performance Indicator C.3.1.3. The internationalization of activities carried out during the doctoral studies is supported by IOSUD through concrete measures (e.g., by participating in educational fairs to attract international doctoral students; by including international experts in guidance committees or doctoral committees etc.).

- Attention is paid to the participation of international experts in the supervision or defense committees of doctoral theses. Professor Radu Nicolescu from Auckland University (NZ) was a member of the defense committee of the doctoral student Mierlă Laurențiu. Professor Adrian Paschke from Freie Universitaet Berlin (DE) is on the supervision committee of the doctoral student Ana-Maria Vișan.

Recommendations:

- Internationalization is a key for a future for an excellent University. This level of Erasmus, Ceepus and other mobilities must be doubled in the future.

The indicator is fulfilled.

IV. SWOT Analysis

<p>Strengths: The POLITEHNICA Bucharest - Pitești University Center remains a regional leader in the field of higher education, through the study programs of Computer Science it offers and the importance of research contracts;</p>	<p>Weaknesses: The low share of research funding from private funds; The low level of attractiveness of the teaching and/or research career; big companies have more money than universities.</p>
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<p>The POLITEHNICA Bucharest - Pitești University Center offers to study a program in an area of Computer Science for a doctorate for full-time, part-time and distance learning;</p> <p>There is an adequate material basis for education and research activities, in continuous improvement and modernization;</p> <p>There are competent human resources, organized pyramidally, for each study program;</p> <p>University research has international and national recognition, transparency in the university's ranking among top research universities, based on a large number of research contracts, ISI-listed publications, investment in infrastructure and involvement of young researchers, PhD students, postdocs extended;</p> <p>The University has adopted and implemented a strategy and operational plan for research and innovation compatible with the latest trends at the European and national level;</p> <p>Research centers have been reorganized; The regulatory framework for doctoral and post-doctoral programs was adopted - as institutional and methodological premises for the emergence of research poles;</p> <p>The intensification of the European mobility programs Erasmus, Erasmus +, Erasmus Mundus has continued;</p> <p>The general principles of quality assurance take into account transparency, compatibility and convertibility. In the strategic plan of the https://www.valahia.ro/en/, the quality is essential and constantly improving;</p> <p>The material base is characterized by the existence of modern equipment for education and research, provides optimal conditions for teaching, as well as practical work in pilot units and experimental stations;</p> <p>All students have access to library services, databases, Internet, dormitory accommodation, social programs, sports facilities, as well as the restaurant.</p>	<p>Low efficiency of technology transfer in case of research results (with poor funding), in the current economic environment; Insufficient visibility concerning EU universities.</p> <p>An increased level of internationalization is a key for a future for an excellent University.</p> <p>The number of doctoral advisors are minimum.</p> <p>Doctoral grants aren't enough for supporting doctoral students' activities.</p> <p>A small rate of exchange students through Erasmus and CEEPUS projects.</p>
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<p>PhD students are very satisfied with their level of education. Many of them are working and continue working in other Universities in Romania or big Companies in Romania.</p>	
<p>Opportunities:</p> <p>Development of collaboration networks and partnerships with foreign universities; Accessing specific grants for student practice;</p> <p>Collaboration with the economic environment for possible technological transfers, service offers, consultancy, initiation of study programs;</p> <p>The interest was shown by young people from various countries in and outside the European space to pursue doctoral degree programs, through the educational offer in languages of international circulation;</p> <p>Use the HORIZON 2020 strategy to encourage and support the university's research programs;</p> <p>Development of new European programs such as "Lifelong learning", Post-doctorate and e-Platforms;</p> <p>Development of existing partnerships with public institutions and the private environment, with the role of generating new sources of financing;</p> <p>Reconfiguring the relations between the public authorities, the university and the economic environment;</p> <p>Generalization of the values of a culture of quality at the level of university education and research;</p> <p>The existence of a dynamic economic environment that requires graduates;</p> <p>The possibility of accrediting new doctoral fields, full of English language;</p> <p>Development of partnerships with other European universities for doctoral studies;</p> <p>Imposing the organization as a partner for the regional economic and social environment;</p>	<p>Threats:</p> <p>Funding for higher education and research may lead to insufficient funding for the academic process;</p> <p>Domestic and international competition: open competitions to attract students, quality resources and funds;</p> <p>An aggressive policy of Computer Science in attracting doctoral and postdoctoral students;</p> <p>National legislation that does not stimulate the attraction of foreign students (from outside the EU);</p> <p>A lack of interest of high school graduates for the Doctoral Study;</p> <p>The current economic context, only with a few relevant economic actors;</p> <p>The payment of state employees does not allow financial incentives for research activity;</p> <p>The risk of absorbing funds lower than forecast and for which expenses have been incurred;</p> <p>Financing. The number of budget-funded seats allocated to POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER is small. In addition, we faced the non-rhythmicity of research project competitions.</p> <p>The relatively high average age of doctoral supervisors;</p> <p>Decreasing attractiveness of the doctorate in Computer Science.</p>

