

**“NATIONAL CENTRE FOR PROFESSIONAL EDUCATION QUALITY ASSURANCE”  
FOUNDATION**



**EXPERT PANEL REPORT**

**ON INSTITUTIONAL ACCREDITATION CARRIED OUT AT NATIONAL UNIVERSITY OF  
ARCHITECTURE AND CONSTRUCTION OF ARMENIA**

**Yerevan - 2022**

## INTRODUCTION

Institutional Accreditation of National University of Architecture and Construction (hereinafter referred to as NUACA or University) was carried out based on the application presented by the University. The process of institutional accreditation was organized and coordinated by the National Centre for Professional Education Quality Assurance Foundation (ANQA) guided by the regulation on “State Accreditation of RA Institutions and their Educational Programs” set by the RA Government on 30 June, 2011 in N978 decree as well as by N959-Ն (30 June, 2011) decree on approving RA Standards for Professional Education Accreditation.

The expertise was carried out by the expert panel formed according to the requirements of ANQA Regulation on the Formation of the Expert Panel. The expert panel consisted of 4 local experts and 1 international expert.

Institutional accreditation aims not only at the external evaluation of quality assurance but also to the continuous improvement of the institution’s management and quality of academic programs. Hence, there were two important issues for the expert panel members:

1. To carry out an expertise of institutional capacities in line with the RA standards for state accreditation
2. To carry out an evaluation for the improvement of university’s quality and for its integration to the European Higher Education Area (EHEA).

The current report includes the results of the evaluation of NUACA’s institutional capacities according to the RA state criteria and standards for accreditation as well as the results of peer review by the international expert from the perspective of being integrated into EHEA.

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## SUMMARY OF EVALUATION

### EVALUATION OF INSTITUTIONAL CAPACITIES ACCORDING TO ACCREDITATION CRITERIA

The expertise of NUACA was carried out by the expert panel formed according to the requirements of ANQA Regulation on the Formation of the Expert Panel. The evaluation was carried out according to the 10 criteria set by the RA Government on 30 June 2011 N 959–Ն decree.

While carrying out the evaluation the expert panel took into consideration that NUACA National University of Architecture and Construction of Armenia (NUACA) is the only university in Armenia that carries out educational, scientific and design activities in the field of architecture and construction. At the same time, the mission of NUACA is broader and includes preparation of specialists with a three-level education system, implementation of research activities and provision of services in the fields of architecture, construction, design, urban economy, ecology, management and technology in accordance with international standards and labor market requirements.

The expert panel also took into consideration that NUACA is undergoing the accreditation process for the second time already and previously, in 2015 it was accredited by National Agency of Quality Assessment and Accreditation of Spain for a period of 5 years.

During the period studied by the expert panel, the activities of NUACA were based on 2015-2020 and 2021-2025 Strategic Plans (SPs), which define the mission, goals, objectives, the actions of their implementation and NUACA KPIs. It should be noted that the expert panel highly appreciates the existence of KPIs in NUACA SPs. However, in 2021-2025 SP there is no time schedule of actions, KPIs are generally not measurable, they do not contain the initial expected / planned values needed to assess progress, which makes it difficult to assess the effectiveness of the strategic plan. The mechanism for evaluating the results of the mission and the implementation of goals is the Rector's annual reports, which, however, are not compiled according to the strategic goals, which in its turn makes it difficult to monitor and evaluate the implementation of the strategic goals.

NCAA has the necessary subdivisions and administrative, teaching, support staffs to carry out the goals of the strategic plan. The structure of the University and the internal normative document base ensure the regulated decision-making process taking the needs of internal stakeholders into account and the preservation of the rules of management ethics.

NUACA implements long-term planning, but lacks in mid-term and short-term planning, which hinders the evaluation of the effectiveness of performance of structural units in terms of "compliance with the goals". At the same time, during the visit, the expert panel was provided with a new format of the annual activity plans of the subdivisions, which can ensure the coordination between the objectives of the SP and the activities of the subdivisions. However, the quality management cycle (planning, implementation, evaluation, improvement) does not work at the departmental level, which puts the efficiency of the University in danger. Interviews and surveys carried out to study the factors influencing the activities of NUACA are not yet complete. However, the publication of up-to-date, objective, impartial quantitative and qualitative information on the quality of academic programs and awarded qualification is quite effective and is ensured through a quite informative and user-friendly website, social platforms and other tools for the dissemination of information.

The specialties implemented by NUACA correspond to the 6th, 7th, 8th levels of the NQF, the mission of the University and are developed in a unified format. The format of academic program specification assumes the availability of learning outcomes; includes their alignment tools with the RA NQF or the SQF and academic program courses (vertical alignment). The format also includes tools for aligning academic program learning outcomes with teaching, learning and assessment methods (horizontal alignment).

However, academic programs developed with these metrics needs to be improved, especially in terms of applying the alignment tools. There is a noticeable need for trainings of the teaching staff to develop academic program LOs, to ensure their vertical and horizontal alignment. Student-centered education is promoted by the involvement of students in practical work, as well as the peculiarities of organizing courses in the fields of architecture and design (small group works), but the educational process in this area still needs to be improved on the university level. Student assessment processes are regulated by internal normative documents, which are also aimed at ensuring the University's policy of assessing students according to their learning outcomes. However, there are different perceptions among the lecturers from the point of view of academic honesty, the definition of academic honesty is missing in NUACA based on the peculiarities of the University. The process of developing and reviewing academic programs needs to be clarified at the University level, especially in terms of procedural and methodological arrangements for benchmarking and stakeholder engagement.

There are student recruitment mechanisms at the NUACA. Admission to the bachelor's level is in accordance with the government-approved state procedure, which, however, does not include the procedure for conducting in-house professional examinations at NUACA. Surveys are conducted to study the educational needs of students, but they do not have a defined frequency.

It's positive that, in order to address the issues raised by the students, NUACA has a clear timetable for meeting with the Rector and Vice-Rectors. The main body for the protection of students' rights is the Student Council. The students nominated by the Student Council are involved in the governing boards of the University, but the links between the students involved in the governing bodies and NUACA student community is not ensured as a result students involved in governing bodies can raise only their own needs and do not represent the student community. An effective process aimed at involving students in internal research grant programs has been launched at the NUACA. The university also provides students with the opportunity to be engaged in additional free of charge or paid classes, which are mainly aimed at developing students' professional and transferable skills.

NUACA is provided with a teaching and support staffs with the necessary qualifications to implement the academic programs. There is a policy and procedure for the selection of teaching and support staffs at NUACA. There are a number of mechanisms and tools for evaluating the teaching staff, but they are not regularly used. There is a teachers' training process for based on their needs that needs to be coordinated and improved. Much attention is paid to generation change, the involvement of young professionals, with the purpose of which the mechanism of providing bonuses is used.

The process of staffing with own graduates is encouraged. The above described processes and tendencies contribute to ensuring the stability of the teaching staff.

