# ROMANIAN AGENCY FOR QUALITY ASSURANCE IN HIGHER EDUCATION Full member of the European Association for Quality Assurance in Higher Education - ENQA Listed in the European Quality Assurance Register for Higher Education - EQAR

Annex No. 3

External Evaluation
Report Doctoral Study
Domain Mathematics
University of Oradea

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24th of November 2021



#### I. Introduction<sup>1</sup>

This report summarizes my impressions as ARACIS International Expert Evaluator of the Doctoral Study Domain Mathematics within University of Oradea (UO). The evaluation of university Doctoral Domain Mathematics at the University of Oradea was carried out by ARACIS in view of maintaining accreditation, procedure of quality assurance aimed to certify fulfillment of operating standards by the institutions organizing university doctoral studies, based on

- Law of National Education No 1/2011
- Government Emergency Ordinance no. 75/2005 on Quality Assurance of Education, approved with amendments and additions by Law No 87/2006, as amended and supplemented subsequently (in particular Articles 10, 13 and 29)
- Romanian Government Decision No. 681 of 29 June 2011 on the approval of the Code of Doctoral Studies, with subsequent amendments and additions
- Order 3651 of 12.04.2021 of the Minister of Education to approve the Methodology for evaluation of doctoral studies and the systems of criteria, standards and performance indicators used in the evaluation and the systems of criteria, standards and performance indicators used in the evaluation.

The evaluation processes was performed by the Romanian Agency for Quality Assurance in Higher Education (ARACIS), who recruited the following Experts Committee, in charge of Evaluation of the Doctoral Domain Mathematics at the University of Oradea:

Coordinator Prof. Dr. Mihai Adela-Gabriela	Universitatea Tehnică de Construcții București/ Universitatea "Transilvania" din Brasov
International expert Prof. Dr. Gruenwald Norbert	University of Applied Sciences Technology, Business and Design, Germany
PhD student Constantin Munteanu	Universitatea Tehnică "Gheorghe Asachi" din Iași

The evaluation period extended from 15/11/2021 to 20/11/2021, and it was developed in a hybrid mode, meaning that the evaluation took place as online meetings and well as on-site visits. Online meetings were provided with a translation into English

After my appointment as an International Expert Evaluator, I was informed by Mitea Bianca from ARACIS of the evaluation team on important aspects of the evaluation process, and how to access to the evaluation documents (Internal Evaluation Report and annexes)

#### Background

The University of Oradea (UO) is defined as a higher education institution located on the western border of Romania, having a decisive role in the socio-economic and cultural development of the geographical area where it operates. Starting from this role, UO has assumed a wide range of educational fields to cover the requirements of a sustainable development of these fields both nationally and internationally, by recognizing the activity submitted after graduation by its and by scientific results of the teaching staff. If the the years 1990-2007 were highlighted by a "horizontal development" of the university, and 2007-2012 was a transition stage on the implementation of European education based on the Bologna Process, starting with



2012, UO has wanted to strengthen the quality (" vertical development") of its own education and research processes and optimization of the joint use of human resources, materials and financial.

The University of Oradea organize doctoral studies in 18 doctoral fields, organized in 7 doctoral schools, both in form of full-time education and in the part-time form.

The Doctoral School of Engineering Sciences comprise the doctoral fields Agronomy, Electrical Engineering, Electronic Engineering, Telecommunications and Information Technologies, Energy Engineering, Industrial Engineering, Engineering and Management and Mathematics, within the Faculty of Managerial and Technological Engineering.

The doctoral field Mathematics was established starting with 2019. The Mathematics doctoral field, has the mission of generating and transferring knowledge to society through:

- academic training, at the highest level of performance, of the doctoral student in order to satisfy the need for his intellectual, professional and social development, but also the need for specialized workforce of the society;
- promoting excellence in the processes of scientific research, development, innovation and knowledge transfer to the Romanian society, thus responding to the need for its progress.