<p>Requirements for participation in projects with companies and institutions in the area of Computer Science</p> <p>Existence of ICSTM with the afferent endowment;</p> <p>National/international visibility of doctoral supervisors;</p> <p>Public-private partnerships with Renault, Arctic and Schneider existing in POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER that can employ PhD students, offer doctoral assignments at the proposal of economic agents and involve them financially.</p>	
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V. Overview of judgments awarded and of the Recommendations

No.	Type of indicator (*, C)	Performance indicator	Judgment	Recommendations
1	A.1.1.1.	<p>A.1.1.1. The existence of specific regulations and their application at the level of the doctoral school to which the field of doctoral studies belongs: a) the regulations of the doctoral school;</p> <p>b) the methodology for conducting elections for the position of director of the Doctoral School Council (CSD), as well as the election by students of the representative in the CSD, and evidence of their conduct;</p> <p>c) methodologies for organizing and conducting doctoral studies (admission of doctoral students, completion of doctoral studies);</p> <p>d) the existence of mechanisms for recognizing the quality of doctoral supervisor and</p>	<i>The indicator is fulfilled.</i>	

		<p>for equivalence of doctorate obtained in other states; e) functional management structures (Doctoral School Council), including proving the regularity of convening meetings;</p> <p>f) the doctoral university study contract;</p> <p>g) internal procedures for analyzing and approving proposals regarding the topic of the training program based on advanced university studies</p>		
2	A.1.1.2.	The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the aspects specified in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.	The indicator is fulfilled	
3	A.1.2.1.	The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic backgrounds.	The indicator is fulfilled	Translate all documents on the website to English.
4	A.1.2.2.	The existence and use of a software program and evidence of its use to verify the percentage of similarity in all doctoral theses.	The indicator is fulfilled	Using an international expert in commission for PhD study and always translate doctoral thesis into English. In this way similarity on English and translation part of the thesis will be reduced to the minimum.
5	A.1.3.1.	Existence of at least one research or institutional/human resources development grant under implementation at the time of submission of the internal evaluation file, per doctoral study domain under evaluation or existence of at least 2 research or institutional development / human resources grant for the doctoral study domain, obtained by doctoral thesis advisors operating in the evaluated domain within the past 5 years. The grants address relevant themes for the respective	The indicator is fulfilled	University must use more EU grants for foreign PhD and postdoctoral students to have the possibility to be excellent in education and to increase the internationality of the study of Computer Science.

		domain and, as a rule, are engaging doctoral students.		
6	*A.1.3.2.	The percentage of doctoral students active at the time of the evaluation, who for at least six months receive additional funding sources besides government funding, through scholarships awarded by individual persons or by legal entities, or who are financially supported through research or institutional/human resources development grants is not less than 20%.	<i>The indicator is fulfilled</i>	In the future is recommended more private sources for doctoral and postdoctoral study.
7	*A.1.3.3.	At least 10% of the total amount of doctoral grants obtained by the university through institutional contracts and of tuition fees collected from the doctoral students enrolled in the paid tuition system is used to reimburse professional training expenses of doctoral students (attending conferences, summer schools, training, programs abroad, publication of specialty papers or other specific forms of dissemination etc.).	<i>The indicator is fulfilled</i>	In next year must be increased from 7,64% to a minimum of 10% from a doctoral grant for professional training expenses of PhD students.
8	A.2.1.1.	The venues and the material equipment available to the doctoral school enable the research activities in the evaluated domain to be carried out, in line with the assumed mission and objectives (computers, specific software, equipment, laboratory equipment, library, access to international databases etc.). The research infrastructure and the provision of research services are presented to the public through a specific platform. The research infrastructure described above, which was purchased and developed within the past 5 years will be presented distinctly.	<i>The indicator is fulfilled</i>	
9	A.3.1.1.	Minimum three doctoral thesis advisors within that doctoral domain, and at least 50% of them (but no less than three) meet the minimum standards of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU) in force at the time when the evaluation is carried out, which standards are required and mandatory for obtaining the enabling certification.	<i>The indicator is fulfilled</i>	