NUACA conducts scientific activities, positions itself as a research university, which is reflected in the respective strategic goals of the University's 2015-2020 SP and 2021-2025 SP. For the relevant purposes of the RS. However, the KPIs are not measurable, they do not contain the preliminary data needed to assess the progress and values for envisaged progress. In the field of research activities,

NUACA views three-year thematic and grant programs received from the State Committee of Science as mid-term planning, and their annual activity plans views as short-term planning. The thematic and grant programs of the State Committee of Science provide significant financial resources for conducting scientific research at the University. However, it is not possible to conclude whether the results recorded are satisfactory or not as KPIs are not measurable. The University also has the necessary administrative and service staff to plan, serve and ensure the accountability of research activities. Since 2021, an internal grant system was launched at the University. A policy aimed at the involvement of students in research, the development of young scientists and the internationalization of research is being introduced at the NUACA. NUACA has the necessary territory for the implementation of education and research processes, which includes classrooms, laboratories, library, etc. The University makes great investments in the improvement of educational environment and especially in the development of laboratories. NUACA provides services in the spheres of architecture and construction as a result of which the University budget incomes have greatly increased due to the implementation of contractual works. Budget allocation at NUACA is not carried out according to strategic goals and objectives. Due to the services directed to the maintenance of health and safety conditions NUACA creates safe and healthy environment however needs of the students with special needs are not taken into account.

Main mechanism of accountability at NUACA is the publication of annual report about the University's activities. The transparency of actions is ensured through the official website of the University as well as through NUACA pages in social networks that have relatively high indices.

NUACA highlights the internationalization of its activities, which is expressed in the relevant strategic goals of the University's 2015-2020 and 2021-2025 SPs. The University cooperates with about 130 European, Russian and American Universities, is involved in many Erasmus+ programs, is actively involved in the inter-university mobility of professors, students and other areas of cooperation. These actions contribute to the internationalization of the University in almost all areas of its activities. However, in this area there is also the problem of non-measurability of KPIs. NUACA has the necessary infrastructure and administrative staff to ensure internationalization, but the effectiveness of internationalization is hampered by the low level of knowledge of a foreign language, particularly English, among the teaching staff and students. The actions taken by the University in this direction have not yet shown significant results.

Although NUACA Quality Assurance Center was established in 2011, the quality assurance system is not yet fully operational. The University has defined quality, quality assurance policy, a number of procedures, which, however, are not aimed at identifying the needs of all internal stakeholders, assessing only some aspects of the University's educational activities. The internal quality assurance system is "fragmented" and does not provide a complete process aimed at improving the activities implemented at the University and evaluating the effectiveness of the SP. NUACA Education Quality Assurance Center is provided with the necessary material and human resources to carry out its functions. However, the latter play a significant role in the reforms implemented at the University.

**Strengths of the University are as follows:**

- 1) Culture of strategic planning at NUACA.
- 2) Reforms implemented at NUACA management system which have a positive effect on the development of the University.

- 3) Existence of LO-based academic programs that involve mapping of LOs, teaching and assessment methods.
- 4) Involvement of students in practical works.
- 5) Involvement of students and teaching staff in research and scientific activities.
- 6) Extensive activities of transferring knowledge to the public by NUACA.
- 7) Existence of preconditions for the development of international and external relations.
- 8) Training of specialists dealing with the coordination of the Quality Assurance structure.
- 9) Existence of highly qualified and experienced teaching and support staffs.
- 10) Implementation of internal research grants.
- 11) Processes of continuous improvement of infrastructure and resources.

**Weaknesses of the University are as follows:**

- 1) The non-measurability of the KPIs in the SP.
- 2) The incompleteness of PDCA cycle in the management system.
- 3) The need to improve the skills of the teaching staff in terms of development, improvement and mapping of academic programs.
- 4) Imperfection of academic program monitoring mechanisms, as well as the existence of unsustainable mechanisms for employer involvement.
- 5) Existence of an internal quality assurance system that does not cover all areas of NUACA.
- 6) Unplanned professional training of lecturers.
- 7) NUACA financial planning is not implemented on the basis of the SP.
- 8) Lack of needs assessment of students with special needs.
- 9) The need to centralize library resources at NUACA.

**Mission and Purposes**

- 1) Based on the good international and local experience to define and introduce the principles of SP development, requirements for the working group, elaboration procedure, stakeholder scope and quota (which areas of activity should be covered by stakeholders, needs of state, internal and external stakeholders, from whom to obtain this information, with what methodology, etc.), approval bodies according to their responsibilities (e.g. to assign the approval of vision, mission, goals, objectives and the approval of the key actions according to the planned activities, their schedule and KPIs to different bodies), their approval and review procedure (envisage opportunities for interim review of action plan and KPIs). To develop the next SP according to the requirements of the document, fully involving the entire spectrum of external and internal stakeholders of the University.
- 2) To develop mid-term and short-term action plans for the actions of 2021-2025 SP indicating the launch and end of actions (if necessary also sub-actions), responsible people (by position), necessary resources, success / performance indicator, supervising person (by position) or body.

**Governance and Administration**

- 1) To develop and introduce tools and procedures for planning, monitoring and annual reporting of the activities of subdivisions derived from the strategic plan.

- 2) To develop and introduce documents and relevant formats defining the processes of planning, monitoring, assessment and improvement of short-term (annual) plans of structural units.
- 3) To introduce the “Benchmark of Labor Market Needs” reporting toolkit to identify labor market needs in other professions of the University.
- 4) To develop procedures and tools for studying the factors influencing all directions of the University's activity.

### **Academic Programs**

- 5) To develop and introduce appropriate procedures and tools to clearly regulate the processes of development, monitoring and review of the academic programs.
- 6) To review learning outcome-course mapping principles and culture in the academic program specification, paying great attention to the selection of courses for the achievement of the LO, including course volume, teaching and assessment methods and the definition of the course outcomes.
- 7) Establish procedures and periodicity of the revision of courses.
- 8) In order to regulate the process of selecting teaching, learning and assessment methods in accordance with the academic program outcomes and to increase the efficiency of the work, to develop a certain policy of method selection which will be derived from the volume, type, outcomes and components of the course, and based on which the lecturer will be able to make a choice and independently choose the methods appropriate to his/her course.
- 9) To define general requirements for graduate works and master's theses, including clear requirements for the structure and content, technical requirements, deadlines for implementation and submission, peer- review, defense and assessment as well as including certain requirements on academic honesty.

### **Students**

- 10) To activate the work of the Student Council by authorizing additional rights to assess the needs of students and to carry out educational activities.
- 11) To activate student career support services to conduct labor market research, provide students with information on vacancies, etc.
- 12) To consider involving students who are not members of the Student Council in governing bodies.

