

The Romanian Agency for Quality Assurance in Higher Education



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

Higher Education Institution/Education Provider Organization:	"Ovidius" University of Constanța
Doctoral School:	Mathematics
Doctoral Domain:	Mathematics
The objective of the external evaluation:	Maintaining accreditation (MAC)



Members of the ARACIS Evaluation Panel

No.	Last Name and First Name	Team role	Signature
1.	Berinde Vasile	Expert evaluator	
2.	Perjan Andrei	International Expert	
3.	Bouruc Petru-Liviu	PhD Student Evaluator	

I. Introduction

This external evaluation report was drafted at the request of the "Ovidius" University of Constanța, Faculty of Mathematics and Informatics, in order to maintain the accreditation of the undergraduate study program in Computer Mathematics. The external evaluation was carried out in accordance with the legal provisions and the ARACIS Methodology. The external evaluation visit on site took place between June 24-26, 2026, with the participation of all members of the external evaluation committee appointed by ARACIS, as follows:

- Prof. Dr. Vasile Berinde – committee coordinator;
- Prof. Dr. Andrei Perjan – expert evaluator;
- Stud. Drd. Petru-Liviu Bouruc – student evaluator.

The internal evaluation report and the related annexes were drawn up in accordance with the ARACIS requirements and the national legislation applicable to higher education.

The "Ovidius" University of Constanta (UOC) is a public higher education institution, established in 1961, as the Pedagogical Institute of Constanta, which in 1977 became the Institute of Higher Education of Constanta, and which, by GD no. 225/07.03.1990, transformed into the current "Ovidius" University of Constanta (UOC). In the structure of the UOC, in the academic year 2025-2026, there are 16 faculties and 12 doctoral schools with 13 doctoral fields. Within the faculties, there are 42 fields of bachelor's studies with 86 study programs, the form of education IF, IFR, ID and DUAL, a preparatory Romanian language program for foreign citizens, 33 fields of master's studies with 66 university master's study programs, the form of education IF and a psycho-pedagogical training program for the certification of skills for the teaching profession. Following the last institutional evaluation conducted by ARACIS in 2022, UOC obtained the High Trust Degree rating.

The Doctoral School of Mathematics (SDMate) has a single field of doctoral university studies, namely Mathematics. Within the doctoral field of Mathematics, five doctoral supervisors are active: four tenured members of UOC (Professors Crăciun Eduard-Marius, Cosma Luminița, Vernic Raluca and Flaut Cristina) and one external doctoral supervisor (Prof. dr. Lascu Dan, from the "Mircea cel Bătrân" Naval Academy in Constanța). All doctoral supervisors in the field of doctoral university studies Mathematics are continuously active in the scientific field, exceeding the score required by the minimal CNATDCU standards in force at the time of evaluation, necessary and mandatory for obtaining the habilitation certificate, based on the scientific results from the last five years.

In the academic year 2025–2026, within the doctoral field of Mathematics, 11 PhD students are active. Since 2021, within SDMate, in the doctoral field of Mathematics, four PhD students have obtained the title of Doctor in Mathematics: Radu Vasile, Nicolescu Eracle Adrian, Emin Anamaria and Tudor Geanina. In October 2025, the public defenses of the doctoral theses of PhD students Burlacu Andreea-Laura and Vintu Ioan-Vladimir took place, and in January 2026 that of Ghița Gilbert Marius Daniel.

The Mathematics domain of SDMate has recorded a constant evolution in terms of the academic framework, scientific visibility and the relevance of the obtained results. The research directions developed within the field are diverse and cover fundamental and applied areas of modern mathematics, including: algebra, equations, probability, mathematical statistics and continuum mechanics. These directions reflect both the tradition of the mathematical school within UOC and the openness towards emerging fields with high application potential.

The structure of the doctoral program fully complies with IOSUD-UOC regulations and national legislation. All elements of the doctoral process - the training program based on advanced university studies, the individual research program, periodic evaluation, and the activity of the guidance committees - are organized and monitored according to institutionalized procedures. The Mathematics domain benefits from the logistical support of the Faculty of Mathematics and Computer Science.

II. Methods used

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

As part of the external evaluation process, the internal evaluation report of DSUM and the related annexes were reviewed and analyzed, focusing on aspects regarding human resources, material base and research activity; regulations, methodologies, procedures; curricula and subject sheets, as well as additional documents requested by the evaluation committee, prior to the on-site visit.

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

The external on-site evaluation visit took place in the room P05, IOSUD UOC, Ion Vodă str. no. 58, and included meetings and discussions, in accordance with the provisions of the ARACIS Methodology and which are found in the visit calendar, agreed with the contact person and the CSUD management.

Other relevant methods or aspects.

In order to ensure an integrated evaluation process, the commission correlated the written documents made available (IER, Annexes), with the information obtained from the discussions held during the meetings organized during the on-site visit and with other observations, which led to the formulation of documented and objective assessments regarding the degree of fulfillment of the ARACIS standards and performance indicators.

III. Judgement on the extent to which the standards and performance indicators are fulfilled

DOMAIN A. Institutional capacity

Criterion A.1. Managerial and administrative structures and processes involving students and other stakeholders

Standard S.A.1.1. Organisational components and institutional processes

The HEI has organisational components in its structure, which function based on adequate competences, responsibilities, processes, and implementation procedures, and ensure an effective management system.

Indicator
I.P.A.1.1.1

For delivering the study programme/domain, the HEI has adequate organisational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.

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

Within the IOSUD – “Ovidius” University of Constanța, including at the Doctoral School of Mathematics, the organization and conduct of doctoral studies are carried out in accordance with an updated institutional regulatory framework that is harmonized with national legislation. Doctoral school's activities are governed by the Institutional Regulations on the Organization and Operation of Doctoral Studies, approved by the University Senate, as well as by specific methodologies and procedures regarding the admission, conduct, and completion of doctoral studies.

The governance of doctoral programs is ensured by functional management structures, established and operated in accordance with institutional methodologies regarding the organization and election of the governing bodies of doctoral studies. At the same time, the relationship between IOSUD and doctoral students is governed by doctoral study contracts, and the doctoral training process is supported by internal procedures regarding the approval of training programs and the monitoring of academic activities.

The university also has transparent mechanisms for recognizing the status of doctoral supervisors and for the equivalence of doctoral degrees and titles obtained abroad, thereby contributing to ensuring compatibility with national and international academic standards and to strengthening the quality of doctoral studies.

The Advanced University Studies Training Program (PPUA) within the Doctoral School of Mathematics is regularly monitored and evaluated by the Doctoral School Council (CSDMate), in accordance with its own regulations. The process includes regular consultations with members of the doctoral school to update the curriculum by revising or introducing new courses, so that the program meets the needs of doctoral students and keeps pace with developments in the national and international academic community.