10	*A.3.1.2.	At least 50% of all teaching/research staff involved in teaching/research activities related to training programs for advanced university studies or in individual research/art creation programs have a full-time employment contract for an indefinite period with the IOSUD.	The indicator is fulfilled	In the future, University need more advisors with indefinite contract periods.
11	A.3.1.3.	The study subjects in the education program based on advanced higher education studies pertaining to the doctoral domain are taught by teaching staff or researchers who are doctoral thesis advisors / certified doctoral thesis advisors, professors / CS I or lecturer / CS II, with proved expertise in the field of the study subjects they teach, or other specialists in the field who meet the standards established by the institution in relation with the aforementioned teaching and research functions, as provided by the law.	The indicator is fulfilled	
12	*A.3.1.4.	The percentage of doctoral thesis advisors who concomitantly coordinate more than 8 doctoral students, but no more than 12, who are themselves studying in doctoral programs ⁶ does not exceed 20%.	The indicator is fulfilled	
13	A.3.2.1.	At least 50% of the doctoral thesis advisors in the evaluated domain have at least 5 Web of Science - or ERIH-indexed publications in magazines of impact, or other achievements of relevant significance for that domain, including international-level contributions that indicate progress in scientific research - development - innovation for the evaluated domain. The aforementioned doctoral thesis advisors enjoy international awareness within the past five years, consisting of: membership on scientific boards of international publications and conferences; membership on boards of international professional associations; guests in conferences or expert groups working abroad, or membership on doctoral defense commissions at	The indicator is fulfilled	

⁶ 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No.1/2011 with subsequent amendments and additions, with additional extension periods approved as per Article 39, paragraph (3) of the Code of doctoral studies approved by the GD No. 681/2011 with subsequent amendments and additions.

		universities abroad or co-leading with universities abroad. For Arts and Sports and Physical Education Sciences, doctoral thesis advisors shall prove their international visibility within the past five years by their membership on the boards of professional associations, membership in organizing committees of arts events and international competitions, membership on juries or umpire teams in artistic events or international competitions.		
14	*A.3.2.2.	At least 50% of the doctoral thesis advisors in a specific doctoral study domain continue to be active in their scientific field, and acquire at least 25% of the score requested by the minimal CNATDCU standards in force at the time of the evaluation, which are required and mandatory for acquiring their enabling certificate, based on their scientific results within the past five years.	The indicator is fulfilled	
15	*B.1.1.1.	<i>The ratio between the number of graduates of masters' programs of other higher education institutions, national or foreign, who have enrolled for the doctoral admission contest within the past five years and the number of seats funded by the state budget, put out through contest within the doctoral domain is at least 0.2 or the ratio between the number of candidates within the past five years and the number of seats funded by the state budget put out through contest within the doctoral studies domain is at least 1,2.</i>	The indicator is fulfilled	
16	*B.1.2.1.	<i>Admission to doctoral study programs is based on selection criteria including: previous academic, research and professional performance, their interest for scientific or arts/sports research, publications in the domain and a proposal for a research subject. Interviewing the candidate is compulsory, as part of the admission procedure.</i>	The indicator is fulfilled	
17	B.1.2.2.	<i>The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission⁷ does not exceed 30%.</i>	The indicator is fulfilled	

⁷ 3 years for the doctoral university studies with the duration stipulated at Article 159, paragraph (3), respectively 4 years for the doctoral university studies with the duration stipulated at Article 174, paragraph (3) of the Law of national education No. 1/2011 with subsequent amendments and additions.