### **Faculty and Staff**

- 13) To establish a policy for the evaluation of the teaching staff, outlining the frequency of the process and to improve the tools used for the assessment of the teaching staff, promoting the professional development of lecturers.
- 14) To develop and introduce a systematic training program for the teaching staff, which will be based on the strategic objectives of NUACA, based on the assessment of the professional needs of the teaching staff.
- 15) To go on developing a policy that encourages the professional advancement of the teaching staff by clearly regulating and diversifying its mechanisms.

### **Research and Development**

- 16) To clearly outline KPIs in the SP so that it will be possible to analyse and assess the success and progress in the research field.
- 17) To define a requirement for internal grants to encourage the publication of articles in impact factor journals.

### **Infrastructure and Resources**

- 18) To make full use of the technical and technological means available at the University as well as the opportunities provided by partners to gain more practical skills. Use the available technical means during the internships.
- 19) To follow and to provide additional resources for upgrading computer labs and ensuring technical support.
- 20) To provide access to professional periodicals and articles in the territory of the University, according to internet addresses.
- 21) To review the model of allocating financial resources and allocate them by subdivisions, according to certain proportions / share and goals, which will lead to decentralization of the budget.
- 22) To define respective procedures and schedule for the coordination of needs assessment and submitting applications by the structural units with the aim of their planning of expenses and financial allocation for assurance and acquisition of necessary material resources.
- 23) To develop and define policies and procedures for identifying people with special needs and the needs of the latter, to develop support mechanisms for people with special needs and types of those mechanisms, define shares of allocated funds.
- 24) To define clear mechanisms for the usage, availability and assessment of effectiveness of infrastructure and resources. To regulate the surveys and other methods carried out for this purpose and carry out surveys with a certain frequency among both internal and external stakeholders.

### **Societal Responsibility**

- 25) To develop and introduced a clear format of reporting which will be linked with the University SP.
- 26) To introduce a regulation on the provision of information, implementation of self-analysis and activity planning, monitoring, assessment and improvement of structural units.

### **External Relations and Internationalization**

- 27) To expand international cooperation also in other fields of NAUCA, e.g. tourism, design with its different spheres, urban economy, management.
- 28) To clarify priorities in the areas of internationalization and external relations, to define time-schedule, responsible people and values for indicators derived from the SP objectives.
- 29) To regulate involvement of faculties in the University internationalization processes.
- 30) To plan the activities of University internationalization and reinforcement of external relations where processes as well as financial resources envisaged by the University will be defined.
- 31) To expand the cooperation with local educational institutions.

32) To continue promoting the enhancement of foreign language proficiency among students and staff.

**Internal Quality Assurance System**

33) To develop and introduce internal quality assurance system which will be aimed at the evaluation of effectiveness of all the processes carried out at the University as well as aimed at gathering information/data from internal and external stakeholders on KPIs defined in SP.

07 July, 2022



**Mkrtich Ayvazyan, Head of the expert panel**

## PEER-REVIEW FROM THE PERSPECTIVE OF EDUCATION INSTITUTION'S INTEGRATION INTO EUROPEAN HIGHER EDUCATION AREA

### **Introduction**

The National University of Architecture and Construction of Armenia (NUACA) Foundation is one of the higher education institutions situated in the capital Yerevan. The NUACA is the only university in the field of architecture and construction in the Republic of Armenia. The beginning of the NUACA related with Higher education in architecture and construction in Armenia launched in 1921 with the Engineering-Architectural and Hydrotechnical-Engineering specialties of the Technical Faculty of Yerevan State University. In 1989, the Institute of Architecture and Construction was established on the basis of the corresponding faculties and chairs of the Yerevan Polytechnic Institute after several reorganizations before. It was renamed to Yerevan State University of Architecture and Construction, and in 2014, to the National University of Architecture and Construction of Armenia. University was accredited by the Agencia Nacional de Evoluacion de la Calidad y Acreditacion (ANECA) for the period of 2015-2020. NUACA play important role in the development of the country economy.

### **Mission and Goals**

University is developing according to Strategic Program (Plan) for 2021-2025. This plan presents NUACA mission and vision as well as values and Aspirations. Mission of the University is aimed at preparing specialists in line with a three-tier education system, carrying out scientific-research activities and providing services in the fields of Architecture, Construction, Design, Urban Economy, Ecology, Management and Technology, in accordance with the international standards and labor market requirements. The Vision declares that University seeks to set up a competitive, flexible educational and scientific system based on the established traditions, which prepares competitive and qualified professionals with modern technology knowledge, social responsibility, national values and respect for culture, where innovation, cooperation and democratic principles are the key to provide relevant professional solutions to the challenges and problems the society faces. NUACA value system is based on Dignified Environment and Respect, Perseverance and Excellence as well as Social Responsibility and Leadership. Strategic Program (2021-2025) is comprehensive, consistent and well-structured document. It contains Key Evaluation Indicators (KEI) which defines the directions, but do not define the most important measurable criteria (KPI), having in mind that this document is the ground stone for the midterm and annual planning. This is particularly important to assure the quality and objectiveness of the monitoring of Strategic Program implementation.

### **Governance and Administration**

The governance and administration of the NUACA has a very important and responsible role to manage and implement the strategy of the University. It is impossible without an active dialog and support of the University Community. Meetings with students, teachers/researchers showed that

University community is well engaged in the dialog with administration and top management bodies. Their voice, opinion and suggestions are heard and they receive a feedback and help if needed. University is aiming to introduce a modern management system ensuring effective autonomy, transparency, accountability. New organizational structure was developed and approved in September 2020. NUACA now has 5 faculties and 23 chairs. Board of Trustees is represented by important internal and external stakeholders respectively acting for the benefit of the University. Recent organizational changes are adequate to the above aim. Such kind of organizational changes are quite complicated and require respective preparation and discussion within the university community. However, it would be advisable to continue internal and external discussion focused on the efficient and transparent management, further flattening of organization structure, decentralization of power and wider University community engagement and empowerment. Top managerial bodies of NUACA (Board of Trustees and Scientific Council) have quite a number of members, what not always assures an efficiency of the mission. There is a trend to introduce process management approach and reduce chairs from the organizational structures and focus on the study program management by program committees in EHEA. It facilitates an avoiding of overlapping and duplication of responsibilities and other misuse.

### **Academic Programs**

The teaching and learning process is organized in a quite similar way as at EHEA universities. NUACA prepares specialists in the fields of Architecture, Construction, Design, Urban Economy, Ecology, Management and Technology with a three-tier education system in line with the requirements of the international standards and labor market. All NUACA academic programs are designed on the basis of learning outcomes and in line with the National academic standards/NQF respective level descriptors. However, it is advisable to continue the internal discussion and clarification of the Learning Outcomes as well as Student Centered Learning approach among all University community to better understand their objectives, content and importance to interlink the requirements of job market, content and quality of academic programs and graduates' knowledge, competence and skills. Pandemics taught teaching staff and student how to continue teaching and learning process online. This experience should be used to develop more flexible formats of education particularly for students who combine working and learning. Construction and urban planning industry is dealing with big amounts of natural resources, financial investments and requires a lot of energy. Therefore, it is advisable that academic programs have to focus on the green/energy-saving and cost-efficient approaches and technologies as well as digitalization of processes.

