

The External Evaluation Report of a Doctoral Study Domain

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I. Introduction

The subject of this Report is a Program Domain Evaluation for the Doctoral Studies of Architecture at the Technical University of Cluj-Napoca (TUCN). The evaluation has been conducted in hybrid mode, and signatory of this Report was virtually collaborated with the rest of the Domain evaluation team.

The Evaluation Team consisted of the following experts:

- **Prof. univ. dr. Iuliana CIOTOIU**, Universitatea “Spiru Haret” din București, Team Coordinator
- **Dr. Marko Savic**, Higher Colleges of Technology (HCT), Abu Dhabi – UAE, International Expert (**Report signatory**)
- **Cornelia-Florina FECHETE**, Universitatea Politehnica Timișoara, Student Representative

The Hybrid Evaluation Visit (Virtually attended by the signatory of this Report) to the Technical University of Cluj-Napoca has been organized by ARACIS, in period July 12-23 2021. Domain host was Prof. Dana Vais, Doctoral Program Council Coordinator of the field Architecture.

As per 2020 data, the Technical University of Cluj-Napoca (TUCN) consists of twelve faculties operating in the two university towns, Cluj and Baia Mare, plus extensions in Alba Iulia, Bistrita, Satu Mare and Zalau. The organizational structure gives the university a regional dimension.

The doctoral – third-cycle university studies allow the attainment of a Level 8 qualification from the EQF/CEC and from the National Qualifications Framework, obtaining the doctoral title.

In TUCN, the doctoral university studies are carried out at the Doctoral School of the Technical University of Cluj-Napoca, that qualifies the institution as IOSUD (Abb. From Romanian for the “Institution Organizing Doctoral Study Programs”). The doctoral school is structured within IOSUD-TUCN, and focused on scientific research and learning through research and whose activity is completed by doctoral theses, scientific publications, innovations, patents and other results of scientific research.

The common duration of the doctoral program is 3 years. The duration of the doctoral program can be extended by 1-2 years, with the approval of the University Senate, at the proposal of the doctoral supervisor. The cycle of doctoral studies has two compulsory components:

- a) Training program based on advanced university studies (PPUA), within the doctoral school;
- b) Individual Scientific Research Program (PCS).

The doctoral studies in the field of Architecture have existed in IOSUD TUCN for 11 years (with the first admission in 2009-2010), period during which it went through several stages (Quoted from the Internal Evaluation Report as follows). Programs delivered are under Scientific type.

“• 2009-2012: Field of Architecture in TUCN in Consortium with UAUIM and UB.

The field of doctoral studies in Architecture was established in IOSUD TUCN by Order of the Ministry of Education, Research and Innovation no .5734/22.10.2009, as part of a consortium created with the Ion Mincu University of Architecture and Urban Planning of Bucharest (UAUIM - coordinating institution) and the University of Bucharest. The doctoral programme thus established was referred to as “Space, Image, Text, Territory” and has been operating since the academic year 2009-2010.

From the Faculty of Architecture and Urban Planning of TUCN, Prof. Arch. Adriana Matei PhD and Prof. Arch. Mircea Sergiu Moldovan PhD worked as doctoral supervisors in this programme.

After three years of operation, the consortium ceased functioning. During 2012, all doctoral students under the leadership of Prof. Arch. Adriana Matei PhD and Prof. Arch. Mircea Moldovan PhD were transferred from UAUIM and registered with IOSUD TUCN. At the end of this period (October 1, 2012), the total number of PhD students in the field amounted to 32.

• 2012-2014: The field of Architecture in TUCN Doctoral School.

In order to comply with the requirements of legal functioning, namely the existence of at least three doctoral supervisors in the field, after the introduction of the qualification defined by the education law 1/2011, other doctoral supervisors in the field of Architecture began to be co-opted within IOSUD TUCN. Associate Professor Arch. Dana Vais PhD was qualified and assigned to the doctoral school (habilitation order O.M. 5633MD/11.12.2013, professor grade as of October 1, 2014).

In the academic year 2013-2014, the first presentations of doctoral theses in the field took place.

Prof. Arch. Mircea Sergiu Moldovan PhD left the TUCN Doctoral School on October 1, 2014, following his retirement. At the end of this period (October 1, 2014), the total number of doctoral students in the field amounted to 36.

• 2014-2018: Doctoral School of Architecture and Urban Planning in TUCN.

The policy of co-opting in the doctoral school new supervisors in the field continued. Associate Professor Arch. Maria Ioana Agachi and Associate Professor Arch. Virgil Pop PhD were qualified and assigned to the doctoral school (habilitate by O.M. 4888/18.08.2015, with professor grades as of October 1, 2015). At the end of this period (October 1, 2018) the total number of doctoral students in the field amounted to 52.

• 2018-currently: The field of Architecture in TUCN Doctoral School.

Currently, in the field of Architecture in the Doctoral School of TUCN, there are six doctoral supervisors, out of which three tenure, a professor from another university institution and two pensioners (see details below in Chapter IV.5. Human resources). Associate Professor Arch. Dan-Ionuț Julean PhD (habilitated by O.M. 3876/04.06.2018) and Prof. Arch. Cazmer Tomas Kovács PhD from Sapiența University of Cluj-Napoca/Tg. Mureș (habilitated by O.M. 5440/04.12.2019) were qualified and affiliated to the doctoral field. At the date of this report (March 18, 2021), the total number of doctoral students enrolled in the field of Architecture is 49.

During 2009-2014, the field of doctoral studies Architecture in IOSUD TUCN was coordinated by Prof. Arch. Adriana Matei PhD. From November 2014 until now, the field has been coordinated by Prof. Arch. Dana Vais PhD, first as Principal of the Doctoral School of Architecture and Urban Planning (established by the reorganization of the TUCN Doctoral School in November 2014), then as Coordinator of the Doctoral Studies Board in Architecture (after another reorganization of the Doctoral School of TUCN, in January 2018)."