18	B.2.1.1.	<i>The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing.</i>	The indicator is fulfilled	
19	B.2.1.2.	<i>At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program.</i>	The indicator is fulfilled	
20	B.2.1.3.	<i>The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses „the learning outcomes”, specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities</i>	The indicator is fulfilled	
21	B.2.1.4.	<i>All along with the duration of the doctoral training, doctoral students in the domain receive counseling/guidance from functional guidance commissions, which is reflected in written guidance and feedback or regular meeting.</i>	The indicator is fulfilled	
22	B.2.1.5.	<i>For a doctoral study domain, the ratio between the number of Doctoral students and the number of teaching staff/researchers providing guidance shall not exceed 3:1.</i>	The indicator is fulfilled	
23	B.3.1.1.	<i>For the evaluated domain, the evaluation commission will be provided with at least one paper or some other relevant contribution per doctoral student who has obtained a doctor's title within the past 5 years. From this list, the members of the evaluation commission shall randomly select 5 such papers / relevant contributions per doctoral study domain for review. At least 3 selected papers must contain significant original contributions in the respective domain.</i>	The indicator is fulfilled	Recommendation for Computer Science to insist on applied science papers. In the future Computer Science according to trends in the development of electric vehicles and renewable energy and waste energy.
24	*B.3.1.2.	<i>For the evaluated domain, the evaluation commission will be provided with at least one paper or some other relevant contribution per doctoral student who has obtained a doctor's title within the past 5 years. From this list, the members of the evaluation commission shall randomly select 5 such papers / relevant contributions per doctoral study domain for review. At least 3 selected papers</i>	The indicator is fulfilled	

		<i>must contain significant original contributions in the respective domain.</i>		
25	*B.3.2.1.	<i>The number of doctoral theses allocated to one specialist coming from a higher education institution, other than the evaluated IOSUD should not exceed two (2) in a year for the theses coordinated by the same doctoral thesis advisor.</i>	The indicator is fulfilled	
26	*B.3.2.2.	<i>The ratio between the doctoral theses allocated to one scientific specialist coming from a higher education institution, other than the institution where the defense on the doctoral thesis is organized, and the number of doctoral theses presented in the same doctoral study domain in the doctoral school should not exceed 0.3, considering the past five years. Only those doctoral study domains in which minimum ten doctoral theses have been presented within the past five years should be analyzed.</i>	The indicator is fulfilled	
27	C.1.1.1.	<i>The Doctoral school in the respective university study domain shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the IOSUD, the following assessed criteria being mandatory: (a) the scientific work of Doctoral advisors; (b) the infrastructure and logistics necessary to carry out the research activity; (c) the procedures and subsequent rules based on which doctoral studies are organized; (d) the scientific activity of doctoral students; (e) the training program based on advanced academic studies of doctoral students; (f) social and academic services (including for participation at different events, publishing papers etc.) and counselling made available to doctoral students.</i>	The indicator is fulfilled	
28	*C.1.1.2.	<i>Mechanisms are implemented during the stage of the doctoral study program to enable feedback from doctoral students allowing them to identify their needs, as well as their overall level of</i>	The indicator is fulfilled	

		satisfaction with the doctoral study program to ensure continuous improvement of the academic and administrative processes. Following the analysis of the results, there is evidence that an action plan was drafted and implemented.		
29	C.2.1.1.	<p>The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection, information such as:</p> <ul style="list-style-type: none"> (a) the IOSUD/Doctoral School regulation; (b) the admission regulation; (c) the doctoral studies contract; (d) the study completion regulation including the procedure for the public presentation of the thesis; (e) the content of the study programs, based on advanced academic studies; (f) the academic and scientific profile and thematic areas/research themes of the Doctoral advisors within the domain, as well as their institutional contact data; (g) the list of doctoral students within the school, with necessary information (year of registration; Advisor); (h) information on the standards for developing the doctoral thesis; (i) information on the opportunities for doctoral students aiming to attend conferences, to publish articles, awarding scholarships etc. (j) links to the doctoral theses' summaries to be publicly presented and the date, time, place where they will be presented; this information will be communicated at least twenty days before the presentation. 	The indicator is fulfilled	More PhD and postdoctoral PhD study of Computer Science based on the English language
30	C.2.2.1.	All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of their thesis.	The indicator is fulfilled	
31	C.2.2.2.	Each doctoral student shall have access, upon request, to an electronic system for verifying the degree of similarity with other existing scientific or artistic works.	The indicator is fulfilled	