### **Students**

Students of NUACA have an influence on university governance and express an opinion on the quality of teaching and learning facilities. During the meetings with the expert panel it became clear that the level of students' and graduates' satisfaction with education was relatively high. However, all students and graduates underlined the necessity to expand practical component of studies focused on the development of professional and transversal skills which helps graduates smoothly integrate into the labor market. It should be mentioned, that the surveys of student opinion are quite irregular, and the feedback system does not work well. In order to determine the

effectiveness of teaching and learning processes, it is worth conducting comparative studies of students' achievements demonstrated in the first and last year of studies as well. NUACA students have less opportunity to shape their individualized learning pathway due to a limited number of electives compare to a EHEA institutions. It would be advisable to sign an agreement with all students regarding the accessibility of the information of their employment from the National Social Security or Employment data base right after the diploma theses defense. University lacks sufficient student dormitories, because current student dormitories are given to the refugees from Artsakh due to the armed conflict in the Artsakh region. The University student deserve to have a modern and richer library with online accessibility and psychological service.

### **Teaching and Support Staffs**

The human resource policy is an essential priority in the implementation of the approved NUACA Strategic Program for 2021-2025. Recruitment and professional development of the teaching staff of NUACA are carried out on the basis of the procedure for the formation of the teaching staff, job descriptions, the resulting processes and functions. Quite a number of the members of the academic staff working at NUACA are leading specialists in architecture, construction, and other relevant fields. The evaluation of the professional qualities of the academic staff is carried out by the joint efforts of the NUACA Education Quality Assurance Center, the Department of Academic Programs and chairs. University organizes trainings for the development of professional and methodological skills of the teaching and administrative staffs. University keeps quite good balance between senior and junior staff as well as gender equilibrium. The level of involvement of foreign lecturers is still low in the University. Therefore, it would be strongly advisable to develop English language skills first of all for academic and administrative staff and all University community members.

### **Research and Development**

NUACA strategic goal (2) declares: University has to obtain and apply internationally competitive scientific-research results. However, the current level of scientific research is not enough developed. The reason for this situation can be explained because of the political and economic condition of the country itself (continues conflicts in Artsakh region). NUACA is more focused on the applied research and development like architectural and industrial design as well as construction projects. University is very active in the development of international cooperation and networking. However, the cooperation results are not so much reflecting on the most important research results - an international publication with citation indexes accessible to the wide world research community. The number of research publications in the scientific journals and research databases is too modest for such University as NUACA. An integration of the research outcomes in the academic programs can also be improved. More active involvement of University researchers in international projects could facilitate a wider bilateral exchange of academic staff with foreign Universities (not limiting to Russian Federation). Wider international research cooperation would facilitate an increase in the number of respective publications and successful applications for external funding as well as commercialization of scientific research.

## **Infrastructure and Resources**

University is investing necessary resources to the development and update of an educational environment in line with the Strategic Program 2021-2025. NUACA is focusing on the improvement of infrastructure and structural units, the classrooms and laboratory renovation as well as modernization of experiential facilities. However, the University library technical infrastructure requires an essential modernization (e-library) and enrichment. Electronic data and process handling tools could facilitate higher efficiency in NUACA management, including quality assurance. Free Wi-fi for all University community members and guests should be accessible in all territory of NUACA.

## **Social Responsibility**

University is developing and improving its social responsibility by keeping intensive cooperation and communication as well as presenting annual reports to the internal and external stakeholders and society. The role of universities as providers of re-training and updating possibilities for currently working people by presenting new technological novelties and practical skills are increasing nowadays. It is also advisable to find a possibility to establish a space for student and teachers' creative workshops and start-ups if possible. NUACA has the creative potential and can find the ways of further community engagement for the bilateral benefit in future.

## **External Relations and Internationalization**

NUACA has quite a number of international partners. However, the number of incoming students and academic staff is not an adequate to the number of partners and could be increased. The signing of cooperation agreements should lead to the practical cooperation activities. It is difficult to expect many foreign students without operating academic programs in English. We've met a few foreign students during the site visit, and it is a good start. The development of internationalization of the University first of all depends on the will and personal engagement of top management and also all members of University community starting from the practical English language skills, proactive application for all possible international research funds and grant schemes as well as membership in international Higher Education organizations like European Association of Institutions in Higher Education (EURASHE) and/or European University Association (EUA), and other.

## **Internal Quality Assurance**

University declares that is following requirements of European Standards and Guidelines (ESG 2015) and principle of PDCA cycle, and it is positive. Currently the Rector with Vice-Rectors team and Education Quality Assurance Center (QAC) are playing the central role assuring the quality in NUACA. QAC has so many responsibilities, that it is quite difficult to carry out them all practically, at least such opinion was formed for experts. Therefore, it would be advisable to decentralize and involve more representatives of administrative and academic units as well as students in the quality assurance activities. The administration needs the well-functioning system of objective data for decision making. The system of the data collection and monitoring should be defined as well as documented. Such a data system can be coherent/tied with KPI system. The adoption of the process

management would facilitate better decision making as well as systemic implementation of the quality assurance system. One of many possible options of process management adoptions can be implementation and certification the ISO Quality Management standard. The Quality Assurance Manual requires revision and improvements after the process management approach and respective procedures will be adopted. The participation of an external stakeholders in the composition of the Quality Assurance Council would also facilitate transparency and accountability as well as public respect and reliability of the university.

**Conclusions:** The National University of Architecture and Construction of Armenia Foundation is in transition period. Many actions have recently been introduced and completed or are under the implementation to modernize and strengthen both the university management, academic performance and its quality and following the Bologna process approach. The University is developing international cooperation and following examples of good practice of European universities. There is also a strong determination of NUACA top leaders and the potential of academic community to continuation this policy. It should be mentioned that the University Self Evaluation Report presented for the evaluation panel correctly and self-critically identifies current situation, and more importantly offers ways of improvements.

*Important note. Please find my reflections as a set of peer recommendations for the successful University development, but not as a judgment.*

Dr. Vaidotas Viliūnas,  
International Expert

## DESCRIPTION OF EXTERNAL REVIEW

### COMPOSITION OF EXPERT PANEL

**Mkrtych Ayyvazyan** Candidate of Physicamathematical Sciences, Vice-Rector for Educational-Scientific Affairs at State Academy of Fine Arts of Armenia, head of the expert panel.

**Harutyun Movsisyan** Candidate of Geological Sciences, Director of “Republican Fund of Geology” State Non-commercial Organization of the RA Ministry of Territorial Governance and Infrastructure, member of the expert panel.