The main objectives of the doctoral field are the following:

- Ob.l. optimizing and streamlining training programs based on advanced studies;
- Ob.2. ensuring and continuous improvement of the quality of activities carried out within the doctoral field;
- Ob.3. stimulating, developing research capacity and capabilities, while promoting new research directions;
- Ob.4. the development of the human resource involved at the level of the doctoral studies cycle;
- Ob.5. internationalization and increasing visibility at national and international level;

#### **II. Methods used/Evaluation Materials**

- 1. Self Assessment Report (in English)
- 2. Online meetings (with English translation)
- 3. Website of Doctoral School University of Oradea (English documents)



# III. Analysis of performance indicators and

# IV. Overview of judgments awarded and of the recommendations

No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
1.	PI	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.	fulfilled	Especially for international doctorate candidates make all documents on the website vailable in English
2.	PI	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.	Fulfilled	
3.	PI	A.1.2.1. The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background.	Fulfilled	
4.	PI	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.	Fulfilled	Note: From a higher percentage of similaryty do not conclude immediately plagiarism. In many disciplines are commen phrases for typical methodological approaches.
5.	IP	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	fulfilled	



No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
	,	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.		
6.	PI*	<b>A.1.3.2.</b> 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%.	fulfilled	
7.	PI*	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.).	Partially fulfilled	
8.	СРІ	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	fulfilled	(visual impression after evaluation of pictures delivered by University of Oradea)
9.	СРІ	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.	fulfilled	
10.	PI*	<b>A.3.1.2.</b> At least 50% of all doctoral advisors have a full-time employment contract for an indefinite period with the IOSUD.	fulfilled	



No.	Type of	Performance indicator	Judgment	Recommendations
	indicator (PI, PI *, CPI)		Š	
11.	PI	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.	fulfilled	Recommendation: Critical thinking and problem-solving top the list of skills that employers believe will grow in prominence in the next five years. These have been consistent since the first WEF report in 2016. But newly emerging are additional skills in self-management such as active learning, resilience, stress tolerance and flexibility. It would be good to implement the acquisition of such skills in the doctorate curriculum.
12.	PI*	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 does not exceed 20%.	fulfilled	
13.	СРІ	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 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.	fulfilled	Recommendation: It is recommended the doctoral supervisors should be more active in activities that increase international visibility, e.g. membership in international scientific committees of international publications or conferences.
14.	PI*	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	fulfilled	



No.	Type of indicator (PI, PI*, CPI)	Performance indicator	Judgment	Recommendations
		on their scientific results within the past five years		
15.	PI*	<b>B.1.1.1.</b> 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.	fulfilled	
16.	PI*	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.	fulfilled	
17.	PI	B.1.2.2. The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission does not exceed 30%.	not applicable	Comment: The doctoral school of Mathematics starts 2 years ago
18.	PI	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.	fulfilled	
19.	PI	<b>B.2.1.2.</b> 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.	fulfilled	
20.	PI	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 activities.	fulfilled	
21.	PI	<b>B.2.1.4.</b> All along the duration of the doctoral training, doctoral students in the domain receive counselling/guidance from functional guidance commissions, which is reflected in	fulfilled	



No.	Type of indicator (PI, PI*, CPI)	Performance indicator	Judgment	Recommendations
		written guidance and feedback or regular meeting.		
22.	СРІ	<b>B.2.1.5</b> . 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.	fulfilled	
23.	СРІ	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	not applicable	Comment: The doctoral school of Mathematics starts 2 years ago, no graduate so far
24.	PI*	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.	not applicable	Comment: The doctoral school of Mathematics starts 2 years ago, no graduate so far
25.	PI*	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.	not applicable	Comment: The doctoral school of Mathematics starts 2 years ago, no graduate so far
26.	PI*	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 minimum ten doctoral theses have been presented within the past five years should be analyzed.	not applicable	Comment: The doctoral school of Mathematics starts 2 years ago, no graduate so far
27.	PI	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	fulfilled	Recommendation: It is recommendet that the doctoral students from different supervisors and even different domains have regulary organised meeting to exchange/present their work and support interdisciplinary cooperation.



No.	Type of indicator (PI, PI*, CPI)	Performance indicator	Judgment	Recommendations
		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.		
28.	PI*	C.1.1.2. Mechanisms are implemented during the stage of the doctoral study program to enable feedback from doctoral students allowing to identify their needs, as well as their overall level of satisfaction with the doctoral study program in order 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.	fulfilled	Recommendation It is strongly recommendet to inform the students about the results and possibly reactions of feedback and questionaires
29.	СРІ	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.	fulfilled	
30.	PI	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.	fulfilled	