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

The Regulations of the Doctoral School of Mathematics are aligned with the provisions of the Framework Regulations on Doctoral Studies (Ministerial Order No. 3020/2024) and regulates essential aspects of the organization of the doctoral program, such as the admission and status of doctoral advisors, decision-making mechanisms regarding the structure of the training program, as well as procedures for changing the academic advisor and managing potential conflicts. At the same time, it establishes the conditions for interrupting the doctoral program, measures to prevent academic fraud, including plagiarism, guarantees of access to research resources, and attendance requirements for doctoral students, thereby ensuring a coherent and rigorous framework for the conduct of doctoral studies.

Aspects that constitute best practice examples

The monitoring of doctoral programs is carried out systematically at the institutional level through the annual report of the Quality Assessment and Assurance Committee, which provides data, analyses, and relevant information regarding the organization, implementation, and continuous improvement of doctoral programs.

Recommendations: do not exist

The indicator is: fulfilled.

The HEI proves that it engages the relevant stakeholders in developing methodologies and regulations, as well as implementation procedures.

Indicator I.P.A.1.2.1	The opinions of the faculty and department members, of the subsidiary or extension* and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Within the Doctoral School of Mathematics, the development and periodic review of methodologies, regulations, and procedures are based on an active consultative process that takes into account the opinions of doctoral school members and other relevant stakeholders.

The consultation process is organized through institutionalized mechanisms, such as working meetings, consultations within academic structures, and requests for written feedback from faculty members, doctoral advisors, and doctoral students. As needed, institutional partners, representatives of the CSUD, and other stakeholders interested in the proper functioning of doctoral studies are also involved. Thus, the decision-making process is participatory and adaptive, integrating the contributions of all involved parties to ensure a coherent, efficient framework aligned with the institutional and external requirements of IOSUD-UOC.

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

The opinions of members of the academic community are incorporated into the process of developing and revising methodologies, regulations, and procedures; these are developed at the university department level, reviewed by the Board of Trustees, and approved by the University Senate. At the IOSUD-UOC level, stakeholder consultation is carried out by involving doctoral students in decision-making and quality assurance structures, as well as through the systematic collection of their feedback via evaluations, surveys, and direct dialogue, thereby contributing to the continuous improvement of academic processes.

Aspects that constitute best practice examples

The doctoral studies program is well organized through approved regulations, methodologies, and procedures.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion A.2. The material resources and optimisation of the use of the material resources

Standard S.A.2.1. Material resources

The HEI owns adequate movable and immovable assets to enable it to carry out the study programme/domain.

Indicator I.P.A.2.1.1	The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus
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* The faculty, department, subsidiary, extension - hereinafter "organisational components"

providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.

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

The “Ioan Popișteanu” University Library serves as the primary information and documentation center for Ovidius University of Constanța, playing a significant role in supporting doctoral studies. It features an extensive collection of books, reading rooms, digital resources, and modern IT infrastructure, complemented by access to international databases through ANELIS Plus. The resources are constantly updated and adequately meet the needs of disciplines in the fields of Mathematics and Computer Science. Academic activity is also supported by the institution’s digital infrastructure, particularly the CALIOPE Digital Repository, which ensures the archiving and open access to scientific papers and doctoral theses, contributing to transparency, academic integrity, and international visibility. At the same time, the university press and its own scientific publications, including the internationally indexed mathematics journal, strengthen the research component and the dissemination of scientific results.

The material base is complemented by continuous investments in digitization, the modernization of laboratories, and the expansion of research and learning infrastructure, including through externally funded projects. The university also provides adequate facilities for students and conditions that meet quality standards, constantly striving to update resources and develop a modern, inclusive academic environment tailored to the needs of doctoral students.

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

Ovidius University of Constanța has its own facilities suitable for conducting all the teaching activities outlined in the curriculum of the Doctoral School of Mathematics, as well as modern IT infrastructure, including high-speed internet access and licensed software. Doctoral students and faculty members of the Doctoral School of Mathematics routinely use the facilities of the Faculty of Mathematics and Computer Science, which provides optimal conditions for teaching, applied research, and research activities.

The faculty has a diverse educational infrastructure, including lecture and seminar rooms, computer labs equipped with modern technology, and its own library. The classrooms are equipped with digital resources that enable activities to be conducted both in person and in a hybrid format, facilitating academic interaction and the learning process.

In addition, faculty offices are used as spaces for research and mentoring activities, providing direct support to doctoral students and contributing to the consolidation of an integrated and high-performing academic environment.

Aspects that constitute best practice examples

The Faculty of Mathematics and Computer Science is well-equipped, featuring digital facilities that enable both in-person and hybrid learning, as well as spaces dedicated to research and direct interaction with doctoral students, thereby fostering an integrated and high-performing academic environment.

Recommendations: do not exist

The indicator is: fulfilled.

Standard S.A.2.2. Management of material resources

The organisational components manage the movable and immovable assets used for the evaluated study programme/domain in an optimal, sustainable manner.

Indicator I.P.A.2.2.1	The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Mathematics continuously monitors the infrastructure and facilities under its ownership or management, implementing measures - based on needs and available resources - aimed at enhancing sustainability and improving conditions of use.

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

Significant investments were made in the renovation and modernization of university facilities, including the furnishing of Room PC105 with new furniture, Samsung smart boards, and air conditioning units, as well as the renovation of Room AB1 using UOC funds and its equipping with desktop computers through a partnership with Banca Transilvania (BT), Constanța branch. Additionally, renovation work was carried out on room PC110, and equipment was provided for laboratories PC109, V3B, and E29, funded through the PRACTIC project.

Furthermore, in 2025, Ovidius University of Constanța began construction of the integrated professional campus for pre-university and university dual education, the Ovidius Engineering Hub, developed within the "Tehno-Dobrogea" regional consortium through the CRESC - PNRR/2022/C15/MEDU/I6. It will be located on land owned by UOC and will cover an area of approximately 10,000 square meters, contributing to the expansion and modernization of educational infrastructure.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion A.3. Adequate human resources and transparent staff recruiting procedures developed according to the law

Standard S.A.3.1. Human resources

The HEI has the required human resources to organise and deliver the evaluated study programme/domain.

Indicator I.P.A.3.1.1	The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The teaching and research staff of the Department of Mathematics are selected and appointed in accordance with national and institutional criteria, in full compliance with the applicable legal framework. The filling of positions in the staffing table is carried out based on the university's internal regulations, which establish the procedures for their development and approval, as well as the competition procedures for vacant, temporarily vacant, or reserved teaching positions, including the rules regarding remuneration for activities on an hourly pay basis.

The university ensures adequate staffing for doctoral programs, both in terms of numbers and qualifications, to guarantee that the activities outlined in the curriculum are carried out under optimal conditions. Furthermore, the necessary framework is provided for mentoring and consultation activities dedicated to doctoral students throughout the entire course of study.

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

The staffing plan for the Doctoral School of Mathematics for the 2025–2026 academic year includes two teaching positions, and for the accreditation renewal evaluation process (*ANEXA SDMate A3.1.a Stat de functii_SDMate_2025_2026*), a projected staffing plan for the 2026–2027 academic year has been developed (*ANEXA SDMate A3.1.b Stat_SDMate previzionat _2026_2027*), which includes the positions and part-time positions corresponding to the disciplines in the evaluated field.