**Ashot Gyurjinyan** Candidate of Technical Sciences, Head of the Chair of “Construction Engineering” at Armenian National Polytechnic University Vanadzor branch, member of the expert panel

**Vaidotas Viliūnas**- Doctor of Chemical Sciences, Member of European Association of Higher Education Institutions (EURASHE), Belgium, international member of the expert panel

**Khachik Shahbazyan** PhD student in the profession of Energy systems, complexes, power plants and their management at “Scientific-Research Institute of Energetics” CJSC of the RA Ministry of Territorial Governance and Infrastructure, student member of the expert panel.

The composition of the expert panel was agreed upon with the University and was appointed by the decree of ANQA Director.

The work of the expert panel was coordinated by the Head of the Department of Institutional and Program Accreditation at ANQA Varduhi Gyulazyan.

Translation was provided by Ani Mazmanyanyan.

All the members of the expert panel, including the translator and the coordinator have signed agreements of freedom and confidentiality.

### PROCESS OF THE EXTERNAL REVIEW

#### Application for state accreditation

NUACA applied for institutional accreditation by submitting the application form, the copies of the license and respective appendices to ANQA.

The ANQA Secretariat checked the data presented in the application form and attached documents.

According to the decision on accepting the application an agreement was signed between ANQA and NUACA. The timetable of activities was prepared and approved.

#### Self-evaluation

According to the time-schedule, the University presented its self-evaluation report in Armenian and English and the supporting documentation according to ANQA format. Within the defined time-period NUACA presented its self-evaluation report which corresponded to the defined unified format, all the relevant grounds and appendices required according to the format were in place. ANQA coordinator checked the technical correspondence of the report to ANQA requirements. Afterwards self-evaluation report and attached documentation package together with the electronic survey filled in by the University were provided to the expert panel the composition of which was beforehand agreed upon with the University and was approved by ANQA Director.

### **Preparatory phase**

In order to prepare the expert panel for the work and to ensure the effectiveness of the processes ANQA conducted 4 trainings in the following topics:

1. Main functions of expert panel members
2. Preliminary evaluation as preparatory phase of developing expert panel report, the main requirements of writing the report
3. Methodology of observation of documents and resources
4. Techniques and ethics of meetings and questions.

Having examined the self-evaluation report of the University and the supporting documentation base, the expert panel conducted preliminary evaluation according to the format making also the list of additional required documents and the questions for clarification was formed mentioning the respective structural units and target groups.

Then the expert panel summarized the results of initial evaluation and formed the site-visit time-schedule[1].

Guided by the Accreditation Manual meetings of all the groups with the expert panel, close and open meetings, observation of documents, visits to different structural units of the University, etc. were involved in the time-schedule.

### **Preliminary visit**

A meeting with NUACA management took place on March 9, 2022. During the meeting time-schedule of the site-visit was agreed upon with the University, the list of additional documents for observations was presented, organizational, technical, informative issues as well as ethical norms and behaviour of the participants of the meetings were discussed. The conditions for focus groups and for the expert panel work were discussed.

### **Site-visit**

The site-visit took place from March 14 to March 17, 2022. The works of the expert panel launched with close meeting the aim of which was to discuss and agree with the international expert Vaidotas Villinas upon the evaluation framework, issues to be discussed during the site-visit, NUACA weak and strong points per criteria, procedure of focus groups and to clarify further steps. All the members of the expert panel, ANQA coordinator and the translator took part in the site-visit.

The site-visit launched and ended with the meeting with NUACA management. All the meetings envisaged by the time-schedule were conducted except the open meeting. Lecturers, students, deans, heads of chairs, employers and alumni were selected by the expert panel from the list provided by the University beforehand. All the meetings envisaged by the time-schedule took place. During the site visit the expert panel observed documents<sup>1</sup> and resources<sup>2</sup>. At the end of each day of the site-visit and during the close meetings preliminary evaluation by the expert panel was withdrawn and at the end of the site-visit during the close meeting the main results of the site-visit were summed up. The expertise was carried out based on State Accreditation Criteria and Standards as well as based on ANQA procedures which assumes two level scale for the evaluation: satisfactory and unsatisfactory.

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<sup>1</sup> Appendix 3. List of Observed Documents

<sup>2</sup> Appendix 4. Resources Observed by the Expert Panel

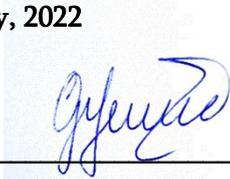
**Expert panel report**

The expert panel carried out the preliminary evaluation on the basis of the electronic questionnaire filled in by the University, the submitted self-analysis, the study of the attached documents, the observations of the site-visit, as a result of regular discussions. Based on the observations made after the discussions, the expert panel prepared a preliminary version of the expert report.

The international expert also prepared a separate opinion on the peer review. The documents were translated and provided to the expert panel. The peer review opinion is fully included in the text of the report. After the approval of the members of the expert panel, the preliminary report was submitted to the Armenian National University of Architecture and Construction on May 23, 2022.

NUACA provided observations on the preliminary report, which were discussed with the expert panel and the final report was prepared.

07 July, 2022



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**Varduhi Gyulazyan, Coordinator of the expert panel**

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

### BRIEF INFORMATION ABOUT THE EDUCATION INSTITUTION

**History:** National University of Architecture and Construction of Armenia (NUACA) is the only university in the field of architecture and construction Armenia in the sphere of education and science. The mission of NUACA is the preparation of specialists with a three-level education system, implementation of research activities and provision of services in the fields of architecture, construction, design, urban economy, ecology, management and technology in accordance with international standards and labor market requirements. The University structural units were established in line with the mission of the University.

**Education:** NUACA education policy is designed to support the University in effectively fulfilling its mission and strategic goals in assuring the quality of education. Developments in the field of education, the increase of stakeholder involvement, changes in their requirements, challenge the University to develop basic policies and procedures, the implementation of which can significantly enhance the quality of provided educational services, thus strengthening the University's competitive position.

**Research.** In NUACA 2015-2020 SP the main sectoral goal is defined as the use of the scientific-creative potential of NUACA in research, consultancy and design aimed at solving the economic, cultural and social problems of the country, and in 2021-2025 SP implementation of internationally competitive research work, the introduction of innovative solutions, and the commercialization of research results are defined as ambitions in the field of science.

At present, special emphasis is placed on the implementation of applied research conditioned by the needs of the country and having dual impact, the creation of a joint platform for scientific publications with foreign partners, and the assurance of a smooth generation change in the field of science.

**Internationalization:** The internationalization processes of NUACA are derived from 2015-2020 and 2021-2025 SPs. The internationalization processes at the University are aimed at the renewal of academic programs, the investment of the latest teaching methods, the implementation of educational, research and design work, participation in scientific programs.

Since 1994, NUACA has been working hard to ensure that the diploma awarded to the graduates of the Faculty of Architecture is officially recognized by the French government as equivalent to the French one. As a result of upgrading curricula, academic programs and making comparisons, it is being re-recognized for different periods, the last two being for five years. The current decision on recognition was made on January 12, 2017 for a period of five years.