	Type of Devicement indicator ludement		D 1.0	
No.	Type of indicator (PI, PI *, CPI)	Performance indicator	Judgment	Recommendations
31.	PI	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.	fulfilled	
32.	PI	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.	fulfilled	
33.	PI*	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.	partially fulfilled (COVID regulations do not allow physical travel since start of doctoral school)	Recommendations: It is recommended to increase the number of international mobility agreements for doctoral sutdents and staff (e.g. Erasmus) with partner universities.
34.	PI	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.	partially fulfilled	Recommendation It is recommended to use personal contacts of doctoral school staff in their national and international scientific network to attract experts for courses/lectures for doctoral students. It is recommendet to allocate a fixed budget from the university funds and try to find additional grants for such activities
35.	PI	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.).	fulfilled	Recommendation It is recommended to use personal contacts of doctoral school staff in their national and international scientific network to promote doctoral studies and attract external candidates for doctoral studies at University of Oradea



### Strength:

The Doctoral Domain at UO benefits from the following:

- Strong engagement for and high qualified Supervisors in the Doctoral School
- Very good and close cooperation between student and supervisor
- Commitment of UO to develop the Mathematical Doctoral School

#### Weakness:

- A small number of international partners and/or international collaborators
- The UO has tools and mechanisms in place to identify the needs and satisfaction of students through specific questionnaires. However, the PhD students were largely unaware of the results and action plan based on answers of the questionnaires.
- The teaching of transversal skills is more or less reduced to lectures in Professional Ethics and Deontology, as "Methodology of Scientific Research" and "Ethics and Academic Integrity".
- Less interaction between students from different supervisors as well as interactions between students from different doctoral schools at UO.
- So far no integration of doctoral students in research projects of supervisors
- The UO has tools and mechanisms in place to design and manage method used in for continuous improvement of educational and management processes. However, most processes are isolated and not bring together in one cycle (e.g. Plan Do Ceck Act (PDCA) cycle)

#### **Opportunities:**

- Extending the number of international cooperation for co-supervision of doctorate studies, for mobility of doctoral students and staff and to increase the international visibility that might be a way of attracting more external students.
- Intergrate in the doctoral studies the development of transversal skills like "Problem Solving", "Critical Thinking", "Team Working", what are on top skills needed for personal development as well as demanded from employers.
- Increase the interaction between students from different supervisors as well as interactions between students from different doctoral schools at UO (e.g. with doctoral summer schools, doctoral seminars etc.).
- For continuous improvement of educational and management describe the processes in one cycle (e.g. Plan Do Ceck Act (PDCA) cycle).

#### **Threats:**

- The financial situation to support the doctoral school, especially to support financially mobility of students as well as financials support for publications of the doctoral students.

11



## VI.Conclusions and general recommendations

Beyond any doubt, and even that the doctoral Doctoral Study Domain Mathematics within the University of Oradea is very young, it has remarkable quality and benefits of highly qualified PhD Supervisors.

The individual supervision and care of the doctoral students are excellent and are very much appreciated by the students.

For the personal development and better employability of the students it is recommended to implement during the doctoral studies skills like "Problem Solving", "Critical Thinking", "Team Working", "Communication", increase international activities, intergrate students in research projects and support the cooperation between doctoral students from different disciplines,

There are very good quality assurance methods in place, however I recommend to organized the activities in one clear cycle and document it in such way (e.g. PDCA) and give feedback of the activities to clients (students, university, society)

Prof. Dr. Norbert Gruenwald Wismar University

#### VII. Annexes

• The detailed schedule of the evaluation visit – MANDATORY.



#### AGENȚIA ROMÂNĂ DE ASIGURARE A CALITĂȚII ÎN ÎNVĂȚĂMÂNTUL SUPERIOR

Membră în Asociația Europeană pentru Asigurarea Calității în Învățământul Superior - ENQA Înscrisă în Registrul European pentru Asigurarea Calității în Învățământul Superior - **EQAR** 

Nr 6239/02.11.2021

#### Programul¹ vizitei de evaluare instituţională - IOSUD / domenii de studii universitare de doctorat a Universităţii din Oradea

The timetable of the institutional evaluation visit - IOSUD / doctoral study domains at the University of Oradea Perioada de derulare a vizitei: 15.11.2021 - 22.11.2021

The evaluation period: 15.11.2021 – 22.11.2021

## Evaluarea Externă Periodică a domeniului de studii universitare de doctorat\_Matematică Periodical External Evaluation of the doctoral study domain Mathematics

Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible
		Luni / Monday, 15.11.2021	
09:00-10:45	Întâlnire <b>preliminară</b> online pentru pregătirea și armonizarea etapelor de evaluare, în modul mixt, la nivel de domenii de doctorat și IOSUD Online preliminary meeting for the preparation and harmonization of evaluation steps, in hybrid mode, of doctoral study domains and IOSUD	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel  - toți membrii echipei de evaluare all evaluation panel members	Înregistrare audio-video ARACIS / platforma ZOOM (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording ARACIS / ZOOM platform (click <u>here</u> to join)

During the visit, other meetings may be requested for possible clarifications.