Evolution of the number of doctoral supervisors, enrolled doctoral students and doctoral graduates for the first 11 (+1/2) years of existence of the field of doctoral studies ARCHITECTURE within IOSUD TUCN is presented at the Table 1 (Below).

	doctors supervisors	Admitted doctoral students	Thesis presentations (graduates) de teze
2009-10	2	9	
2010-11	2	14	
2011-12	2	9	
2012-13	2	5	
2013-14	2	8	9
2014-15	2	6	18
2015-16	4	11	2
2016-17	4	9	2
2017-18	4	9	1
2018-19	5	6	2
2019-20	5	6	3
2020-21	6	8	2

Figure 1 – Domain key numbers (from Internal Evaluation Report)

II. Methods used

The External Evaluation that is subject of this Report (Virtual Evaluation by the International Expert) has included the following activities:

- The thorough analysis of the Internal Evaluation Report of the doctoral study domain Architecture and appropriate Annexes provided via links or via ARACIS Cloud;
- The analysis of documents, data and information available at the official TUCN web site www.utcluj.ro and provided via ARACIS Cloud;
- Meeting/discussions with doctoral students in the doctoral study domain Architecture;



- Meeting/Discussions with the graduates of the doctoral study domain Architecture;
 - Meeting/Discussions with employers of the graduates in the doctoral study domain Architecture;
 - Meeting/Discussions with the school officials of the TUCN Doctoral School;
 - Meeting/Discussions with the Head and doctoral advisors in the doctoral study domain Architecture;
- Architecture;
- Meeting/Discussions with the representatives of the various structures of the TUCN Doctoral School, including:
 - The Council of the Doctoral School, the University Senate, the Board of Directors, the Quality Assessment and Assurance Commission, the Quality Assurance Department, the Ethics Commission (including with the student representatives of these structures);
 - the Research Centers representatives;

III. Analysis of ARACIS's performance indicators

Domain A. INSTITUTIONAL CAPACITY

The Technical University Cluj-Napoca (TUCN) tradition dates since 1777 (University Charter, https://www.utcluj.ro/media/decisions/2015/10/23/Carta_actualizata_20_octombrie_2015.pdf), however, formally, continuous history begins in 1920 when the Industrial High School has been established. Passing through several evolution stages including establishment of the Polytechnic Institute of Cluj (1953), institution has gained university status and current name in 1992.

Since 2003, TUCN is member of the European University Association (EUA) and number of other international and regional associations and networks. Following the multistage evaluation by ARACIS, TUCN has been labeled "High Confidence" qualification. TUCN possess QS 4 star rating, and has been ranked by World QS ranking within 1000-1100 range (2021)

The Doctoral studies at TUCN has been launched in 1953, and first doctoral degree awarded in 1960. Since then, Doctoral studies have also passed through several evolution stages, and finally established under current structure since 2017.

Criterion A.1.

The administrative, managerial institutional structures and the financial resources

TUCN is a part of the Romanian Higher Education system. It is a Public university, and as such majorly funded by the state budget. University has provided set of the regulatory documents (via ARACIS Cloud) proving its' overall institutional administrative capacity and financial viability.

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

The current structure of the TUCN Doctoral school is presented by the Figure 1 below (Internal Evaluation Report):

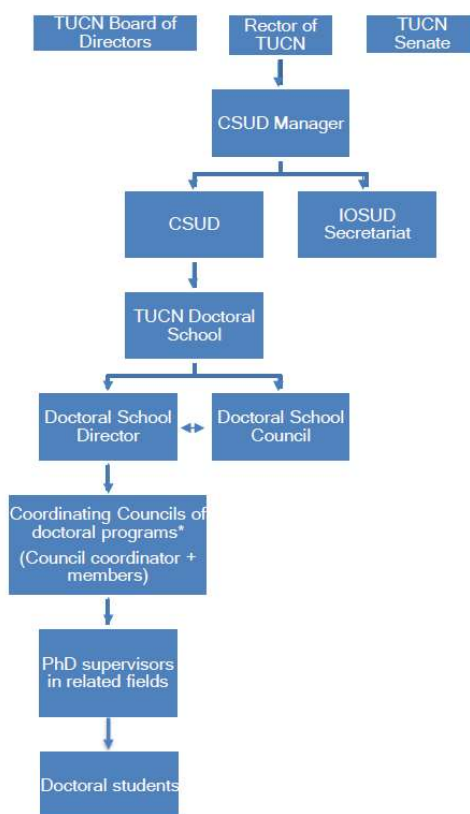


Figure 2 (from Internal Evaluation Report)

Following the structural changes, TUCN Doctoral School, the regulations of the Doctoral School have been approved by the Doctoral School Board and the TUCN Board of Directors in 2019, with certain additions and revisions during 2020 & 2021 (all accessible via TUCN web site).

Performance Indicator A.1.1.1.

The existence of specific regulations and their application at the level of the Doctoral School of the respective university doctoral study domain

The structure and content of the internal regulatory framework (provided via links in Internal Evaluation Report) includes all required elements by Performance Indicator A.1.1.1.:

- The methodology for Doctoral School Council elections;
- The methodology for organizing and conducting Doctoral Studies;
- Mechanisms for recognizing status of a Doctoral Advisor;
- Mechanisms for the equivalence approval of the doctoral degree obtained abroad;
- Functional management structure of the Doctoral School;
- The Contract for Doctoral Studies
- Internal procedures for review and approval of proposals of subject matters of doctoral research

Recommendations:

The indicator is fulfilled.

Remark:

The single outstanding issue that requires clarification is related with the status of Doctoral students who exceed the study duration as stipulated in Contract, specifically who covers financial dues for the resources engagement during the extended period.

Performance Indicator A.1.1.2. *The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the` in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code of Doctoral Studies with subsequent amendments and additions.*

The internal Doctoral Study-related Regulation documents (Regulation of the doctoral school of the Technical University of Cluj-Napoca within the institution organising doctoral studies IOSUD-UTCN (http://iosud.utcluj.ro/files/Files/EN-Files/Legislatie/Regulation%20of%20the%20doctoral%20school%20of%20the%20UTCN_23.01.2019.pdf) and Institutional Regulation on the organisation and conduct of doctoral studies and advanced research post doctoral programmes at the Technical University of Cluj-Napoca (UTCN) (http://iosud.utcluj.ro/files/Files/EN-Files/Legislatie/Institutional%20Regulation_January_2020.pdf) are aligned with the following national and institutional legislature:

- The Romanian Law of National Education no. 1/2011, amended;
- The UTCN Charter with subsequent amendments,
- The Romanian Government Decision 681/2011, The Code of doctoral studies, amended,
- The Romanian Government Decision 134/2016 and the competent Ministry Order no.3482/2016,
- The Institutional Regulation regarding the organization of doctoral studies in UTCN/2018,
- Romanian Law 288/2004, amended,
- The competent Ministry Order no. 3121/27.01.2015,
- Regulation for obtaining the habilitation certificate and the affiliation to the Doctoral School of the Technical University of Cluj-Napoca/2018.
- The Order no. 5403/1.11.2018 regarding the establishment of the methodology for the evaluation of doctoral studies and systems of criteria, standards and performance indicators used in the assessment, published in: The Official Gazette Part I, no. 962 of 14 November 2018.
- The Romanian Order no. 5140 /11 September 2019 for the approval of the Methodology for academic mobility of students.

Both regulatory documents are approved by the relevant University organs (Administration Council 2019 and University Senate 2020, respectively).

Recommendations:

The indicator is fulfilled.

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

According to the provided documentation and links, TUCN and it's Doctoral Studies School possess necessary logistical resources to carry out Doctoral studies.

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

TUCN facilitates records of Doctoral studies by the module (application) “Management of the doctoral students” within the integrated University Information System (since 2017-2018).