Administrative activities are supported by numerically and professionally adequate support staff, consisting of the doctoral school's secretariat, and its evaluation and self-evaluation are conducted periodically, in accordance with UOC's institutional regulations.

The human resources involved in teaching activities meet the legal requirements for tenure in higher education, as reflected in the staffing tables and the structure of filled positions. The faculty members of SDMate have completed all levels of university training and conduct research in the field, as evidenced by their publications and lists of related works.

Recommendations:

Encouraging and supporting younger teaching staff to obtain their habilitation.

The indicator is: fulfilled.

Indicator I.P.A.3.1.2	The HEI ensures professional and personal development for its staff.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

OUC complies with ARACIS standards regarding the continuing professional development of academic staff and maintains a balance between the stability of its human resources and their adaptation to the requirements of doctoral studies and developments in the educational environment.

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

The faculty members of the Mathematics Department are actively involved in the process of continuous professional development, participating in training and professional development programs organized by the university. To this end, the Department of Faculty Development at UOC regularly conducts training activities designed to improve teaching strategies.

Recommendations: do not exist

The indicator is: fulfilled.

Standard S.A.3.2. Recruitment procedures

Teaching staff recruitment procedures compliant with the provisions of the law.

Indicator I.P.A.3.2.1	Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At UOC, the filling of vacant or temporarily vacant positions - for both teaching and non-teaching staff - as well as professional career development, is carried out through competitive selection or promotion exams, as appropriate, in strict compliance with the applicable legal framework.

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

At UOC, the filling of vacant or temporarily vacant positions - for both teaching and non-teaching staff - as well as professional career development, is carried out through competitive selection or promotion exams, as appropriate, in strict compliance with the applicable legal framework.

Aspects that constitute best practice examples

UOC ensures the recruitment and career development of its teaching and support staff through transparent, non-discriminatory procedures that strictly comply with the legal framework, based on competitive selection processes and clearly defined institutional methodologies.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion A.4. Digitalisation of institutional processes

Standard S.A.4.1. Digital transformation

The digital transformation process in the organisational component seeks to achieve administrative simplification and improve the quality of the services provided to the members of its own community, as well as to third parties.

Indicator I.P.A.4.1.1	The organisational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

UOC and SDMate use integrated IT systems and modern digital solutions to collect, process, and monitor educational data, as well as to ensure quality and streamline academic and administrative processes, in accordance with the 2022–2027 Digitalization Strategy. The digital infrastructure is supported by the IT&C Service and includes essential platforms such as UMS/Solaris for managing enrollment and student records, applications dedicated to faculty evaluation, platforms for housing, as well as expanded access to online library resources and scientific databases. Through these tools, the university ensures transparency, rapid access to information, and efficient services for the entire academic community, contributing to the complete digitization of university workflows.

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

OUC is carrying out a series of national and international projects and partnerships, including through the PNRR, FDI, and research programs, which contribute to the digitization, innovation, and continuous modernization of the educational and research process. Regarding the assurance of academic integrity, all doctoral dissertations defended since 2016 are checked using specialized computer systems for detecting similarities, employed at various times (Plagiarism-detector and subsequently *Sistemantiplagiat.ro*). These platforms compare the content against multiple national and international databases, and the results are summarized in similarity reports that support the evaluation of the originality of the works. In the near term, the university aims to intensify the digitization process, with a focus on expanding the functionalities of the UMS platform, in order to optimize the services offered to the academic community and increase the efficiency of educational and administrative processes.

Aspects that constitute best practice examples

UOC ensures the digitization and streamlining of student services through integrated platforms that enable online faculty evaluations, the management of housing requests, and access to digital library resources.

Recommendations: do not exist

The indicator is: fulfilled.

DOMAIN B. Educational efficacy

Criterion B.1. Content and relevance of study programmes

Standard S.B.1.1. Content of study programme/s*

The study programme is based on a curriculum designed so that students can acquire the expected learning outcomes.

Indicator I.P.B.1.1.1	The study programme is developed and structured according to the expected learning outcomes, and organised based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral Program in Mathematics (DSUD) provides comprehensive documentation that includes the curriculum, course descriptions, and information regarding admission and graduation. The curriculum is structured in accordance with national and European standards, comprising specialization, synthesis, and advanced knowledge courses—both required and elective—that lead to the attainment of a Level 8 qualification (Ph.D.). The program is organized based on the ECTS system, with each semester comprising 30 credits and 12 weekly instructional hours. The curriculum includes the course “Academic Ethics and Integrity,” which also addresses research ethics. Course descriptions, updated annually and approved by the Doctoral School Council, specify learning outcomes, assessment methods, and each course’s contribution to field-specific competencies.

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

The final examination is summative in nature and certifies the achievement of learning outcomes corresponding to the doctoral degree, being organized in accordance with current regulations. The structure of the curriculum allows doctoral students to participate in domestic and international mobility programs.

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

Curricula and course descriptions are developed and revised in accordance with ARACIS standards and are subject to internal quality assurance audits. The CSUD and the Doctoral School continuously monitor learning outcomes and conduct periodic evaluations to ensure the continuous improvement of teaching, research, and administrative activities. These evaluations aim to ensure compliance with legal requirements, the quality of resources and research activities, the visibility of scientific results, as well as adherence to the principles of ethics, transparency, and quality management.

Aspects that constitute best practice examples

The existence and implementation of a unified institutional procedure for the development, updating, and approval of course descriptions—including at the level of the advanced doctoral program—ensures curricular coherence, transparency in academic processes, and compliance with quality assurance standards.

Recommendations:

It is recommended to recalculate the number of hours in the subject sheets for PPUA courses.

The indicator is: fulfilled.

Criterion B.2. Alignment of the curriculum with the qualification

Standard S.B.2.1. Alignment with the qualification level and the intended competences

In the curriculum design and development process, the organisational component seeks to ensure the qualification level, as well as correlation with the envisaged occupations.

Indicator
I.P.B.2.1.2

The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).

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

The Doctoral School of Mathematics designs and develops its curriculum in accordance with the requirements of the National Qualifications Framework (CNC), the National Qualifications and Competence Information System (RNCIS), and the European Qualifications Framework (EQF), ensuring alignment between the qualification level and the targeted professional, transversal, and specific competencies. The syllabi and course descriptions are based on an analysis of labor market demands, occupational profiles, and relevant professional standards, reflecting the level of complexity of doctoral studies, the balance between theoretical, methodological, and practical components, as well as the coherence between program objectives, curriculum content, and learning outcomes. This approach facilitates the international recognition and comparability of the qualifications obtained.

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

The curriculum for the Mathematics doctoral program includes specialized courses, synthesis, and advanced knowledge, ensuring interdisciplinary training and the development of advanced research skills. The curriculum structure reflects a balance between foundational and specialized training, and the distribution of teaching activities is tailored to the program's objectives.