32	C.2.2.3	All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral School, according to internal order procedures.	The indicator is fulfilled	Build virtual joint access laboratory for better online activities of PhD students. This means virtualizing real laboratories and giving access to students to training in virtual space, before starting real laboratory work.
33	*C.3.1.1.	IOSUD, for every evaluated domain, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at mobility periods abroad, up to at least 20%, which is the target at the level of the European Higher Education Area.	The indicator is fulfilled	The institution must increase the number of PhD students in Erasmus projects incoming and outgoing abroad. Internationalization is a key to educational success in the future.
34	C.3.1.2	C.3.1.2. Within the field of study evaluated, it is supported, including financial, organizing international co-supervision doctorates, respectively inviting top experts to give courses/lectures for doctoral students.	The indicator is fulfilled	increasing financial and other institutional support for the coordination of doctoral programs under international co-supervision. expanding the quantity of doctorate theses that are co-supervised internationally. inviting specialists from around the world to give presentations in the area.
35	C.3.1.23	The internationalization of activities within doctoral studies is also supported by other concrete measures (for example, participation in educational fairs to attract international doctoral students; inclusion of international experts in committees for guidance or defense of doctoral theses, etc.).	The indicator is fulfilled	International specialists should be included in doctorate student advising committees and public defense committees for theses (during thesis defense), and theses should be written in English or another widely spoken language.



VI. Conclusions and general recommendations

After full evaluation POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER Doctoral study of Computer science and talking with professors, rector, dean, students, chiefs of laboratories, etc and after reading plans and programs, annexes, and all other documents. I have only one decision.

POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER is an quality University center. Doctoral study of Computer Science on al 35 indictor are fulfilled. In the future POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER need more collaborations activities every year according to the internationalization Doctoral Study and add more quality resources for the study.

POLITEHNICA BUCHAREST - PITESTI UNIVERSITY CENTER , doctoral studies of Computer Science fulfilled all 35 indicators for IOSUD evaluation.

Date:

Evaluator: Prof. dr Tihomir Latinovic

VII. Annexes

Programul⁸ vizitei de evaluare instituțională - IOSUD/domenii de studii universitare de doctorat a
POLITEHNICA București - Centrul Universitar Pitești

The timetable of the institutional evaluation visit - IOSUD/doctoral study domains at the **Pitești University**

Perioada de derulare a vizitei: 16.01.2025 - 17.01.2025

The evaluation period: 16.01.2025 - 17.01.2025

Evaluarea Externă Periodică a IOSUD și a domeniilor de studii universitare de doctorat

Periodical External Evaluation of the Institution Organising Doctoral Study Programs (IOSUD), and of the doctoral study domains

Interv al orar hour	Activitate / Activity	Participanți / Participants	Observații/ Locație Observations/ Location
Joi / Thursday, 16.01.2025			
09:00- 09:30	Întâlnire organizatorică a comisiei de experți evaluatori	- Membrii comisiei de experți evaluatori ARACIS	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești - Corp S, Sala S216
09:30- 10:00	Întâlnirea comisiei de experți evaluatori cu responsabilul domeniului de studii universitare de doctorat evaluat și cu echipa care a realizat raportul de evaluare internă	- Membrii comisiei de experți evaluatori ARACIS - Reprezentanți ai instituției evaluate	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești - Corp S, Sala S216 Participanți din UNSTPB-CUP - Consiliul Scolii Doctorale Interdisciplinare – Informatica/ Director
10:00- 10:30	Întâlnirea comisiei de experți evaluatori cu reprezentanții conducerii instituției evaluate și ai CSUD	- Membrii comisiei de experți evaluatori ARACIS - Reprezentanți ai conducerii universității - Reprezentanți ai CSUD și ai școlii doctorale /	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Sala Senat – rectorat - Conducere CUPIT, Consiliul Scolii Doctorale Interdisciplinare – Informatica/ Director

⁸ În perioada vizitei pot fi solicitate și alte întâlniri, pentru eventuale clarificări. During the visit, other meetings may be requested for possible clarifications.