<sup>&</sup>lt;sup>1</sup> În perioada vizitei, pot fi solicitate și alte întâlniri, pentru eventuale clarificări.

Intervalul			
orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil  Comments/ Responsible
11:00-11:45	Întâlnirea online a comisiei de experți evaluatori cu reprezentanții conducerii universității și ai CSUD  Online meeting with representatives of the institution and of the Council for Academic Doctoral Studies (CSUD)	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel - toți membrii echipei de evaluare all evaluation panel members - reprezentanți ai conducerii representatives of the University's management - reprezentanți ai CSUD și ai școlii/școlilor doctorale representatives of the CSUD and of the Doctoral School /Schools - persoana de contact IOSUD/domenii the contact person for IOSUD / doctoral domains	Înregistrare audio-video / platforma UO (apăsați aici pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click here to join)
12:00-13:00	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online a comisiei de experți evaluatori cu responsabilul domeniului de studii universitare de doctorat evaluat și cu echipa care a realizat raportul de evaluare internă  Domain Mathematics: Online meeting with the contact person for the doctoral study domain under review and the team who drafted the internal evaluation report	Comisia de evaluare domeniu Matematică  Domain evaluation panel Mathematics  -membrii comisiei de experți evaluatori domeniu members of domain evaluation panel  - responsabilul domeniului de studii universitare de doctorat evaluat și echipa care a realizat raportul de evaluare internă	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)

Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible
		The doctoral studies domain contact person and the team who drafted the internal evaluation report	
14:30-15:30	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online a comisiei de experți evaluatori cu personalul didactic aferent domeniului evaluat  Domain Mathematics: Online meeting with the academic staff corresponding to the doctoral study domain	Comisia de evaluare domeniu Matematică Domain evaluation panel Mathematics -membrii comisiei de experți evaluatori domeniu members of domain evaluation panel -cadre didactice cu titlul de conducător de doctorat Doctoral coordinators	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)
		Marți / Tuesday, 16.11.2021	
09:00 - 10:00	Întâlnire online cu membrii <b>Comisiei de Etică</b> a universității  Online meeting with the members of the Ethics Commission	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel  - toți membrii echipei de evaluare all evaluation panel members  -membrii Comisiei de Etică Ethics Commission members	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)
10:15 - 11:15	Activități de evaluare  Evaluation activities	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel - toți membrii echipei de evaluare all evaluation panel members	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform

Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible
	Întâlnire online cu membrii Comisiei pentru Evaluarea și Asigurarea Calității (CEAC) / Departamentul de asigurare a calității Online meeting with the Commission for Quality Evaluation and Assurance (CEAC) members / Quality Assurance Department	- reprezentanți ai CEAC/Departament AC representatives of Commission for Quality Evaluation and Assurance (CEAC) / Quality Assurance Department	(click <u>here</u> to join)
11:30-12:30	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online a comisiei de evaluare cu studenții doctoranzi  Domain Mathematics : Online meeting with PhD students	Comisia de evaluare domeniu Matematică  Domain evaluation panel Mathematics  - membrii comisiei de experți evaluatori domeniu members of domain evaluation panel  - studenții doctoranzi PhD students	Înregistrare audio-video ARACIS / platforma ZOOM (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording ARACIS / ZOOM platform (click <u>here</u> to join)
14:00-15:00	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online a comisiei de evaluare cu reprezentanți ai absolvenților domeniului  Domain Mathematics: Online meeting with graduates for the respective doctoral study domain	Comisia de evaluare domeniul Matematică  Domain evaluation panel Mathematics  - membrii comisiei de experți evaluatori domeniu  members of domain evaluation panel  - reprezentanți ai absolvenților  representatives of doctoral graduates	Pauză-Întâlnirea nu se va desfășura- lipsă absolvenți pe domeniu Break-The meeting will not take place-there are not any graduates

Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible			
09:00-10:00	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online cu directorii/responsabilii centrelor/laboratoarelor de cercetare aferente domeniului de studii universitare de doctorat  Domain Mathematics: Online meeting with the Directors/ persons in charge of the research centers/laboratories within the doctoral study domain	Comisia de evaluare domeniul Matematică Domain evaluation panel Mathematics  - membrii comisiei de experți evaluatori domeniu members of domain evaluation panel  -directorii centrelor / laboratoarelor de cercetare directors of research centers/laboratories	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)			
11:30 -12:30	Activități de evaluare  Evaluation activities  Domeniu Școala doctorală Științe inginerești-Matematică: Întâlnire online cu membrii Consiliului școlii /școlilor doctorale (CSD) în cadrul cărora funcționează domeniul evaluat Domain: Engineering Sciences Mathematics: Online meeting with Doctoral Schools Council (CSD members)	Comisia de evaluare domeniu  Matematică  Domain evaluation panel Mathematics  - membrii comisiei de experți evaluatori domeniu  members of domain evaluation panel  -membrii CSD  CSD's members	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)			
14:00 -15:00	Activități de evaluare  Evaluation activities  Domeniu Matematică: Întâlnire online a comisiei de evaluare cu reprezentanți ai angajatorilor absolvenților domeniului	Comisia de evaluare domeniu Matematică  Domain evaluation panel Mathematics  - membrii comisiei de experți evaluatori domeniu	Pauză-Întâlnirea nu se va desfășura- lipsă angajatori Break-The meeting will not take place-there are not any employers of Doctoral graduates in the domain			

Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible
	<u>Domain Mathematics</u> : Online meeting with employers of Doctoral graduates in the domain	members of domain evaluation panel  - reprezentanți ai angajatorilor employers' representatives	
16:30 -17:30	Întâlnire tehnică online, pentru identificarea aspectelor specifice care trebuie clarificate, dacă este cazul, pe parcursul vizitei la fața locului Online technical meeting to identify specific issues that need to be clarified, if necessary, during the on-site visit	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel  - toți membrii echipei de vizită all evaluation panel members	Înregistrare audio-video ARACIS / platforma ZOOM (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording ARACIS / ZOOM platform (click <u>here</u> to join)
		Joi / Thursday, <b>18.11.2021</b>	
09:00-18:00	Reuniuni de lucru față în față², vizitarea bazei materiale didactice și de cercetare  Face-to-face working meetings, visiting the educational and research infrastructure	- directorul de misiune și coordonatorul, un student doctorand evaluator the Evaluation Director and the coordinator of the IOSUD evaluation panel, one student  - reprezentanți ai universității university's representatives	Vizită UNIVERSITATE Site visit to the university

<sup>&</sup>lt;sup>2</sup> Experții evaluatori la nivelul domeniilor de studii universitare de doctorat pot stabili independent programul vizitei la fața locului, de comun acord cu persoana de contact de la domeniul evaluat și respectând programul întâlnirilor comune cu restul membrilor echipei de evaluare. *The evaluators at doctoral study domain level can independently establish the program of the on-site visit, in agreement with the contact person for the evaluated domain and respecting the schedule of joint meetings with the rest of the evaluation panel members.* 

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Intervalul orar EET/ Hour (Bucharest time-EET)	Activitate / Activity	Participanți / Participants	Observații/ Responsabil Comments/ Responsible
09:00-18:00	Reuniuni de lucru față în față, vizitarea bazei materiale didactice și de cercetare  Face-to-face working meetings, visiting the educational and research infrastructure	- directorul de misiune și coordonatorul, un student doctorand evaluator the Evaluation Director and the coordinator of the IOSUD evaluation panel, one student  - reprezentanți ai universității university's representatives	Vizită UNIVERSITATE Site visit to the university
		Sâmbătă/ Saturday, 20.11.2021	
10:00-11:30	Întâlnire online pentru concluzii  Online meeting for conclusions	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel  - toți membrii echipei de evaluare all evaluation panel members	Înregistrare audio-video ARACIS / platforma ZOOM (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording ARACIS / ZOOM platform (click <u>here</u> to join)
11:45-12:30	Întâlnire finală online în vederea prezentării principalelor constatări rezultate în urma evaluării la nivel de domenii de doctorat și IOSUD și a recomandărilor de îmbunătățire a calității Meeting with representatives of the institution under review to discuss on the conclusions of the evaluation process and the main reccomandations	Comisia de evaluare IOSUD&domenii IOSUD&domains evaluation panel  - toți membrii echipei de evaluare all evaluation panel members  - reprezentanții universității university's representatives	Înregistrare audio-video / platforma UO (apăsați <u>aici</u> pentru a vă conecta)  Audio-video recording UO / ZOOM platform (click <u>here</u> to join)



Director de misiune

**Director CSUD**