Course descriptions contain comprehensive information on competencies and learning outcomes, objectives, content, research methodology, assessment, and bibliography, and are aligned with the requirements of the academic and professional environments. They highlight the professional and cross-disciplinary competencies, skills, and attitudes that doctoral students acquire during their studies and are reviewed and approved by the Council and the Director of the Doctoral School.

Aspects that constitute best practice examples

Course descriptions are developed in a comprehensive and transparent manner, including competencies, learning outcomes, research methodologies, assessment standards, and a bibliography, which contributes to the coherence and quality of the doctoral education process.

Recommendations; do not exist.

The indicator is: fulfilled.

Criterion B.3. Student-centred learning, teaching and evaluation

Standard S.B.3.1 Principles

The organisational component implements the principles of student-centred learning.

Indicator I.P.B.3.1.1	The organisational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The teaching-learning process within the doctoral program is structured around direct instructional activities and independent study, in accordance with institutional regulations. Instructional activities are supported using modern digital resources and educational platforms, and course content and teaching strategies are continuously updated.

Teaching materials fully cover the course content, and teaching methods and content are periodically evaluated for updates and curricular coherence. Course syllabi are reviewed and approved by the Doctoral School Council, ensuring transparency and quality. Additionally, faculty members provide personalized consultations and guidance to doctoral students based on their individual needs.

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

The university has a clear procedural framework for academic management, including mechanisms for resolving complaints and appeals, procedures for changing doctoral advisors, and conflict mediation included in the . Student progression is regulated based on the ECTS credits earned, in accordance with institutional regulations.

Completion of studies requires the preparation and public defense of a doctoral dissertation, which demonstrates the student's independent research skills. Additionally, the institution ensures that dissertations undergo plagiarism checks and are archived in the digital repository, guaranteeing academic integrity and the transparency of research results.

Aspects that constitute best practice examples

The program's organizational structure ensures the consistent implementation of student-centered learning principles by integrating them into both the curriculum and the teaching strategies employed, thereby fostering an educational experience tailored to the needs and profile of each student.

Recommendations: do not exist.

The indicator is: fulfilled.

Indicator I.P. B.3.1.2	The organisational component ensures opportunities for students to participate in academic mobility programmes organised in person and/or virtually.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The university has appropriate procedures in place for recognizing and completing periods of academic mobility for undergraduate, master's, and doctoral students, whether undertaken domestically or abroad, including through programs such as ERASMUS.

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

The structure of the curriculum allows students to participate in domestic and/or international mobility programs, in accordance with the Regulations on the Recognition of Study and/or Placement Mobility Programs Undertaken as Part of Erasmus+ Mobility Programs. Also, the doctoral students are periodically informed about the academic mobility opportunities. Following discussions with the relevant parties, it has been agreed that the number of academic mobilities and international partners should be increased.

Aspects that constitute best practice examples

The program's organizational structure ensures the consistent implementation of student-centered learning principles by integrating them into both the curriculum and the teaching strategies employed, thereby fostering an educational experience tailored to the needs and profile of each student.

Recommendations: do not exist.

The indicator is: fulfilled.

Standard S.B.3.2. Fairness	
The organisational component provides fair opportunities for students.	
Indicator I.P.B.3.2.1	The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities

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

Promoting and supporting equal opportunity, as a fundamental value of contemporary society, is a core principle enshrined in UOC's mission. The university's internationalization efforts are aligned with sustainable development goals and are carried out with respect for academic integrity, equity, and inclusion, ensuring equal access to international opportunities for the entire UOC academic community—students, faculty, and administrative staff—regardless of background or socioeconomic status.

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

Teaching and learning strategies are tailored to students' actual needs, and the curriculum includes courses that help students adapt to the specific requirements of their chosen field. In addition, UOC operates a Career Counseling and Guidance Center (CCOC), which supports students' academic and professional development.

Aspects that constitute best practice examples

The organizational structure ensures equal opportunities for students by adapting the educational process to the diversity of learning styles and individual abilities, thereby providing fair opportunities for each student to realize their potential and aspirations.

Recommendations: do not exist.

The indicator is: fulfilled.

Criterion B.4. Accessibility and efficiency of the resources and support services, adequate for learning

Standard S.B.4.1. Access to resources and services

The organisational component provides access to adequate resources and support services, according to the needs of the students.

Indicator I.P.B.4.1.1	The organisational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organisation of the study programme.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Through the faculty members involved in DSDMate and the FMI library collection, SDMate provides appropriate learning resources (textbooks, monographs, guides, periodicals, etc.), available in both print and electronic formats.

The "Ioan Popișteanu" University Library of the UOC offers a comprehensive collection and subscriptions to relevant national and international specialized journals for the disciplines in the DSUD Mathematics curriculum. In addition, the organizational component facilitates access to educational resources and support services tailored to the needs of doctoral students, including access to international databases and the ANELIS+ platform. Ovidius University of Constanța has anti-plagiarism verification procedures in place for final theses, and the Doctoral School of Mathematics has sufficient financial resources to carry out teaching and research activities. Students are informed about financial support options and have access to complementary services, in accordance with institutional regulations.

Overall, financial and material resources are adequate, accessible, and managed transparently, based on clear and equitable methodologies for granting financial support.

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

Faculty members possess the skills to advise, monitor, and facilitate the learning process, and each doctoral student receives guidance from a doctoral advisor. Tuition fees are set in accordance with the average costs of public education for similar fields and are communicated to students through various channels, in accordance with the Operational Procedure regarding the justification, collection, and record-keeping of fees related to the educational process at “Ovidius” University of Constanța. Doctoral students are informed about opportunities for institutional financial support and how tuition fees are used, based on the Methodology for Granting Scholarships and Other Forms of Financial Support.

IOSUD-UOC and SDMate ensure equal opportunities for doctoral students by adapting the educational process, providing financial and academic support, facilitating mobility, and promoting diversity. These activities are supported by the Career Counseling and Guidance Center (CCOC), which offers integrated services in psychological counseling, career and educational guidance, resume development, mock interviews, and training in soft skills.

Aspects that constitute best practice examples

IOSUD-UOC and SDMate provide an integrated support framework for doctoral students by combining the academic advising offered by faculty members and doctoral advisors with specialized services provided by CCOC, as well as through transparent mechanisms for informing students about tuition fees and financial aid, thereby contributing to equitable access, career guidance, and personalized development of the doctoral journey. It is worth mentioning that the website contains comprehensive information on all aspects of the doctoral programme.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion B.5. Learning outcomes

Standard S.B.5.1. Definition and evaluation

Learning outcomes are adequately defined and evaluated.

Indicator I.P.B.5.1.1	Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Learning outcomes are defined in terms of professional and cross-disciplinary competencies aligned with the specific requirements of the doctoral program, such as in-depth knowledge, critical thinking, research autonomy, and the capacity for innovation. Each course in the curriculum includes a detailed description of the targeted competencies (cognitive, methodological, instrumental, and value-based), the expected learning outcomes, formulated in accordance with international classifications (knowledge, skills, and autonomy/responsibility), as well as the correlation between content, teaching methods, and assessment methods. This structure ensures coherence between the educational objectives of the courses and the requirements of the doctoral program, contributing to the development of advanced research

competencies, the ability to construct scientific arguments, the formulation of hypotheses, and the independent use of bibliographic sources.