**Quality assurance:** QA policy and procedures at NUACA are aimed at improving the quality of education, helping to increase the efficiency of the university management system and reduce administration, develop competitiveness, and introduce and improve student-centered learning.

**Source:** *The source of facts in the above areas is the documents provided by the institution (e.g. self-evaluation, strategic plan, schedule, plans of structural units, concepts, etc.).*

## I. MISSION AND PURPOSES

**CRITERION: The policies and procedures of the institution are in accordance with the institution's mission which is in line with ANQF.**

### Findings

#### **1.1 The institution has a clear, well-articulated mission that represents the Institution's purposes and goals and is in accordance with National Qualifications Framework (hereafter NQF).**

For the reporting period NUACA activities are based on the SP 2015-2020 and SP 2021-2025 where NUACA mission, goals and objectives are defined. 2015-2020 Sp defines University's mission, 9 goals derived from it, 27 objectives and 130 activities (actions) and 69 KPIs. According to 2015-2020 SP the mission of NUACA is as follows: " To prepare specialists in the fields of Architecture, Construction, Design, Urban Economy, IT and related fields, with a three-tier education system in accordance with the international standards and labor market requirements, carrying out scientific-research activities and providing services.

2015-2020 SP goals are as follows:

1. Preparation of applicants with quality knowledge for the normal organization of admission according to University specialties.
2. Providing high quality, up-to-date education in line with the developments in the Bologna process.
3. Improving the policy of personnel of the University and enhancement of effectiveness of training of scientific-pedagogical staff.
4. Modernization of educational laboratories and classrooms, creation of new ones, replenishment of material and technical base, development of infrastructures.
5. Utilization of the scientific-creative potential of the University in research, consultancy and design works aimed at solving the economic, cultural and social problems of the country.
6. Sustainable development of international relations in the fields of educational and scientific-technical cooperation, continuous assurance of the process of recognition of a university certificate abroad.
7. Introduction and improvement of effective structures for student involvement in the University management process.
8. 8. Ensuring accountability of the results of the University activities.
9. Stability of financial and economic activity.

At the same time, in 2015-2020 SP there is no vision and values of the University by the maintenance of which the program should be implemented. In 2015-2020 SP there are also deadlines for the implementation of the objectives, but the definition of the deadlines for the implementation of the objectives is of a formal nature, as they mention 2015 as the beginning and as an end mainly 2020 or "each year" is mentioned (except for the deadlines for the completion of 18 events mentioned in the following objectives 2.1, 3.2, 3.4, 3.5, 4.1, 6.2 and 6.3). Progress indicators (KPIs) are often not

measurable, they do not contain the data and values needed to assess the progress. Responsible people and evaluators of the work performed are not defined.

In 2021-2025 SP the mission, vision, values, ambitions of the University, 5 goals, 28 objectives, 67 actions and 80 KPIs are defined. According to 2021-2025 SP of NUACA, the mission of the University is: "Preparation of specialists with a three-level education system, implementation of research activities and provision of services in the fields of architecture, construction, design, urban economy, ecology, management and technology in accordance with international standards and labor market requirements".

2021-2025 SP goals of the University are as follows:

1. Assurance of student-centered ecosystem and implementation of internationally competitive academic programs.
2. Getting and applying internationally competitive scientific-research outcomes.
3. Expand of international recognition of the University and assurance of attractiveness of scientific-educational environment.
4. Investment of modern management to ensure autonomy, transparency, accountability and effective changes at the University.
5. Expansion and reinforcement of constructive relationship with local and international partners.

However, in 2021-2025 SP there is no schedule of actions, the people responsible for the implementation of actions and the evaluators/receipients of the work done are not defined. KPIs are generally not measurable and do not contain the initial data and envisaged values needed to assess the progress. During the site-visit it became clear that the University administration views the numeral values of 2015-2020 SP KPIs as baseline for 2021-2025 SP KPIs which, however, are not defined in 2021-2025 SP. NUACA is implementing academic programs in BA, MA and PhD levels which are deried from its mission and are in line with the RA NQF 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> levels and cover all the levels of higher education.

## **1.2 The mission statement, goals and objectives of the Institution reflects the needs of the internal and external stakeholders.**

According to the self-evaluation, in order to develop 2021-2025 SP by the order and with the presidency of the Rector, a commission was set up, where Vice-rectors, the Head of the Staff, the Rector's Advisor, the Scientific Secretary and the Head of the Education Quality Assurance Center were involved. A number of internal stakeholders (administrative staff, teaching staff members) were also involved in the development of the SP. The draft of 2021-2025 SP was widely discussed during the workshop organized in Aghveran in February 2021 with the participation of about 70 internal and external stakeholders. During the site-visit it became clear that the draft of 2021-2025 SP was discussed in the chairs and in the faculty councils as well.

At the same time, the policy of stakeholder involvement in the development of SP is missing or not documented. The principles of the development of SP, the requirements for the composition of the working group, the development procedure, the scope of stakeholders - quotas (which areas of activity should be covered by stakeholders, the needs of the state, internal and external stakeholders, from whom to receive this information, by what methodology, etc.) are not defined.

### **1.3 The Institution has set mechanisms and procedures to evaluate the achievement of its mission and goals and further improve them.**

During the visit and from the self-evaluation it became clear that in order to analyse the work done in the direction of 2015-2020 SP, a working group was set up by the coordination of Education Quality Assurance Center and the Department of Academic Programs and Methodology, which the University Vice-Rectors, 21 representatives of a number of subdivisions coordinating educational, scientific, international, financial and economic activities. As a result of the work of the working group, a report was compiled, which reflected the results of 6 years of the completed 2015-2020 SP. In particular, relevant assessment indicators are involved in the report according to strategic goals, their values for the beginning of 2015 and the end of 2020, as well as the identified problems and possible ways to solve them. The appendix to the document also shows the indicators of annual dynamics.

As already mentioned in the previous standard, the development of 2021-2025 SP was carried out by a Commission set up for that purpose, during its work the Commission took into account the report on the analysis of the performance of 2015-2020 SP. The Rector's annual reports can be considered as a mechanism used to monitor the SP.

However, mechanisms and procedures for developing a strategic plan, evaluating the results and improving them are not defined.

#### **Considerations:**

NUACA has a defined and published mission and strategic goals that generally reflect the needs of internal and external stakeholders. However, in the action plans of 2015-2020 SP and 2021-2025 SP there is no schedule, the responsible people for particular actions are not defined, as well as there are no initial and expected values of the evaluation indicators. This makes it difficult to organize the implementation of the strategic plan, as well as to assess the effectiveness of the University.

The Rector's annual reports can be a mechanism for monitoring the SP. However, the reports are not developed according to strategic objectives, which makes it difficult to monitor the implementation of the mission, strategic objectives and/ or the current assessment.