In addition, the digital platform of the Doctoral school (<https://doctorat.utcluj.ro/>) provides number of information regarding the Doctoral school records as well as 24/7 support for doctoral students. Platform consists of the following modules:

- Roles and permissions management module
- Admission and authentication module
- Internationalization module
- Doctoral student management module
- Application management module
- Document generation and upload module
- The module for public presentation of doctoral theses
- The module for generating statistics
- Data export and archiving module
- “dCard” digital card identification module

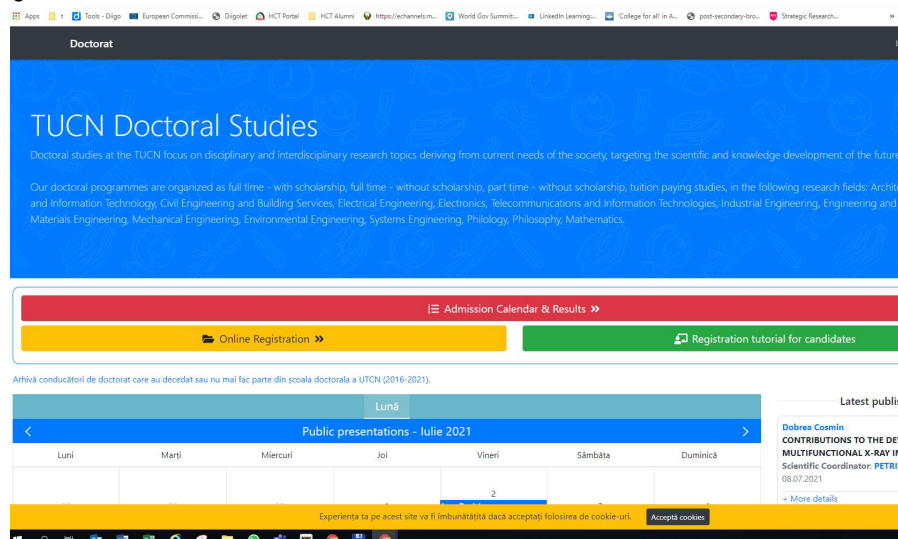


Figure 3 – TUCN Doctoral Studies Portal (landing page, Accessed 16.07.2021.)

Recommendations:

The indicator is fulfilled.

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

Doctoral Studies School at TUCN utilizes highly functional Turnitin anti-plagiarism tool to identify and verify originality of the doctoral theses. Domain Internal Evaluation Report has provided evidence about it's implementation and thoroughly described the methodology of use. However, as dissertations are

published on Romanian, it is questionable up to what extent the Turnitin may identify similarities with other dissertations or publications that have been published in other languages (e.g. English).

Recommendations:

The indicator is partially fulfilled.

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

As a public institution, TUCN receives most of the necessary Doctoral School related funding from the state budget. However, the fact that the most of the funds are provided through institutional financing channel, the public financing limitations reflect to the fulfillment of this Standard.

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

The Architecture Domain has provided evidence regarding six international and national grants obtained in period 2015-2020, with overall in-kind value around 75,000 euro and significant support in-kind (through various kind of research support). Some of students from the Doctoral program Architecture, during the meeting, confirmed that they were engaged in project activities financed by stated grants, or offered to participate but rejected as the topic was not aligned with their research focus.

Recommendations:

The indicator is fulfilled.

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

Out of the current 49 students enrolled at the Doctoral studies of Architecture, 29 are considered as in active status (extension period inclusive). Out of them, 13 are currently receiving scholarship from TUCN, while the overall number of those who have been receiving TUCN scholarship is 27. Besides TUCN scholarships, three doctoral students have received additional financing from third party source for longer than 6 months.

Accordingly, percentage of active students receiving additional funding is 44.8%

Recommendations:

The indicator is fulfilled.

Performance Indicator *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.).*

The provided statement referring to Performance Indicator A.1.3.3 (Anexa_A.1.3.3._Nota justific._Arhitectura_signed.pdf) does not fully refer to the Standard requirements. Investments in library resources, anti-plagiarism software and employees' salaries are unlikely to be considered as referring to the requirements. Accordingly, the current percentage of standard-related resource usage is identified as 0.22%.

Recommendations:

The indicator is not fulfilled.

Remarks:

University shall develop financial mechanism for the budget re-distribution in order to fulfill the Performance Criteria.

Criterion A.2. Research infrastructure

TUCN Doctoral Studies in Architecture Domain has provided quite generic information regarding the available research resources.

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

Specificities of the research conducted under Architecture Domain, as per discussions with Faculty members, require wider scope regarding this standard (urban space as lab).

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

Resource-related evidence presented through the Internal Evaluation Report focusses mainly on spatial availability, basic IT equipment and library and its databases. Exceptions are BIM software (with the limited number of licenses) and a modelling lab, but the function of those is not clarified within the scope of the Doctoral program studies.

Internal Evaluation Report does not refer to any specific research lab or software (e.g. architectural technologies, acoustics, illumination, indoor/outdoor environmental impact, parametric design, building performance etc.) that may extend the breadth and depth of the architectural research.

Recommendations:

The indicator is partially fulfilled.

Remarks:

Having in mind specificities of the research conducted within the Architecture Domain, available library and lab resources are considered limited. It is necessary to improve resourcebase by investing in some of learning resources (e.g. Taylor & Francis e-library pack) and labs (equipment – for digital fabrication, 3D printing, acoustics, lighting etc. - and specialized software – e.g. for parametric design, measuring and recording for field trips) that may widen the scope of doctoral research.

Criterion A.3. Quality of Human Resources

The structure and competence of the Doctoral School supervisors in the field of Architecture is evaluated following the statements from the Internal Evaluation Report and number of Annexes addressing their research records and achievements.

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

Architecture Domain possess sufficient staff for the conduction of the Doctoral program within the program scope and comparing with the current enrollment numbers. This has been confirmed during discussions with students and graduates.

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

Some of the documents (as sampled) provided to justify that all six Doctoral supervisors in the field of Architecture meet required CNATDCU standards. Certain discrepancies in submission Annexes have been clarified by additional justifications provided by Domain Head on request.

Recommendations:

The indicator is fulfilled.

Remarks:

The academic staff outputs and achievements considered under standard for the qualification for engagement at the Doctoral studies shall consistently respond to criteria. Among additionally submitted CVs, provided Excel format (Prof. K.Kovacs) is quite suitable and recommended for future submission and for the internal quality control purposes.

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

Justification is provided that three out of six Doctoral Study advisors engaged by Architecture Domain (Vais, Pop, Julean) are in full-time employment with TUCN.



Recommendations:

The indicator is fulfilled.

Performance Indicator 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.*

Four theoretical courses in the first semester of the Doctoral Studies are taught by doctoral supervisors. A course in Ethics and Integrity is considered as general course, and may be chosen from the pool of similar courses run by faculty from other Departments.