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

Within the Doctoral School of Mathematics, learning outcomes are clearly and consistently defined in accordance with national and European standards for higher education qualifications, and are integrated into the curriculum, course descriptions, and other curricular documents. This ensures a shared understanding of the learning objectives among doctoral students and the faculty involved in the educational process. Learning outcomes are communicated from the very beginning of the doctoral program and are discussed throughout teaching activities, which contributes to the transparency and predictability of the training process. At the same time, they form the basis for the continuous and final assessment of doctoral students' performance, in relation to established standards and the specific requirements of the doctoral cycle.

Furthermore, the course objectives, content, learning outcomes, required reading list, as well as the examination and assessment methods are presented to students by the faculty from the very first class sessions.

Aspects that constitute best practice examples

Learning outcomes are systematically incorporated into the curriculum, course descriptions, and other curricular documents, ensuring consistency and coherence in the design and implementation of the program.

Recommendations: do not exist

The indicator is: fulfilled.

Indicator I.P.B.5.1.2	Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The Doctoral School of Mathematics provides a coherent and rigorous framework for verifying the achievement of learning outcomes through ongoing assessments throughout the doctoral program and through the final evaluation of the doctoral dissertation, in accordance with the provisions of Higher Education Law No. 199/2023 and the institutional regulations in force. Ongoing assessment serves to monitor the doctoral student's academic and scientific progress, particularly during the theoretical and methodological training phase, and is conducted through exams for the courses in the curriculum, the preparation and defense of scientific papers, as well as participation in research activities (presentations, conferences, publications), in accordance with the requirements for developing competencies corresponding to Level 8 of the National Qualifications Framework (CNC).

The final evaluation of doctoral studies includes the public defense of the doctoral thesis before a specialized committee, in accordance with institutional legislation and methodology, as well as obtaining the approval of the advisory committee based on the completion of the mandatory intermediate stages. The process also includes verifying the originality of the thesis through a similarity report generated using accredited software, in accordance with academic ethics and integrity standards, and evaluating the scientific contribution relative to the field's standards of excellence.

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

The entire evaluation process is based on the principles of transparency, objectivity, and academic fairness, and is aligned with legal requirements regarding the training of independent researchers. Completion of the program requires the preparation and public defense of a doctoral thesis, through which the doctoral candidate demonstrates the ability to independently conduct complex research at the standards required by the doctoral program. Through the implementation of the *Operational Procedure regarding the organization of the final examination for doctoral studies*, through the public defense of the doctoral thesis, the *Operational Procedure regarding the anti-plagiarism verification of doctoral dissertations*, and the *Operational Procedure regarding the archiving and publication of final theses in the institutional digital repository*, The Doctoral School of Mathematics ensures not only the validation of learning outcomes but also the support of an individualized educational path for each doctoral student, in accordance with the university's mission and the requirements of the European Higher Education Area.

Aspects that constitute best practice examples

Each stage of the doctoral program is clearly defined and implemented through procedures approved by the doctoral school and IOSUD

Recommendations: do not exist

The indicator is: fulfilled.

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

Standard S.B.7.1. Admission

The admission procedures and principles ensure access to higher education.

Indicator
I.P.B.7.1.1

The organisational component applies the admission procedures.

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

The university implements a transparent student recruitment and admission policy, which is made public at least six months prior to the application period through the admissions website and official communication channels. Admission is conducted for study programs that are accredited or authorized to operate on a provisional basis, in accordance with government resolutions and the rector's decisions in effect at the time the process is organized.

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

Student recruitment is carried out through the university's own admission procedures, which are regulated at the institutional level by the *Regulations on the Organization and Conduct of the Admission Competition for Doctoral Studies at "Ovidius" University of Constanța*.

To this end, the online admission platform has been updated to reflect current specific conditions (fields and study programs, admission criteria, schedule, number of available spots, etc.) and to facilitate the

management of interactions with applicants, as well as the process of assigning and confirming admitted applicants.

Aspects that constitute best practice examples

The admissions platform is also designed for doctoral programs; it is intuitive and makes it easier for applicants to apply to doctoral programs.

Recommendations: do not exist

The indicator is: fulfilled.

Indicator I.P.B.7.1.2	Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The admission criteria are clearly defined and non-discriminatory. They are based solely on the applicant's academic qualifications to ensure they can achieve the expected learning outcomes. Registration for the admissions process requires a bachelor's or master's degree, or equivalent academic credentials.

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

Admission to the Mathematics doctoral program is based solely on the candidate's academic qualifications, and no discriminatory criteria are applied.

Recommendations: do not exist

The indicator is: fulfilled / partially fulfilled / unfulfilled.

Standard S.B.7.2. Academic journey of students	
The organisational component carries out actions supporting the students' academic journey.	
Indicator I.P.B.7.2.1	The organisational component applies the regulations concerning the students' professional activity.

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

The Doctoral School of Mathematics provides a coherent and regulated organizational framework, in accordance with national legislation and institutional regulations, that supports doctoral students' academic journey from admission through to the completion of their thesis. This framework ensures continuous monitoring and support of scientific progress through structured mechanisms for coordination, evaluation, and support.

The process includes the assignment of a doctoral advisor and an advisory committee, the development and monitoring of the individual research plan, as well as periodic interim evaluations that allow for the assessment of progress and the provision of feedback. Doctoral students also have access to academic resources and scientific databases, as well as administrative support and academic advising.

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

The professional activities of doctoral students are governed by the *Framework Regulations on Doctoral Studies*, which cover all aspects of the doctoral program, from admission through to graduation. Additionally, the Doctoral School of Mathematics has in effect the *Regulations on the Organization and Functioning of the Doctoral School of Mathematics*, a document that addresses the specific aspects of the doctoral program in the field of mathematics.

Aspects that constitute best practice examples

The doctoral program in mathematics has its own regulations governing its organization and operation, namely the Regulations Governing the Organization and Operation of the Doctoral School of Mathematics.

Recommendations: do not exist.

The indicator is: fulfilled.

Criterion B.8. Internationalisation process

Standard S.B.8.1. Internationalisation

Improving the quality of education and research through internationalisation actions.

Indicator
I.P.B.8.1.1

The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.

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

UOC places particular emphasis on the internationalization of studies, focusing on the mobility of students, faculty, and administrative staff through partnerships with universities abroad, in accordance with the Regulations on Mobility under the Erasmus+ Program. To continue implementing this program, UOC holds the Erasmus Charter for the period 2021–2027 (“Erasmus Charter for Higher Education 2021–2027”), which certifies the institution’s commitment to European quality standards. The program is implemented and coordinated at the institutional level by the Erasmus+ Program Office (EPO), which is responsible for managing European mobility for students and academic and non-academic staff, under the coordination of the National Agency for Community Programs in the Field of Education and Vocational Training.