Interv al orar hour	Activitate / Activity	Participanți / Participants	Observații/ Locație Observations/ Location
10:30 – 11:00	Întâlnirea echipei de evaluare cu membrii Consiliului școlii doctorale/ conducere facultate în cadrul căreia va funcționa domeniul evaluat	- Membrii comisiei de experți evaluatori ARACIS - Membrii CSD	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești, Corp S, Sala S216 Participanți din UNSTPB-CUP - Consiliul Școlii Doctorale Interdisciplinare – Informatica/ Director
11:00- 11:30	Întâlnirea echipei de evaluare cu personalul didactic aferent domeniului evaluat	- Comisia de evaluare ARACIS - Cadre didactice care au calitatea de conducător de doctorat	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Corp S, Sala S216 - Participanți din UNSTPB-CUP - Cadre didactice care au calitatea de conducător de doctorat
11:30- 12:30	Întâlnirea echipei de evaluare cu studenți doctoranzi aferent domeniului evaluat Întâlnirea echipei de evaluare cu reprezentanți ai angajatorilor absolvenților domeniului evaluat Întâlnirea echipei de evaluare cu absolvenți cu titlu de doctor din domeniul evaluat	- Comisia de evaluare ARACIS - Studenți doctoranzi / - Comisia de evaluare ARACIS - Reprezentanți ai angajatorilor - Comisia de evaluare ARACIS - Absolvenți cu titlu de doctor din domeniul evaluat /	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Corp S, Sala S216 Reprezentanți ai angajatorilor, Studenți doctoranzi, Absolvenți cu titlu de doctor din domeniul evaluat
12:30- 13:00	Întâlnirea echipei de evaluare cu directorii/ responsabili centrelor/ laboratoarelor de cercetare , membrii Comisiei de Etică, CEAC a instituției de învățământ superior	- Comisia de evaluare ARACIS - Reprezentanți ai instituției evaluate	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Corp S, Sala S216 Participanți din UNSTPB-CUP- Consiliul Școlii Doctorale Interdisciplinare – Informatica/ Director
13:00- 14:00	Pauză de prânz		
14:00- 16:00	Vizitarea bazei materiale didactice și de cercetare	- Membrii comisiei de experți evaluatori ARACIS	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Corp S – Laboratoare, sali de curs/seminar, birouri DMI - Biblioteca și Sala de lectură

Interv al orar hour	Activitate / Activity	Participantî / Participants	Observații/ Locație Observations/ Location
		- Reprezentanți ai instituției evaluate	Consiliul Scolii Doctorale Interdisciplinare – Informatica/ Director
16:00- 18:00	Întâlnirea membrilor comisiei de experți evaluatori cu responsabilul domeniului de studii universitare de doctorat evaluat	- Membrii comisiei de experți evaluatori ARACIS - Reprezentanți ai instituției evaluate	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești - Corp S, Sala S216 Consiliul Scolii Doctorale Interdisciplinare – Informatica/ Director

Interv al orar hour	Activitate / Activity	Participanți / Participants	Observații/ Locație Observations/ Location
Vineri/ Friday, 17.01.2025			
09:00- 12:30	Întâlnire de lucru a comisiei de experți evaluatori	- Membrii comisiei de experți evaluatori ARACIS	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești - Corp S, Sala S216
12:30- 13:30	Pauză de prânz		
13:30- 14:00	Întâlnire de lucru a comisiei de experți evaluatori	- Membrii comisiei de experți evaluatori ARACIS	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești - Corp S, Sala S216
14:00- 15:00	Întâlnirea comisiei de experți evaluatori cu reprezentanții conducerii instituției evaluate și ai CSUD: prezentarea concluziilor evaluării	- Membrii comisiei de experți evaluatori ARACIS - Reprezentanți ai conducerii universității - Reprezentanți ai CSUD și ai școlii doctorale /	UNSTPB-CUP, Str. Târgu din Vale, Nr. 1, Pitești Sala Senat – rectorat - Conducere CUPIT, Consiliul Scolii Doctorale Interdisciplinare – Informatica/ Director