In total, 28 different faculty members are engaged in supervising committees. Out of them, 19 faculty members are from the TUCN Faculty of Architecture, 4 from other TUCN departments, and 5 from other Romanian universities.

The concern raised is the distribution of the teaching load, presuming that Doctoral Supervisors teach at Bachelor and/or Master level as well. Being intensively engaged in teaching on undergraduate level may limit supervisors' capacity for continuous research. During the meeting with Faculty, the issue is clarified.

Recommendations:

The indicator is fulfilled.

Remarks:

In order to enhance the research capacity of the Domain Architecture and utilize elements of the conducted research in undergraduate curricula, suggestion would be to request one full time equivalent (FTE) research position (100% engagement on research) that can be divided between tenured staff, simultaneously reducing their teaching load.

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

Five of six doctoral supervisors currently mentor doctoral students. None of them has more than 8 active mentees (in 'internship'). The overall number of mentees including students on extension exceeds 8 (11) with only one Supervisor (16.67%).

Recommendations:

The indicator is fulfilled.

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

Submitted documents (shared via ARACIS Cloud) provide evidence regarding this Standard.

Performance Indicator A.3.2.1. *At least 50% of the doctoral thesis advisors in the evaluated domain have at least 5 Web of Science- or ERIH-indexed publications in magazines of impact, or other achievements of relevant significance for that domain, including international-level contributions that indicate progress in scientific research - development - innovation for the evaluated domain. The aforementioned doctoral thesis advisors enjoy international awareness within the past five years, consisting of: membership on scientific boards of international publications and conferences; membership on boards of international professional associations; guests in conferences or expert groups working abroad, or membership on doctoral defense commissions at universities abroad or co-leading with universities abroad. For Arts and Sports and Physical Education Sciences, doctoral thesis advisors shall prove their international visibility within the past five years by their membership on the boards of professional associations, membership in organizing committees of arts events and international competitions, membership on juries or umpire teams in artistic events or international competitions.*

As per Internal Evaluation Report, more than 50% of Doctoral supervisors at the Architecture Domain have more than 5 publications in the field of Architecture, with the international visibility.

Recommendations:

The indicator is fulfilled.

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

As per Internal Evaluation Report, more than 50% of the doctoral supervisors of the Architecture field meet at least 25% of the score required by the minimum CNATDCU standards in force at the date of evaluation, according to their checklist of the minimum scientific standards in the field for the last five years.

Recommendations:

The indicator is fulfilled.

Domain B. EDUCATIONAL EFFECTIVENESS

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

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

TUCN Doctoral Program in Architecture is enrolled in balance with its' capacity, and attracts fair number of candidates from outside the institution. That has been confirmed during meetings with Students and Graduates.

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

Internal Self Evaluation Report and provided anexes prove diversity of the enrolled students, as sufficient number of graduates from other institutions (11 out of 35 in last five years) enrol Doctoral studies at TUCN Architecture program as per requirements of the Performance Indicator.

Recommendations:

The indicator is fulfilled.

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

Analyzing study duration record, and discussing with Faculty, Students, Graduates and Council members provide clear scope regarding this Standard.

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

TUCN Senate has recently (18.02.2021.) approved the procedure that addresses organization of admission to the Doctoral cycle at all of TUCN tertiary programs: (http://iosud.utcluj.ro/files/Files/Legislatie%202021/Regulament%20admitere%20doctorat_2021_CA_2.0_2.21.pdf). The stated document stipulates evaluation of the candidates' research interest and performance via reviewing admission documents and via interviews.

Recommendations:

The indicator is fulfilled.



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

During the last five years, only one of 41 admitted students have dropped out within the three-year program duration. However, current distribution of students (21 regular, 8 on extension, 20 on grace period as per Table A314 of the Internal Evaluation Report) requires detailed longitudinal analysis, as status of students on grace period regarding this standard is not clear.

Recommendations:

The indicator is partially fulfilled.

Remarks:

In discussions with faculty members during the evaluation, it has been emphasized that there is a need for more robustness in facilitating program delivery in order to enhance efficiency. However, this is considered as systemic issue influenced by regulations (3 year scholarship for Doctoral students, “working for free” during extension or grace period. Suggested solution may be to charge students who do not graduate on time.

Criterion B.2. The content of doctoral programs

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

Evidence has been provided by Internal Evaluation Reporta and on request (by Domain Head), and consolidated with findings during the meetings at the Domain level.

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

The Internal Evaluation Report (page 85) provides Doctoral Study program matrix. The Doctoral Program has 4 theoretical courses in 1st semester (in addition to two self-study courses). Two of theoretical courses are related to Research methodology.

Thorough analysis of those two courses as per provides Syllabi (in Annexes) indicate that program may be slightly enriched.

Recommendations:

The indicator is fulfilled.

Remarks:

Proposed literature at the theoretical research methodology courses may include additional titles, e.g. two examples below:

<https://www.routledge.com/The-Dissertation-A-Guide-for-Architecture-Students/Borden-Ray/p/book/9780415725361>



https://books.google.ae/books/about/Building_Knowledge_in_Architecture.html?id=vADyuc16kVAC&redir_esc=y

In addition, and having in mind discussions held during the virtual visit, if case of more inclusion of humanities (e.g. Psychology in Architecture), some additional methods (quantitative and qualitative) shall be considered as supplement to current program (possible as elective). In order to fulfill, more theoretical courses (e.g. whole Year 1) as electives shall be added to program.

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

In academic 2018-19 TUCN has introduced compulsory courses in Ethics and Academic Integrity for all Doctoral students. In addition, specifically for ARCHITECTURE, the course "Research methodology in architecture 2", also deals with ethical issues.

Recommendations:

The indicator is fulfilled.

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

The Internal Evaluation Report refers to set of provided documents stipulating program-related and conduction-related quality assurance mechanisms. However, in order to ensure the fulfillment of this standard, Domain Head is required to provide list of the Program Learning Outcomes, mapped against EQF/NQF requirements for Level 8, as well as to map Course Learning Outcomes against Program Learning Outcomes in order to clarify course purpose within the Program.

As required by the External evaluation Team, Domain Head has provided Program Learning Outcomes as well as Course Learning Outcomes for theoretical courses (that, in general confirm the properness of the program structure), but without mapping matrix.

Recommendations:

The indicator is partially fulfilled.

Remarks:

The original submission, driven by Accreditation standards, do not stipulate mapping of Program Learning outcomes (PLO) against NQF, neither mapping Course Learning Outcomes (CLO) against PLOs. In addition, during discussion with the Quality Assurance Committee members, it has been clarified that topic of Los is just getting into implementation.

Specifying PLOs and CLOs (including those related with the independent research , in addition to theoretical courses), their mapping to PLOs, and finally mapping PLOs to NQF descriptors is suggested to be added to the accreditation standards as a stipulative requirement.