Taking into account the above-mentioned it can be concluded that in the level of strategic planning and activities NUACA strives to be based on PDCA cycle:

1. Plan-development of SP
2. Do-mid-term and short-term actions
3. Check-reports, discussions, analysis
4. Act- taking into account the recorded problems planning of further activities.

However, the above mentioned stages are not fully developed and documented, and the PDCA cycle is not fully introduced. In particular, there is a lack of mid-term and short-term planning based on the objectives of the SP, as well as the mechanisms for monitoring the SP need to be reconsidered and improved. NUACA is implementing academic programs in BA, MA and PhD levels which are in line with the RA NQF 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> levels and their professional directions are in concord with the University mission.

#### **Summary:**

Taking into account that the goals of 2015-2020 SP and 2021-2025 SP are derived from the mission and in general they reflect the needs of internal and external stakeholders, NUACA academic programs are in line with NQF, and in some cases also to sectoral frameworks, the expert panel finds that NUACA meets the requirements of Criterion 1.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 1 is satisfactory.

## **II. GOVERNANCE AND ADMINISTRATION**

**CRITERION: The institution's system of governance, administrative structures and their activities are efficient and are aimed at the accomplishment of mission and goals of the institution preserving ethical norms of governance.**

### **Findings**

**2.1. The Institution's system of governance ensures structured decision-making process, in accordance with defined ethical rules and has efficient provision of human, material and financial resources to accomplish its educational and other purposes.**

The management of NUACA is carried out in combination with the principles of sole and collegial management by the Rector and the Board of Trustees, as well as with the significant role of the Scientific Council. The highest governing body is the Board of Trustees composed of 20 members, which is formed for a period of 5 years. The Board of Trustees is composed of the representatives of the founder, the authorized body, NUACA teaching staff and students. The composition of the Board of Trustees is approved by the Prime Minister of the Republic of Armenia. The functions of the Board of Trustees include approval of the Strategic plan, approval of the annual budget, election of the Rector, evaluation of the Rector's annual report about the University activities, etc. Thus the Board of Trustees is responsible for the approval of the Strategic plan and mid-term and short-term monitoring (approval of reports) of its implementation. Rector and the Scientific Council are responsible for the long-term, mid-term and short-term implementation of the Strategic plan and the day-to-day management of the University. NUACA Scientific Council is composed of 59 members and is formed with a period of 5 years. The President of the Scientific Council is the Rector ad officio. Vice-rectors, heads of departments, Scientific Secretary, Head of the Education Department, Chief Accountant, Directors of branches and centers, Deans of faculties, Heads of chairs, the President of the Trade Union, the President of the Students' Council, representatives of the teaching staff and 14 students are involved in the Scientific Council. It should be mentioned that the representation of students in the Scientific Council is 23.7% however, according to point 7 of the regulation of NUACA Scientific Council "the number of students' representatives should not be less than 25%".

In order to increase the efficiency of the implementation of 2021-2025 strategic goals and objectives, on January 14, 2022 the new structure of NUACA was approved. According to the new structure, the activities of the NUACA per each sector are coordinated accordingly by:

1. Vice-Rector on Education Affairs,
2. Vice-Rector on Educational Reforms,
3. Vice-Rector on Scientific Affairs,
4. Vice-Rector on International Relations and Cooperation,

5. Head of the Staff,
6. Head of the Center for Education Quality Assurance and Development
7. Head of the Financial-Economic Affairs
8. Chief Accountant

Under the subordination of the persons holding the mentioned positions are sufficient number of subdivisions to carry out the activities envisaged in those spheres, which in their turn are staffed with the necessary number of qualified specialists. However, regulations of the departments are generally outdated or does not exist. The process of developing a regulation corresponding to the new structure and new responsibilities of the subdivisions arising from the new structure is at the initial stage.

## **2.2. The Institution's system of governance gives an opportunity to students and the teaching staff to take part in decision making procedures.**

NUACA lecturers and students are involved in all collegial governing bodies of the University. In particular, the Board of Trustees includes 8 lecturers (including 5 heads of chairs) as representatives of the teaching staff, which makes up 25% of the total members of the Board of Trustees. The representatives of the teaching staff of the Board of Trustees are nominated by NUACA Scientific Council. 25% of the Board is made up of students, student board members are nominated by the Students' Council.

Among the 59 members of the Scientific Council there are 21 members of the teaching staff (including 8 heads of chairs), which is about 35.5% of the members of the Scientific Council. As already mentioned in the previous criterion, the proportion of student representatives in the Scientific Council according to the regulations should be at least 25%. The President of the Trade Union is also involved in the Scientific Council who thus has the opportunity to protect the interests of the members of his organization from decisions that violate their rights.

## **2.3. The Institution formulates and carries out short-term, mid-term and long term planning consistent with its mission and goals as well as has appropriate mechanisms for the implementation and monitoring of those plans.**

The long-term planning of NUACA for the reporting period is reflected in actions defined for the fulfillment of strategic goals and objectives mentioned in 2015-2020 and 2021-2025 strategic plans. However the definition of deadlines for the implementation of envisaged activities is formal (2025-2020 Strategic plan) or is missing (2021-2025 Strategic plan). People responsible for the implementation of those activities are not defined, there are no entry and expected values for KPIs.

Mid-term and short-term planning process is not coordinated at NUACA either on administrative or on faculty or chair levels. Some examples of mid-term planning are international and scientific grant project plans (average 3 years), the availability of which, however, is conditioned by the requirements of the grantholder. At the same time during the site-visit it became clear that since 2022 the system of annual planning of subdivisions has been launched at the University and on the last day of the visit annual plans for 2022 of the following subdivisions were available for the expert panel: "Department for Scientific Policy Development and Coordination", "Department of PhD Studies and Scientific Information", "Department for the Organization of Education Process", "Department of Academic Programs", "Department of Foreign Students", "Department of International Relations and Cooperation", "Francophonie Center for Academic Achievement", "Center for Strategic Planning and Quality Assurance", "Chair of Engineering Geodesy" and "Chair of Technology and Organization of Construction Production". The above mentioned plans are formed according to a unified format and include envisaged activities, deadlines, responsible person's name and surname, criteria for the

evaluation of the result, reference to the relevant goal and objective of NUACA 2021-2025 Strategic plan.

The only operating mechanism for monitoring is the annual report of the Rector based on the reports of Vice-Rectors, which, however, are not developed based on the strategic goals. Documentary base for long-term, mid-term and short-term planning and monitoring mechanisms are missing.

#### **2.4 The Institution carried out examination of facts affecting its activities and draws on reliable findings during the decision-making process.**

According to SER, in order to examine the factors influencing its activities, NUACA conducts surveys among employers and other external stakeholders, as well as analyzes of information received from employer alumni, organizations of internship and final attestation commissions. As an evidence “Benchmark of Labor Market Needs” report is attached carried out within the framework of TACEESM Erasmus+ in 2020, which summarizes the results of a survey carried out among the representatives of 32 employers/organizations in the field of architectural and civil construction, conclusions and recommendations are also made. However, the above-mentioned report of Labor Market Need is the only one in the reporting period; it is not carried out regularly and does not cover all the professions provided by the University. At the same time, this report can serve as a good example for identifying the needs of the labor market according to other professions of the University.