Research Center in Computer Science

Fields of research

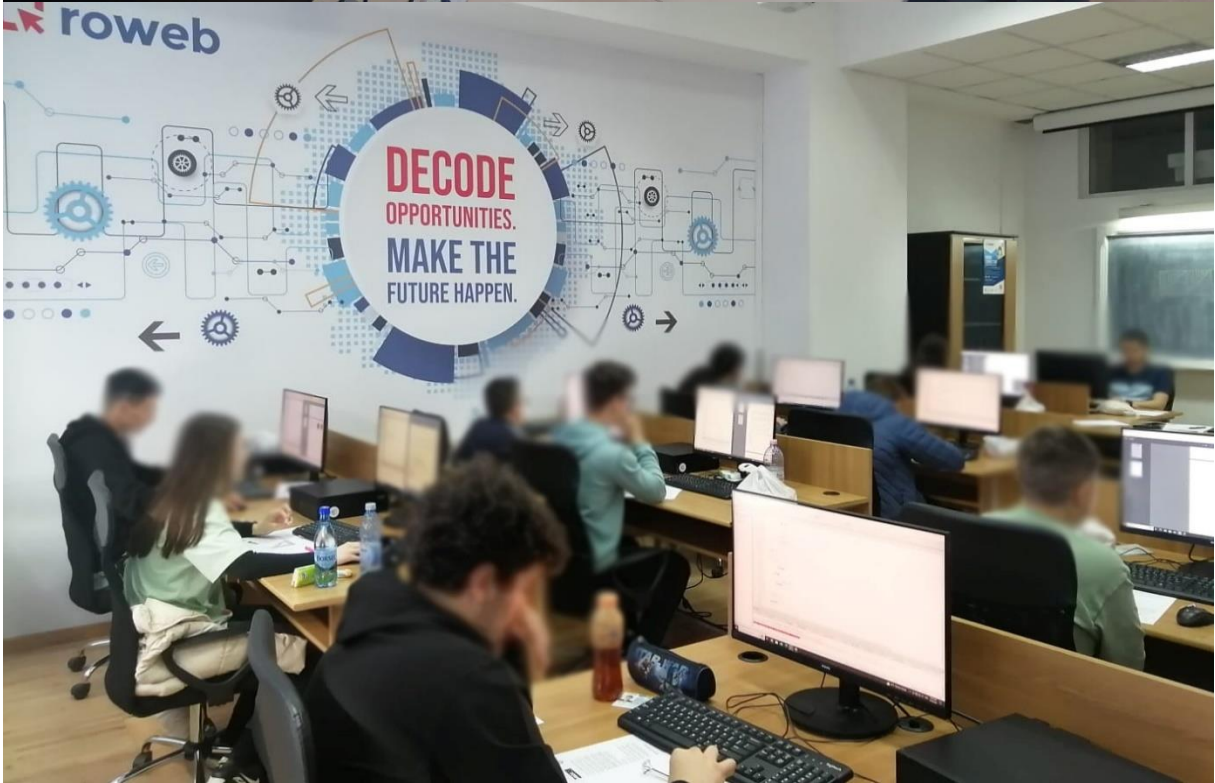
Laboratories

Calculation Methods and Programming Methodologies Research Centre:

Established in 2008-2009, this center is recognized as a type A research center and focuses on various computational and programming methodologies.