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

Along duration of their studies, and in alignment with study protocols, Doctoral students are provided with continuous guidance by the Supervisors and other members of the Guidance Committee. Proper and extensive evidence has been provided regarding the meeting and feedback (Annexe B.2.1.4 on ARACIS Cloud).

Recommendations:

The indicator is fulfilled.

Remarks:

During the discussion with the Graduates, some of attendees have emphasized that program requires very early to decide regarding the dissertation topic, and that there is a need to provide more flexibility in exploring exact direction and methodology for doctoral research.

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

Overall number of teaching staff included in guidance at the Doctoral Domain Architecture (including Supervisors) is 30. Overall number of students at the Program (including those on grace period) is 49. 49/30 equals 1.63:1 that is less than 3:1.

Recommendations:

The indicator is fulfilled.

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

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

Analysis of research and artistic outputs of Domain students (Annexes, links) provide evidence required to assess the Standard.

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

The Reviewer has had an access to research outputs of all 11 TUCN Architecture Domain Graduates students, and selected the following articles:

1. Costea, R. (2016). The Architecture of Memory. The Memory of Architecture, Philosophy @Lisbon, Special Number, Philosophy & Architecture. n. 5/2016, p.120-128

2. Potîng, R. (2018). Arta Cinema in Cluj-Napoca: The history of the most long-living cinema in Romania. Acta Technica Napocensis: Civil Engineering & Architecture Vol. 61 No 3, p.152-172
3. Opincariu, D.S., Voinea, A.E. (2016). Regional Cultural Interferences in Saxon Villages from Transylvania, Design Communication European Conference, Architecture & Design Faculty, Ozyegin University Istanbul
4. Silviu-Claudiu, B., Pop, V. (2019). The overlapping memories of Sîngeorz-Băi: The perpetual palimpsest of Romania's spa town heritage. 2nd International European Urbanisms Seminar 18-20 December 2019, Leuven
5. Tiganas, S. (2015). Learning from Ourselves, De Urbanitate. Tales of Urban Lives and Spaces, Editura Universitară "Ion Mincu", p.196-204

All of the articles satisfy both requirements - relevant contributions per doctoral study, and contain significant original contributions in the respective domain.

In addition, during the meeting with graduates, reviewer had an opportunity to witness breadth of interests and eloquency of graduates, that warmly confirmed findings within this Performance Criteria.

Recommendations:

The indicator is fulfilled.

Remarks:

The following edition may be quite good additional target for Doctoral graduates as potential opportunity for publishing: <http://www.archidoct.net/>.

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

Domain has provided evidence regarding various exposures, presentations and exhibitions of TUCN Doctoral Students in Architecture. Annexes contain evidence regarding 17 events. Having in mind overall number of PhD graduates in the last 5 years (11), 17/11 is above required minimal index value (1).

Recommendations:

The indicator is fulfilled.

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

Evidence provided within Internal Evaluation Report is confirmed through discussion with faculty and students.

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



The Internal Evaluation Report provides detailed distribution of external referees that have been engaged on dissertations during last 5 years. Among 20 external jury members, only three have been engaged more than once, but not with the same advisor in the same year.

During the discussion with graduates, it has been confirmed that the expertise of external jury members is aligned with the dissertation topic and thus quite supportive during their research.

Recommendations:

The indicator is fulfilled.

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

During the last five years, 11 doctorands have graduated at the Study Domain Architecture. Only one external specialist, assoc. prof. arch. Francoise Pamfil PhD, have attended three dissertations. 3/11 index value is equal to 0.27 that is below stipulated maximum of 0.3.

Recommendations:

The indicator is fulfilled..

Domain C. QUALITY MANAGEMENT

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

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

Key resources for evaluating this Standard are Internal Evaluation Report (with Annexes at ARACIS Cloud) and meeting with Quality Committee Members.

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

TUCN, at all study levels (including Doctoral studies) facilitate quality control of all three university missions (teaching/learning, research and community service) at following levels (as per information provided in Internal Evaluation Report and annexes):

- The Commission for Quality Assessment and Assurance (CEAC), by monitoring and coordinating the implementation of the quality function at the institutional level;
- Office for Quality Assurance, by coordinating the quality assurance process at the educational level and assisting management in making strategic decisions regarding quality;
- Quality managers at the level of faculties and Doctoral School, responsible for implementation.

Following recent Senate decision (No. 1301, 28.01.2021.), indicators for the self-evaluation process have been aligned with the requirements of ARACIS standards, that covers all areas required by this indicator. Regardless that this is the first cycle of the evaluation by new standards, the extensive evidence has been provided regarding previous evaluations and surveys. In Internal Evaluation Report It is stated that “Depending on the results, it can be followed by plan of measures generated based on the feedback collected at the field level...”.

Recommendations:

The indicator is fulfilled.

*Performance Indicator *C.1.1.2. Mechanisms are implemented during the stage of the doctoral study program to enable feedback from doctoral students allowing 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.*

Domain Architecture uses unified TUCN Doctoral Studies questionnaire to collect the feedback of students during their studies. The questionnaire (provided in Annexes) includes satisfaction rates, and provides space to students to identify key challenges and needs. Based on responses, Domain has prepared an Action Plan (provided in Annexes) to reflect on challenges.

Recommendations:

The indicator is fulfilled.

Remarks:

During the meeting with Graduates, some concerns have been raised regarding the overall satisfaction rate with the study experience. It would be advisable to, besides surveys, organize regular meetings with students and listen to their concerns.

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

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

Key information regarding Standard have been found at the Doctoral Studies Web site.

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

- (a) the Doctoral School regulation;*
- (b) the admission regulation;*
- (c) the doctoral studies contract;*
- (d) the study completion regulation including the procedure for the public presentation of the thesis;*
- (e) the content of training program based on advanced academic studies;*
- (f) the academic and scientific profile, thematic areas/research themes of the Doctoral advisors within the domain, as well as their institutional contact data;*
- (g) the list of doctoral students within the domain with necessary information (year of registration; advisor);*
- (h) information on the standards for developing the doctoral thesis;*
- (i) links to the doctoral theses' summaries to be publicly presented and the date, time, place where they will be presented; this information will be communicated at least twenty days before the presentation.*

The dedicated TUCN Doctoral Studies Web Platform <http://iosud.utcluj.ro/> provides all necessary information regarding Study regulations, admission process, study contract, graduation requirements and structure and outcomes of the doctoral programs.

In addition, web-site <https://fau.utcluj.ro/scoala-doctorala-de-arhitectura-si-urbanism.html> provides all relevant information related with Study Domain.

Recommendations:

The indicator is fulfilled.

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

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

Doctoral students have enabled access to the electronic library resources subscribed by TUCN (Science Direct, Springer Link Journals, PROQUEST Central, Wiley Journals, Web of Science, PubMed, and temporarily ANELIS PLUS 2020).