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

At SDMate, the opportunities offered through the Erasmus+ program are available to faculty, doctoral students, and support staff alike. Starting in 2024, UOC is part of the European university alliance “ARTEMIS,” alongside seven other prestigious higher education institutions in Europe. Within this alliance, the partners aim to develop a long-term strategy focused on educational and entrepreneurial innovation, with an emphasis on social inclusion, sustainable development, and digital transition.

Recommendations: do not exist.

The indicator is: fulfilled.

Criterion B.9. Scientific research results

Standard S.B.9.1 Scientific research in the education process

Scientific research activities support students in achieving the learning outcomes.

Indicator I.P.B.9.1.1	Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The DSUD of Mathematics has its own scientific research plan, which is implemented through the projects undertaken and the activities of the FMI Research Center, and is supported by national and international grants managed by faculty members of the Department of Mathematics and the FMI. Faculty members conduct research in the fields of the disciplines they teach, with the results being disseminated through publications in specialized journals, scientific presentations at national and international conferences, symposia, and seminars, as well as through research contracts.

According to the Strategic Plan of the Doctoral School of Mathematics, the research results of the faculty directly contribute to the achievement of learning outcomes by doctoral students. Research activity is integrated into the educational process by updating course content with recent findings, using interactive teaching methods, and incorporating research results into bibliographic resources, including through the publication of papers co-authored with students.

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

Ph.D. students in the Mathematics Doctoral Program are encouraged to participate in scientific seminars, conferences, roundtables, research projects, and interdisciplinary collaborations, as well as to present papers at scientific conferences organized by the FMI and SDMate. In this context, a relevant example is the Mathematical Communications Session, organized jointly with the Romanian Mathematical Society (SSMR), Constanța branch, which includes Section A as well as Section B dedicated to doctoral students, with international participation beginning in 2022.

These scientific events contribute to the dissemination of research results produced by SDMate doctoral students in the field of Mathematics and to their integration into the national and international academic community.

Recommendations: do not exist

The indicator is: fulfilled.

Standard S.B.9.2. Scientific research pertaining to the objectives of the study programme

The organisational component carries out scientific research activities aligned with the objectives of the evaluated study programme.

Indicator I.P.B.9.2.1	The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The results achieved have gained visibility and recognition both nationally and internationally, having been integrated into the scientific community and capitalized upon through publications, projects, and partnerships. These aspects are highlighted in the DSUD Mathematics and Computer Science Research Report (2021–2025), which includes appendices detailing ISI and BDI articles, conference proceedings, published books and chapters, as well as participation in scientific events during the 2021–2025 period.

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

IOSUD organizes scientific conferences and national and international symposia, in which DSUD Mathematics students are actively involved in scientific research alongside faculty members in the field. They showcase their research findings by presenting their papers at events organized at the university level.

Aspects that constitute best practice examples

IOSUD publishes the research results achieved by doctoral students and their advisors monthly through the Doctoralia Newsletter.

Recommendations: do not exist

The indicator is: fulfilled.

DOMAIN C. Quality management

Criterion C.1. Quality assurance strategies and procedures, including in the field of academic ethics and conduct, which involve students, employers and other stakeholders and are applied in a consistent, transparent manner

Standard S.C.1.1. Application

Adequately implemented strategic directions, actions, and procedures

Indicator I.P.C.1.1.1	The organisational component consistently carries out actions and applies procedures, proving their impact on improving the quality of education at the level of the study programme
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

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

UOC implements a rigorous quality management system at all hierarchical levels, based on policies and procedures that involve the participation of students, teaching staff, graduates and employers to ensure continuous improvement of education and research. This concern is supported both in the Quality

Management System Manual and in the University's Strategic Plan and the Code of Ethics and University Deontology. At the level of the Faculty of Mathematics and Informatics, through the CEAC-FMI Commission, detailed activity reports and analyses regarding admission and final exams are prepared and published annually.

Aspects that constitute best practice examples

Analyses are periodically carried out regarding the admission process (including comparative analyses), final exams and evaluation sessions, which are published in the Current Analyses section, in the Quality section of the faculty page.

Recommendations: do not exist

The indicator is: fulfilled.

Standard S.C.1.2. Stakeholder engagement

The HEI proves that it engages the stakeholders who have relevant activity in applying the procedures.

Indicator I.P.C.1.2.1	The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

In the process of adopting and revising methodologies, regulations and procedures, which are developed at the level of university structures, endorsed by the Board of Directors and approved by the University Senate, the opinions of members of the academic community and other stakeholders are taken into account, based on the Regulation on the initiation, review, approval, monitoring and periodic evaluation of study programs in the UOC.

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

Annual reports on the quality of activities carried out within the ISD are prepared following consultation with key stakeholders, including faculty, students, and employer representatives. These reports analyze the results of academic activities, highlight areas for improvement, and formulate recommendations and measures for the continuous improvement of the quality of the educational and research processes.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion C.2. Functionality of education quality assurance structures, including in the field of academic ethics and conduct, according to the law

Standard S.C.2.2. Operation

Quality assurance and academic ethics and conduct organisational structures adequately perform their specific role and functions.

Indicator I.P.C.2.2.2.	The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The University Ethics Committee established at the UOC level carries out its activity autonomously, at the request of members of the academic community. At the level of the Faculty of Mathematics and Informatics, a Working Committee of the Faculty Council operates, which has among its responsibilities the analysis of situations involving deviations from the Code of Ethics and University Deontology, with a view to notifying or not the University Ethics Committee.

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

The ethical principles and operating rules of the University Ethics Commission are included in the Code of University Ethics and Deontology of the UOC, respectively, in the Regulation on the organization and operation of the University Ethics and Professional Deontology Commission of the UOC. According to the analysis of the Code of Ethics and following discussions with representatives of the Ethics Commission, it was found that anonymous complaints cannot be filed. According to Decision 952/2025, universities must update their Code of University Ethics and Deontology to allow the formulation of anonymous complaints that refer to cases of harassment based on gender or moral harassment. There were no problems in the DSUD Mathematics.

Recommendations:

Update the Code of Ethics so that it allows the submission of anonymous reports referring to cases of sexual harassment or moral harassment, according to Decision 952/2025.

The indicator is: fulfilled.

Criterion C.3. Procedures for the initiation, monitoring and periodic review of the study programmes and domains and of the performed activities, involving students, employers and other stakeholders

Standard S.C.3.1. Procedures and implementation of procedures	
The HEI has procedures for initiating, monitoring, and periodically reviewing the study programmes and domains and the performed activities, and applies them systematically.	
Indicator I.P.C.3.1.1	The organisational component consistently applies the procedures, and proves their impact on quality assurance.

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

IOSUD implements institutional procedures for the initiation, monitoring, review, and periodic evaluation of doctoral programs and fields of study, with a view to ensuring their quality and continuous improvement. The responsibility for monitoring lies with the directors of the doctoral schools, and the evaluation is conducted annually in accordance with internal procedures; the results are analyzed by CEAC-ISD and approved by CSUD.