➤ **The library**



The screenshot shows the website for the Library of the Pitești University Center. At the top left is a photo of a modern brick building. The main title is "LIBRARY OF THE PITEȘTI UNIVERSITY CENTER" in green. Below it is the ISIL number "RO-AG-0136". A navigation menu includes "Contact", "Valori bibliofile", "Documente Acreditări", "Referințe bibliografice", "Proiecte", and "Tipuri documente". A central banner features a "NEW" starburst and the text "DIGITAL LIBRARY Access guide". Below this is a list of menu items: "Despre noi", "Ghiduri, Pliante", "Regulamente", "Echipa bibliotecii", "Permise", "Perioadice", "Politica de dezvoltarea a colecțiilor", "Împrumut interbibliotecar", and "Biblioteca în cifre". The main content area highlights the "Encyclopedia of Argeș and Muscel" with the note "Bibliographies in digital format - a new online service offered to users available in the Digital Library". It also features a section for "FAMOUS THOUGHTS, MAXIMS, QUOTES AND SAYS (about books, reading, learning and libraries)" with a quote by Michael Eminescu: "School will be school when man will be man and the state will be the state." A "Catalog on-line" link is present, accompanied by a photo of a library interior. On the right side, there are icons for search, home, and a globe.

➤ **Online databases:**

- ANELIS PLUS - National Electronic Access to Scientific Literature for Supporting the Research and Education System in Romania - scientific databases for study and research in various fields
- ScienceDirect Freedom Collection, Elsevier - provides access to online scientific research journals, academic books, book series and online encyclopedias; covered fields: humanities, medicine, exact sciences, technology.
- Web of Science - Core Collection, InCites Journal Citation Reports, Derwent Innovations Index, Clarivate Analytics - mainly includes scientific journals, conferences and books; covered fields: humanities, social sciences, arts, exact sciences.
- PROQUEST Central - offers access to scientific research journals in an online format, reports, newspapers, books; fields found: science and technology, medical sciences, literature, society and culture, art, history, religion, computers, education, business and much more.
- Scopus, Elsevier -c comprises; scientific journals, books and conference papers; fields found: medical sciences, technology, social sciences, arts, humanities.
- de Gruyter ebooks - includes academic papers of the highest level; fields covered: humanities, social sciences, medicine, natural sciences, law.
- Cab ebooks - provide online access to authoritative information from a top scientific publisher; fields: agriculture, environment, health, nutrition, etc.

➤ *Teachers and students of the POLITEHNICA Bucharest - Pitesti University Center can access the subscribed databases from the University's computer network, based on IP or remotely, through mobile access*



➤ **ONLINE RESOURCES**

Welcome to Digital Library

- * **Digitized publications**
- * **Digital publications**
- * **Electronic periodicals**
- * **Digital periodicals**
- * **Digitized periodicals**
- * **Digitized articles**
- * **Digital articles**
- * **Publications published by the University of Pitești Publishing House**
- * **Publications published by the "Transilvania" University Publishing House, Brașov**
- * **Representative publications of the Argeș - Muscel area**
- * **Doctor Honoris Causa UPIT**
- * **Digitized manuscripts**
- * **OSIM publications**
- * **IFR University Courses**
- * **Bibliographies in digital format**
- * **Geographic Romania - Author: Dan GHINEA**
- * **Ancient Greek authors**
- * **UPIT doctoral theses**
- * **UPIT doctoral theses summaries**
- * **EU publications through CDE UPIT**
- * **Publications on Japanese culture and civilization**

Study mobility for students of the POLITEHNICA Bucharest - Pitesti University Center INFORMATICS domain, within the Erasmus + program



Department of Mathematics-Informatics has Inter-Institutional Agreements on Informatics (bachelor / master / doctoral level) with different universities from the EU-countries and non-EU countries: *France* (Universite de Lorraine), *Spain* (University of Granada, University Rey Juan Carlos), *Greece* (Aristotle University Of Thessaloniki, Ionian University, Technological Educational Institute of Crete), *Lithuania* (Vilnius University, Klaipeda State University of Applied Sciences), *Austria* (University of Kagenfurt), *Turkiye* (Bilecik Şeyh Eddeballi University, Agri Ibrahim Cecen University, Bahcesehir University, Selcuk University, Dicle



University, Firat University, Izmir Institute of Technology), *Bulgaria* (St. Cyril and St. Methodius University of Veliko Turnovo, Paisii Hilendarski University of Plovdiv, Angel Kanchev University of Ruse), *Poland* (Polytechnika Czestochowska), *Macedonia* (Ss. Cyril and Methodius University in Skopje), *Egypt* (Mansoura University), *Kazakhstan* (Istana IT University).