Recommendations:

The indicator is partially fulfilled.

Remarks:

Having in mind specificities of the research conducted within the Architecture Domain, available library resources are considered limited. It is necessary to improve resourcebase by investing in some of additional literature & databases (e.g. Taylor & Francis e-library pack).

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

TUCN is subscribed and providing access to internationally recognized anti-plagiarism platform TURNITIN. The extent and regulations for use are explained in detail Internal Evaluation Report and during the meeting with the members of the TUCN Ethic Committee.

Recommendations:

The indicator is fulfilled.

Remarks:

TURNITIN by its' model, can't recognize potential plagiarism patterns from other languages. In addition, it is unlikely to identify adequate tool that may recognize plagiarism in artistic work.

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

TUCN Doctoral students have access to all key TUCN research facilities, including University Labs.

Recommendations:

The indicator is partially fulfilled.

Remarks:

Due to the character of studies, and having in mind key topics of doctoral dissertations (housing, heritage,...) the key benefit for Architectural students would be related with field trips and accessing archives.

Criterion C.3. Internationalization

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

Standard has been assessed based on Internal Evaluation Report (with Annexes) and confirmed at sample level during discussions with Graduates.

Performance Indicator *C.3.1.1. *IOSUD, for every evaluated domain, has concluded mobility agreements with universities abroad, with research institutes, with companies working in the field of study, aimed at the mobility of doctoral students and academic staff (e.g., ERASMUS agreements for the doctoral studies). At least 35% of the doctoral students have completed a*

training course abroad or other mobility forms such as attending international scientific conferences. IOSUD drafts and applies policies and measures aiming at increasing the number of doctoral students participating at mobility periods abroad, up to at least 20%, which is the target at the level of the European Higher Education Area.

Since 2015, through the TUCN agreements within the Erasmus+ program, 32 mobility places have been provided to Architecture Domain doctoral students. The list of universities partnering with TUCN Architectural domain include schools from Austria, Belgium, France, Germany, Greece, Italy, Spain, Hungary & Turkey. During the stated period, five of currently enrolled students have used the opportunity to use mobility opportunities in duration between 3 and 10 months.

Besides Erasmus+, 9 doctoral students have participated in various international events (conferences, exhibitions, workshops – evidence provided in Annex), and three in other various 3months+ internships.

Overall, 17 of 48 students (one dropped out) or 35.4% have been included in international activities.

Recommendations:

The indicator is fulfilled.

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

During the period of last five years, Domain Architecture has invited two international faculty members to participate in study activities. Their engagement has been covered by faculty or Erasmus funds. In addition, in 2016, TUCN has awarded (on initiative of the Faculty of Architecture & Urban Planning) the Honorary Doctorate to Professor Raf de Sager from the KU Leuven.

Recommendations:

The indicator is fulfilled.

Remarks:

Participation of international dissertation advisors may bring additional value to the program.

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

TUCN International Relations Office web site (<http://bri.utcluj.ro/>) contains all major information related with the university international activities. Page is available in four languages.

Since 2017, TUCN has participated at 26 international fairs and exhibitions (Europe, Africa, America, Asia), where the Doctoral programs (including Architecture) were promoted.

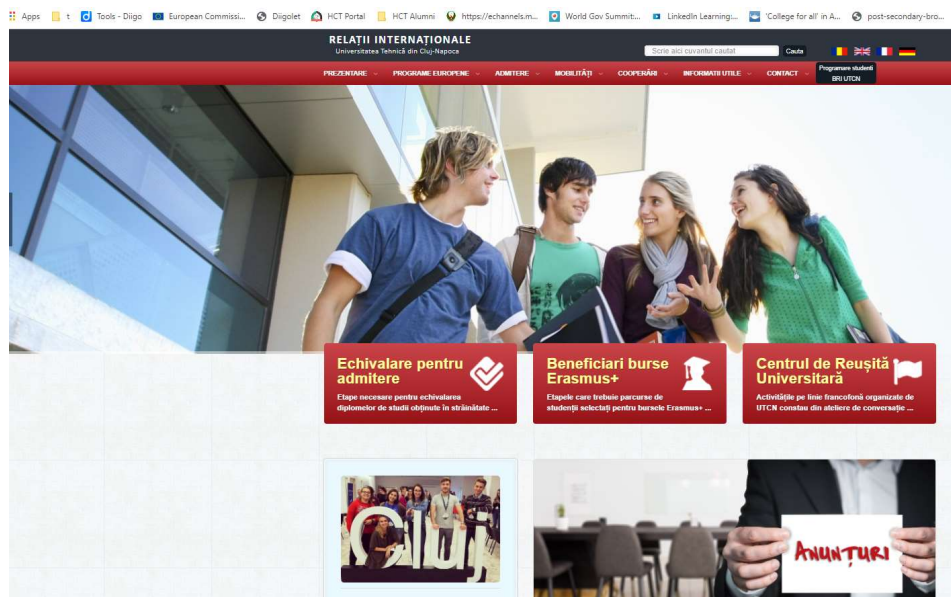


Figure 4 – TUCN International Relations web site (landing page, Accessed 16.07.2021.)

Recommendations:

The indicator is fulfilled.

IV. SWOT Analysis

<p><u>Strengths:</u></p> <ul style="list-style-type: none"> - Long University tradition, ensuring steadiness of structure and processes; - Robust regulatory system of Doctoral School and Studies; - Web presentation and visibility of Doctoral Studies; - Harmonized Faculty team at the Domain Level - Quality of the Graduates; - Doctoral Studies in Architecture have recognizable identity regarding areas of research; - Enthusiastic, sacrificed and responsive Domain Head; - Wide generational span of faculty members; 	<p><u>Weaknesses:</u></p> <ul style="list-style-type: none"> - Insufficient funds distribution towards professional training expenses of doctoral students; - Lack of subscriptions to appropriate (Domain-related) library databases; - Insufficient specialized laboratory resources and/or specialized field measuring and recording equipment; - Insufficient breadth and duration of theoretical courses; - Insufficient focus on Learning outcomes and their comprehensive mapping;
<p><u>Opportunities:</u></p> <ul style="list-style-type: none"> - Shifting financing status of students after three years to self-financing may motivate them to graduate in timely manner; - Shifting financing status of students after three years to self-financing may add financial stimulus to motivate academic supervisors; - Collecting students' verbal feedback in order to improve quality of program and delivery; - Engagement of more international faculty, advisors and supervisors may wide-up student research horizons, and exploring dissertations on English; - Research position (e.g. 1 FTE) to emphasize on research production of faculty at Doctoral level; 	<p><u>Threats:</u></p> <ul style="list-style-type: none"> - TURNITIN inability to identify plagiarism from resources on foreign languages; - Insufficient robustness at the Domain level regarding the quality assurance within the self-evaluation process; - Unclear financial obligations of the students at the grace period; - Obligations and teaching load of supervisors at undergraduate level;