At the institutional level, the process is supported by the Annual Report of the Quality Assessment and Assurance Commission, which includes data, analyses, and conclusions regarding the organization and conduct of doctoral studies, thereby contributing to the development of improvement measures.

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

The Doctoral School of Mathematics systematically implements institutional procedures for quality assurance and evaluation of teaching and research activities, in accordance with national legislation, the Framework Regulations on Doctoral Studies, and ARACIS standards. The organizational framework is established by the Doctoral School Regulations and by specific methodologies regarding admission, the conduct of doctoral programs, the evaluation of doctoral students and advisors, the completion of studies, and adherence to the principles of academic ethics.

These procedures are implemented in a transparent and predictable manner, with the involvement of the relevant bodies of the doctoral school and the university, such as the Doctoral School Council, the advisory committees, the CEAC, and the Ethics Committee. Continuous monitoring of these activities contributes to enhancing the quality of doctoral programs, improving research outcomes, supporting doctoral students' progress, and fostering an institutional culture focused on academic performance and integrity.

Recommendations: do not exist

The indicator is: fulfilled.

Indicator I.P.C.3.1.2	Members of its own community and other stakeholders are involved in the procedure implementation process.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The curriculum and subject sheets for DSUD Mathematics are periodically reviewed to ensure adaptation to market dynamics, in accordance with the Regulation on the initiation, review, approval, monitoring and periodic evaluation of study programs at the "Ovidius" University of Constanta and the Operational Procedure on the monitoring, review and internal evaluation of undergraduate and master's degree programs at the "Ovidius" University of Constanta.

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

Stakeholder involvement in the application of procedures helps tailor them to the needs of the academic community, increases the efficiency of implementation, and ensures that institutional decisions are based on participatory principles and a commitment to continuous improvement.

After approval by the University Senate, the procedures are implemented within the academic community, and their results and impact are monitored and reflected in institutional evaluation documents, such as the Rector's annual reports, DSAMC reports, and CEAC-ISD activity reports.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion C.4. Procedures for the periodic evaluation of the quality of the activities of teaching staff, auxiliary teaching staff, and administrative staff

Standard S.C.4.1. Procedures

Applying the methodologies and procedures contributes to improving the quality of the staff's activities.

Indicator I.P.C.4.1.1	The organisational component analyses the results of the students' biannual evaluation of teachers.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

At UOC, the periodic evaluation of the professional performance of teaching staff is conducted annually, in accordance with the law and the procedures approved by the University Senate. The process includes self-evaluation, peer review, managerial evaluation, student evaluation, and monitoring of the work of doctoral advisors, contributing to continuous professional development and ensuring the quality of teaching and research activities.

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

The evaluation results are analyzed by the Doctoral School Council and communicated individually to the faculty members; when necessary, measures to improve performance are established and implemented.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion C.5. Systematically updated databases on internal quality assurance

Standard S.C.5.1. Databases

The HEI uses databases to support internal quality assurance activities.

Indicator I.P.C.5.1.1	The organisational component systematically collects and analyses data required for the internal quality assurance process.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Ovidius University of Constanța operates the "Quality and Integrity" institutional platform, which supports the collection, processing, and analysis of data relevant to monitoring and improving the quality of education. Information from faculties, doctoral schools, and administrative units is used to prepare quality reports and strategic documents regarding the university's status.

The Doctoral School of Mathematics consistently uses IT tools and institutional databases to support evaluation and internal quality assurance processes, in accordance with ARACIS standards and UOC's internal regulations.

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

The unit responsible for quality management within the Doctoral School of Mathematics periodically collects, compiles, and analyzes relevant data regarding doctoral students' progress, research activities, evaluation results, and performance indicators for the doctoral program. This process is supported by internal databases, institutional IT platforms, and monitoring documents, with the involvement of the Doctoral School Council and the university's specialized units.

The resulting information is used to monitor doctoral students' progress, identify opportunities for improvement, inform strategic decisions, and prepare the quality and self-assessment reports required for internal and external evaluation processes. By utilizing a system based on up-to-date data, SDMate ensures transparency, efficiency, and continuous improvement of doctoral training activities.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion C.6. Transparency of information of public interest, including those regarding the study programmes and domains offered, and transparency regarding the related certificates, diplomas and qualifications

Standard S.C.6.1. Transparency

The organisational component ensures transparency of information, as required by the law.

Indicator I.P.C.6.1.1	The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

Ovidius University of Constanța consistently ensures the transparency of information of public interest by publishing it both in print, via institutional bulletin boards, and electronically, on the university's website and those of its faculties and doctoral schools. Up-to-date information is available regarding study programs, degrees offered, diplomas, academic staff, student facilities, and other matters relevant to the university community and the interested public.

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

The Doctoral School of Mathematics ensures transparency regarding the organization and implementation of the doctoral program by periodically publishing relevant documents and data on its website, such as the strategic plan, curriculum, CSUD decisions, and the results of academic staff's research activities. Information is available regarding the program's objectives, the curriculum, targeted qualifications and career paths, training and assessment methods, study resources, and doctoral students' achievements. There is also a monthly newsletter that disseminates information about doctoral studies and events.

✓ Aspects that constitute best practice examples

The doctoral school ensures effective communication and transparency by regularly disseminating information on doctoral studies, academic opportunities, and events through the monthly newsletter Doctoralia, supporting the engagement and access to relevant information for the doctoral community.

Recommendations: do not exist

The indicator is: fulfilled.

Indicator I.P.C.6.1.2	The organisational component ensures transparent decision-making processes.
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Presentation of the state of facts, supported by documents and data (documents preferably included through links in the body of the IER)

The doctoral school ensures the transparency of information by publishing and disseminating it in both print and electronic formats, providing access to relevant data on study programs, qualifications offered, degrees, academic staff, available resources, and student facilities, as well as other information of public interest.

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

To ensure transparency in decision-making, the resolutions of the University Senate and the CSUD are disseminated to the entire academic community through their faculty-level representatives and are available on the website.

Recommendations: do not exist

The indicator is: fulfilled.

Criterion C.8. Participation in external evaluation processes, according to the law

Standard S.C.8.1. Compliance with the external evaluation obligation

The HEI undergoes external quality evaluation as required by the law.

Indicator I.P.C.8.1.1	The organisational component carries out the procedures pertaining to the external quality evaluation process, aiming to organise the evaluated study programme as provided by the law.
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The Doctoral School of Mathematics at "Ovidius" University in Constanța strictly applies the procedures for external quality assessment, in accordance with the provisions of Higher Education Law No. 199/2023, the Framework Regulation on Doctoral Studies approved by Ministerial Order No. 3020/2024, and ARACIS standards and methodology.

The indicator is: fulfilled.