V. Overview of judgments awarded and of the recommendations

No.	Type of indicator (*, C)	Performance indicator	Judgment	Recommendations
A1.1.1.		<i>The existence of specific regulations and their application at the level of the Doctoral School of the respective university doctoral study domain</i>	Fullfilled	<i>The single outstanding issue that requires clarification is related with the status of Doctoral students who exceed the study duration as stipulated in Contract, specifically who covers financial dues for the resources engagement during the extended period.</i>
A1.1.2.		<i>The doctoral school' Regulation includes mandatory criteria, procedures and standards binding on the ` in Article 17, paragraph (5) of the Government Decision No. 681/2011 on the approval of the Code</i>	Fullfilled	

		<i>of Doctoral Studies with subsequent amendments and additions.</i>		
A1.2.1.		<i>The existence and effectiveness of an appropriate IT system to keep track of doctoral students and their academic background.</i>	Fullfilled	
A1.2.2.		<i>The existence and use of an appropriate software program and evidence of its use to verify the percentage of similarity in all doctoral theses</i>	Partially fullfilled	
A1.3.1.		<i>Existence of at least one research or institutional / human resources development grant under implementation at the time of submission of the internal evaluation file, per doctoral study domain under evaluation, or existence of at least 2 research or institutional development / human resources grant for the doctoral study domain, obtained by doctoral thesis advisors operating in the evaluated domain within the past 5 years. The grants address relevant themes for the respective domain and, as a rule, are engaging doctoral students.</i>	Fullfilled	
A1.3.2.	*	<i>The percentage of doctoral students active at the time of the evaluation, who for at least six months receive additional funding sources besides government funding, through scholarships awarded by individual persons or by legal entities, or who are financially supported through research or institutional / human resources development grants is not less than 20%</i>	Fullfilled	
A1.3.3.	*	<i>At least 10% of the total amount of doctoral grants obtained by the university through institutional contracts and of tuition fees collected from the doctoral students enrolled in the paid tuition system is used to reimburse professional training expenses of doctoral students (attending conferences, summer schools, training, programs abroad, publication of specialty papers or other specific forms of dissemination etc.).</i>	Not fullfilled	<i>University shall develop financial mechanism for the budget re-distribution in order to fulfill the Performance Criteria.</i>
A.2.1.1.		<i>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</i>	Partially fullfilled	<i>Having in mind specificities of the research conducted within the Architecture Domain, available library and lab resources are considered limited. It is necessary to improve resourcebase by investing in some of learning resources (e.g.</i>

		<i>international databases etc.). The research infrastructure and the provision of research services are presented to the public through a specific platform. The research infrastructure described above, which was purchased and developed within the past 5 years will be presented distinctly.</i>		<i>Taylor & Francis e-library pack) and labs (equipment – for digital fabrication, 3D printing, acoustics, lighting etc. - and specialized software – e.g. for parametric design, measuring and recording for field trips) that may widen the scope of doctoral research.</i>
A3.1.1.		<i>Minimum three doctoral thesis advisors within that doctoral domain, and at least 50% of them (but no less than three) meet the minimum standards of the National Council for Attestation of University Degrees, Diplomas and Certificates (CNATDCU) in force at the time when the evaluation is carried out, which standards are required and mandatory for obtaining the enabling certification.</i>	Fullfilled	<i>The academic staff outputs and achievements considered under standard for the qualification for engagement at the Doctoral studies shall consistently respond to criteria. Among additionally submitted CVs, provided Excel format (Prof. K.Kovacs) is quite suitable and recommended for future submission and for the internal quality control purposes.</i>
A3.1.2.	*	<i>At least 50% of all doctoral advisors have a full-time employment contract for an indefinite period with the IOSUD.</i>	Fullfilled	
A3.1.3.		<i>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.</i>	Fullfilled	<i>In order to enhance the research capacity of the Domain Architecture and utilize elements of the conducted research in undergraduate curricula, suggestion would be to request one full time equivalent (FTE) research position (100% engagement on research) that can be divided between tenured staff, simultaneously reducing their teaching load.</i>
A3.1.4.	*	<i>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%.</i>	Fullfilled	
A3.2.1.		<i>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</i>	Fullfilled	

		<p>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 or co-leading with universities abroad. For Arts and Sports and Physical Education Sciences, doctoral thesis advisors shall prove their international visibility within the past five years by their membership on the boards of professional associations, membership in organizing committees of arts events and international competitions, membership on juries or umpire teams in artistic events or international competitions</p>		
A3.2.2.	*	<p>At least 50% of the doctoral thesis advisors in a specific doctoral study domain continue to be active in their scientific field, and acquire at least 25% of the score requested by the minimal CNATDCU standards in force at the time of the evaluation, which are required and mandatory for acquiring their enabling certificate, based on their scientific results within the past five years.</p>	Fulfilled	
B1.1.1.	*	<p>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.</p>	Fulfilled	
B1.2.1.	*	<p>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</p>	Fulfilled	

		<i>candidate is compulsory, as part of the admission procedure.</i>		
B.1.2.2.		<i>The expelling rate, including renouncement / dropping out of doctoral students 3, respectively 4, years after admission¹ does not exceed 30%.</i>	Partially Fulfilled	<i>In discussions with faculty members during the evaluation, it has been emphasized that there is a need for more robustness in facilitating program delivery in order to enhance efficiency. However, this is considered as systemic issue influenced by regulations (3 year scholarship for Doctoral students, “working for free” during extension or grace period. Suggested solution may be to charge students who do not graduate on time.</i>
B2.1.1.		<i>The training program based on advanced academic studies includes at least 3 disciplines relevant to the scientific research training of doctoral students; at least one of these disciplines is intended to study in-depth the research methodology and/or the statistical data processing.</i>		<i>Proposed literature at the theoretical research methodology courses may include additional titles, e.g. two examples below: In addition, and having in mind discussions held during the virtual visit, if case of more inclusion of humanities (e.g. Psychology in Architecture), some additional methods (quantitative and qualitative) shall be considered as supplement to current program (possible as elective). In order to fulfill, more theoretical courses (e.g. whole Year 1) as electives shall be added to program.</i>
B2.1.2.		<i>At least one discipline is dedicated to Ethics and Intellectual Property in scientific research or there are well-defined topics on these subjects within a discipline taught in the doctoral program.</i>	Fulfilled	
B2.1.3.		<i>The IOSUD has mechanisms to ensure that the academic training program based on advanced university studies addresses „the learning outcomes”, specifying the knowledge, skills, responsibility and autonomy that doctoral students should acquire after completing each discipline or through the research activities.</i>	Partially Fulfilled	<i>The original submission, driven by Accreditation standards, do not stipulate mapping of Program Learning outcomes (PLO) against NQF, neither mapping Course Learning Outcomes (CLO) against PLOs. In addition, during discussion with the Quality Assurance Committee members, it has been clarified that topic of Los is just getting into implementation.</i>