IV. SWOT Analysis

Strengths:		Weaknesses:
Very clear organization of the curricula for each 5 modules. Active supervisors, with solid scientific activity and with publications in international Q1–Q2 journals and high AIS, according to the new CNATDCU requirements (2026), each supervising at least one PhD student. The scientific journal Analele	INTERNAL FACTORS ↑	Insufficient salary motivation of teaching staff (with respect to salaries in the IT industry). Limited financial resources allocated by the university to support the participation of teaching staff and students to national and international conferences. The need to strengthen the international visibility of the

Științifice ale UOC – Seria Matematică, indexed Web of Science, which increases the visibility of the Doctoral Programme of Mathematics.		domain through the website and public reports in English language.
SWOT analysis		
Opportunities: The development of UOC infrastructure through the two new buildings and the equipping of specialized laboratories through the EDU-TIC-ING-UOC, EDU-TAB-UOC and EDUOC projects. The increasing role of mathematics in AI, data science and the modelling of phenomena, which may attract motivated doctoral students and interdisciplinary collaborations.	 EXTERNAL FACTORS	Threats: The decrease in interest in mathematical studies at national level, which reduces the selection pool for doctoral students. Insufficient funding of scientific research in higher education, with impact on the sustainability of projects and academic visibility. The very low number of research project calls at national level. The still low salary level of university assistants (compared to the economic environment in the IT field) makes doctoral studies less attractive.

V. Extent to which the standards and performance indicators are fulfilled, and recommendations

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
DOMAIN A. Institutional capacity			
1.	I.P.A.1.1.1 For delivering the study programme/domain, the HEI has adequate organisational components and an adequate management system, which operate based on methodologies, regulations and procedures that are periodically reviewed as required by law.	F	
2.	I.P.A.1.2.1 The opinions of the faculty and department members, of the subsidiary or	F	

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
	extension and of other stakeholders are considered in the process of adopting and revising methodologies, regulations and implementation procedures.		
3.	I.P.A.2.1.1 The HEI legally owns venues for the related education, research and administrative processes, as well as for services for students, doctoral students and trainees, thus providing an enabling environment for living and studying, including for disabled persons. Optimal venues are also provided for activities of the staff. Such venues are adequately equipped.	F	
4.	I.P.A.2.2.1 The movable and immovable assets are properly maintained to ensure optimal conditions for studying, living and research, as well as for work.	F	
5.	I.P.A.3.1.1 The human resources of the organisational component are suitable to perform the activities pertaining to the evaluated study programme/domain. The teaching staff has the required qualifications and professional competences to teach the subject matters assigned to them in the job list.	F	Encouraging and supporting younger teaching staff to obtain their habilitation
6.	I.P.A.3.1.2 The HEI ensures professional and personal development for its staff.	F	
7.	I.P.A.3.2.1 Recruitment procedures comply with the provisions of the law, and are established and carried out transparently.	F	
8.	I.P.A.4.1.1 The organisational component uses IT tools in its own procedures, to improve access and provide good quality services for the members of its own community and the indirect beneficiaries of education.	F	
DOMAIN B. Educational efficacy			
9.	I.P.B.1.1.1 The study programme is developed and structured according to the expected learning outcomes, and organised based on transferable study credits. It includes all learning, teaching, practical training, research and evaluation experiences, which, together, lead to a higher education qualification.	F	It is recommended to recalculate the number of hours in the subject sheets for PPUA courses.
10.	I.P.B.2.1.2 The expected learning outcomes are correlated with the competences required by those occupations, according to the occupational standards and/or the European Skills, Competences and Occupations (ESCO).	F	
11.	I.P.B.3.1.1 The organisational component ensures implementation of the student-centred learning in the curriculum and through the teaching strategies used in the learning and teaching activities and experiences.	F	

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
12.	I.P.B.3.1.2 The organisational component ensures opportunities for students to participate in academic mobility programmes organised in person and/or virtually.	F	
13.	I.P.B.3.2.1 The organisational component provides fair opportunities for students, in line with their potential and aspirations, taking into account the diversity of learning styles and abilities.	F	
14.	I.P.B.4.1.1 The organisational component provides students, including those with special educational needs/disabilities, with access to resources and services designed to support the learning process, adequate for the individual learning needs, the study domain, the study cycle, and the form of organisation of the study programme.	F	
15.	I.P.B.5.1.1 Learning outcomes are adequately described, and they support understanding of the students' and teachers' expectations regarding the content of the subject matters in the curriculum.	F	
16.	I.P.B.5.1.2 Achievement of the learning outcomes is checked in ongoing examinations and study completion exams.	F	
17.	I.P.B.7.1.1 The organisational component applies the admission procedures.	F	
18.	I.P.B.7.1.2 Admission in higher education study programmes complies with the principles of fairness and equal opportunities, and with the establishing of support measures to ensure access of vulnerable groups at social and educational risk, including candidates with special educational needs and/or disabilities.	F	
19.	I.P.B.7.2.1 The organisational component applies the regulations concerning the students' professional activity.	F	
20.	I.P.B.8.1.1 The organisational component carries out international cooperation actions supporting mobility of the members of its own community and collaboration in academic and research activities.	F	
21.	I.P.B.9.1.1 Learning based on scientific investigation and research results support and are capitalised upon in achieving the learning outcomes envisaged through the study programme.	F	
22.	I.P.B.9.2.1 The results of scientific research are visible at national and international level in that scientific domain, and capitalised upon in an adequate manner.	F	

No.	Performance Indicator	Extent to which it was fulfilled (F/PF/UF)	Recommendations
DOMAIN C. Quality management			
23.	I.P.C.1.1.1 The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	
24.	I.P.C.1.2.1 The opinions of the members of its own community and of other stakeholders are taken into account in the procedure implementation process.	F	
25.	I.P.C.2.2.2. The academic ethics commission operates based on the regulation approved by the University Senate, and performs actions that are compliant with the law, independently from any other structure or person in the higher education institution.	F	Update the Code of Ethics so that it allows the submission of anonymous reports referring to cases of sexual harassment or moral harassment, according to Decision 952/2025.
26.	I.P.C.3.1.1 The organisational component consistently applies the procedures, and proves their impact on quality assurance.	F	
27.	I.P.C.3.1.2 Members of its own community and other stakeholders are involved in the procedure implementation process.	F	
28.	I.P.C.4.1.1 The organisational component analyses the results of the students' biannual evaluation of teachers.	F	
29.	I.P.C.5.1.1 The organisational component systematically collects and analyses data required for the internal quality assurance process.	F	
30.	I.P.C.6.1.1 The organisational component ensures publication and access to information of public interest regarding the evaluated study programme.	F	
31.	I.P.C.6.1.2 The organisational component ensures transparent decision-making processes.	F	
32.	I.P.C.8.1.1 The organisational component carries out the procedures pertaining to the external quality evaluation process, aiming to organise the evaluated study programme as provided by the law.	F	

Summary Table of Performance Indicators – Degree of Fulfillment

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



VI. Conclusions

Following the periodic evaluation procedure, the on-site visit and the preparation of the EER, it resulted that all performance indicators are met. Therefore, the external evaluation committee proposes

maintaining accreditation (MAC)

for the Doctoral School of Mathematics at the "Ovidius" University of Constanta.

VII. Annexes

- 1) *The schedule of the on-site visit.*
- 2) *Meetings minutes*