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

				<i>Specifying PLOs and CLOs (including those related with the independent research , in aaddition to theoretical courses), their mapping to PLOs, and finally mapping PLOs to NQF descriptors is suggested to be added to the accreditation standards as a stipulative requirement.</i>
B2.1.4.		<i>All along the duration of the doctoral training, doctoral students in the domain receive counselling/guidance from functional guidance commissions, which is reflected in written guidance and feedback or regular meeting.</i>	Fullfilled	<i>During the discussion with the Graduates, some of atendees have emphasized that program requires very early to decide regarding the dissertation topic, and that there is a need to provide more flexibility in exploring exact direction and methodology for doctoral research.</i>
B2.1.5.		<i>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.</i>	Fullfilled	
B3.1.1.		<i>For the evaluated domain, the evaluation commission will be provided with at least one paper or some other relevant contribution per doctoral student who has obtained a doctor's title within the past 5 years. From this list, the members of the evaluation commission shall randomly select 5 such papers / relevant contributions per doctoral study domain for review. At least 3 selected papers must contain significant original contributions in the respective domain.</i>	Fullfilled	<i>The following edition may be quite good additional target for Doctoral graduates as potential opportunity for publishing: http://www.archidoct.net/.</i>
B3.1.2.	*	<i>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.</i>	Fullfilled	
B3.2.1.	*	<i>The number of doctoral theses allocated to one specialist coming from a higher education institution, other than the evaluated IOSUD should not exceed two (2) in a year for the theses coordinated by the same doctoral thesis advisor.</i>	Fullfilled	
B3.2.2.		<i>The ratio between the doctoral theses allocated to one scientific specialist</i>	Fullfilled	

		<i>coming from a higher education institution, other than the institution where the defense on the doctoral thesis is organized, and the number of doctoral theses presented in the same doctoral study domain in the doctoral school should not exceed 0.3, considering the past five years. Only those doctoral study domains in which minimum ten doctoral theses have been presented within the past five years should be analyzed.</i>		
C1.1.1.	C	<i>The Doctoral school in the respective university study domain shall demonstrate the continuous development of the evaluation process and its internal quality assurance following a procedure developed and applied at the level of the IOSUD</i>	Fullfilled	
C1.1.2.	C, *	<i>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.</i>	Fullfilled	<i>During the meeting with Graduates, some concerns have been raised regarding the overall satisfaction rate with the study experience. It would be advisable to, besides surveys, organize regular meetings with students and listen to their concerns.</i>
C2.1.1.	C	<i>The IOSUD publishes on the website of the organizing institution, in compliance with the general regulations on data protection,</i>	Fullfilled	
C2.2.1.	C	<i>All doctoral students have free access to one platform providing academic databases relevant to the doctoral studies domain of their thesis.</i>	Partially fullfilled	<i>Having in mind specificities of the research conducted within the Architecture Domain, available library resources are considered limited. It is necessary to improve resourcebase by investing in some of additional literature & databases (e.g. Taylor & Francis e-library pack).</i>
C2.2.2.	C	<i>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.</i>	Fullfilled	<i>TURNITIN by its' model, can't recognize potential plagiarism patterns from other languages. In addition, it is unlikely to identify adequate tool that may recognize plagiarism in artistic work.</i>
C2.2.3.	C	<i>All doctoral students have access to scientific research laboratories or other facilities depending on the specific domain/domains within the Doctoral</i>	Partially fullfilled	<i>Due to the character of studies, and having in mind key topics of doctoral dissertations (housing, heritage,...) the key benefit for Architectural</i>

		<i>School, according to internal order procedures.</i>		<i>students would be related with field trips and accessing archives.</i>
C3.1.1.	C	<i>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</i>	Fulfilled	
C3.1.2.	C	<i>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.</i>	Fulfilled	<i>Participation of international dissertation advisors may bring additional value to the program.</i>
C3.1.3.	C	<i>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.).</i>	Fulfilled	

VI. Conclusions and general recommendations

The Review of the Architecture Domain at the TUCN Doctoral Studies has confirmed that program, research, physical and human resources generally fulfill Accreditation Standards. Considering Accreditation not as audit but rather as quality enhancement process, reviewer has identified several areas of improvement that are recommended to be implemented by the University and by the Domain. In addition there are few recommendations to ARACIS in order to improve Standards and Review procedure.

Recommendations to TUCN:

- 1) Restructuring of Doctoral Studies fund distribution in order to provide much more support to Doctoral students research, internationalization and exposure.*
- 2) Activation of number of 100% Research positions (FTE) in order to enhance the capacity of all Domains and their research production.*
- 3) Providing balanced additional funds for smaller and specific Doctoral programs as a rearesearch-base (literature, equipment).*
- 4) Stipulate defining Learning outcomes for all Doctoral study activities.*
- 5) Extend theoretical courses over Year 1 of Doctoral studies and provide more opportunities for cross-disciplinary research.*

Recommendations to Domain Architecture:

- 1) Approach University with additional requests for appropriate research resources (databases, equipment).*
- 2) Improve internal quality standards in order to balance staff records.*
- 3) Request 100% Research position (1FTE) to enhance research capacity.*
- 4) Explore tools for more robust study delivery in order to reduce average study time.*
- 5) Add topics and promote tangential and electives from other disciplines as a part of the theoretical course fund.*
- 6) Provide more flexibility to students to choose or change dissertation topic later in study journey.*
- 7) Explore additional opportunities for program internationalization (e.g. delivery & dissertation in English).*

Recommendations to ARACIS:

- 1) Emphasize on Learning Outcomes (Los) and their comprehensive mapping (Program LOs against National Qualification Framework descriptors; Course LOs against Program LOs in order to explore and confirm study program coherence.*
- 2) Add indicator regarding character of the Doctoral Program (e.g. narrow / wide/ specialized etc.).*



VII. Annexes

- *The detailed schedule of the evaluation visit – MANDATORY. (Shared by ARACIS via e-mail)*
- *The survey questionnaire applied to doctoral students or academic staff in the doctoral study domain under review, the results - optional (e.g., in graphic form) and their interpretation - if applicable.*
- *Scanned documents – any document requested from the IOSUD during the evaluation visit and received, which is not found in the internal evaluation file received before the visit and referred to in the report. (Shared via ARACIS Cloud)*
- *Pictures – if relevant issues are raised regarding the condition of the student residences, cafeterias, premises for teaching and learning activities, library etc. (Shared via ARACIS Cloud)*
- *Screenshots/Print screens of the Doctoral School/IOSUD website proving specific claims in the report, accompanied by the date when they were accessed and saved. (Provided within the Report)*
- *Any other documents relevant to the evaluation process referred to in the report. (Shared via ARACIS Cloud)*