The PEST analysis, which was first conducted in 2021, is also considered as a tool for studying external factors and it includes the opinion of a group of 21 internal stakeholders on the possible impact of negative trends in the macro-environment of the Republic of Armenia on the University. The analysis covers legal, political, economic, socio-cultural and technological spheres of the Republic of Armenia, but is quite general and does not contain any statistical data<sup>3</sup>.

Since 2020, NUACA has been included in the QS Rank ranking system, and according to the criteria of the system, it has been involved in the list of the best 251-300 universities. In order to improve the results of NUACA in accordance with the requirements of the QS Rank ranking system, changes have been made in the functions of some departments.

NUACA takes some steps to gather reliable data needed to make decisions based on it, but the process is not systemic and is in the early stages of development.

#### **2.4. The management of the policies and the processes is based on the quality management principle (plan-do-check-act /PDCA/).**

According to the SER, "the subdivisions of NUACA carry out annual planning of their activities, submit an annual report at the end of the year, summarizing the level of implementation of the planned activities and outlining the achieved results and based on the presented results they plan the activities for the coming year". However, during the site-visit it became clear that the planning process of the subdivisions is not coordinated. In particular, the policy and procedure of planning the annual activity of the subdivisions is missing, and until 2022 the unified format of annual activity planning was missing either. Not all the subdivisions of the NUACA carry out planning of activities. There is no system for monitoring the annual activities of NUACA subdivisions.

Organizing accountability on an annual basis does not allow the problems that arise during the planning or implementation phases to be identified during the year. There are also problems during the evaluation of the annual activities of the subdivisions. Thus, according to the SER "the evaluation of functions at the subdivision level is problematic in some cases, as KPIs for specific purposes are either not defined or not measurable." In addition, during the site-visit it was found out that there are no mechanisms for evaluating and improving the results of the annual activities of the subdivisions.

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<sup>3</sup> The text has been reviewed based on the TLIs observations.

Actually at the level of NUACA subdivisions, the PDCA cycle is not introduced, and the evaluation of the efficiency of the subdivisions cannot provide a solid basis.

## **2.5 The Institution has evaluation mechanisms in place ensuring data collection, analyses and application of the data on the effectiveness of the academic programs and other processes**

According to the SER, "the collection and summarization of information on the effectiveness of academic programs is carried out through surveys and meetings-discussions with stakeholders for the evaluation of the satisfaction of stakeholders with academic programs". However, during the site-visit it became clear that they are not systematic, they only cover the scope of academic programs. Meanwhile, 2015-2020 and 2021-2025 Strategic plans define other goals and objectives of the University activity, in the direction of which there are no mechanisms to evaluate the collection, analysis and application of information on the effectiveness of the processes.

## **2.7. There are objective mechanisms in place evaluating the quality of quantitative and qualitative information on the academic programs and qualification awarded.**

The main mechanisms for ensuring the dissemination of information on the activities of NUACA are the official website of NUACA, the University's pages on social networks, information leaflets, newspaper periodicals, research journals and annual reports on the activities of NUACA. The study of the official website showed that it contains comprehensive information about the activities of the University: plans, reports, regulations, charters, procedures, as well as information about the structure, staff, academic programs, scientific activities, internationalization, etc. During the site-visit it became clear that the website has been changed and is now in an active stage of development.

### **Considerations:**

The study shows that NUACA has the necessary subdivisions and staff with the relevant qualifications to implement the goals of the strategic plan. Administrative, teaching, and support staffs are sufficient for the fulfillment of educational and other strategic purposes. The structure of NUACA ensures a regulated decision-making process and maintenance of the rules of the ethics of management.

Through the involvement of internal stakeholders in all collegial governing bodies, the University enables students and teaching staff to participate in decision-making.

NUACA implements long-term planning, but does not set out the resources, deadlines, responsible people as well as initial and expected values for KPIs. There are no mid-term and short-term planning and monitoring mechanisms, and the toolkit is in the process of development. At the same time, the new format of annual action plans may increase the alignment of strategic goals and objectives with the activities of the subdivisions, but the experience of effective completion of the format has yet to be developed. Surveys and interviews organized for the study of external factors influencing the activity of the University are not coordinated. The policy and procedures of data collection needed to make well-balanced decisions are missing. At the same time, "Benchmark of Labor Market Needs" report can serve as a good example of identifying labor market needs for University's other professions. Quality management cycle (plan, do, check, act) is not operating on NUACA subdivision level which puts the effectiveness of the activity of the University in danger.

The effectiveness of NUACA processes, updated, objective and impartial qualitative and quantitative information about academic programs and awarded qualifications is published on NUACA

website which is quite informative and user friendly as well as is provided through social platforms and other tools of dissemination of information.

### **Summary:**

Taking into account that NUACA management system ensures the coordinated process of participatory decision making in accordance with the rules of ethics, has necessary structure, human, material and financial resources for the implementation of strategic goals as well as highlighting the fact that the University has an open and willing staff for improvements, which according to the expert panel can in a short (at the same time realistic) time period carry out noticeable improvements in this field, the expert panel finds that NUACA meets the requirements of Criterion 2.

At the same time the expert panel mentions that initial and expected values are not defined for KPIs, mid-term and short-term planning practice is not fully introduced as well as management is not carried out according to quality management cycle (plan, do, check, act) to which NUACA should pay special attention.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 2 is satisfactory.

## **III. ACADEMIC PROGRAMS**

**CRITERION: The programmes are in concord with the Institution's mission, form part of institutional planning and promote mobility and internationalization.**

### **Findings**

**3.1 The academic programs are in line with Institution's mission, they correspond to the state academic standards and are thoroughly described according to the intended learning outcomes of the qualification awarded.**

According to NUACA 2021-2025 SP, the mission of the University is: "Preparation of specialists with a three-level education system, implementation of research activities and provision of services in the fields of architecture, construction, design, urban economy, ecology, management and technology in accordance with international standards and labor market requirements".

In fact, the University defines the directions of architecture and construction in its mission and carries out its activities in accordance with them, prepares specialists who meet the requirements of the labor market. It is true that in its mission the University, in addition to the fields of architecture and construction, has also defined other related areas, which also implement appropriate academic programs for preparation of specialists, but the questions asked during the site-visit show that the University still needs to take improvement measures (in terms of human and material resource improvement, curriculum review), especially in the direction of the following academic programs : "Tourism", "Management", "Economics", "Accounting and taxes", "Informatics (computer science)" and "Information systems" .

The study of the academic programs shows that the academic programs have the specifications that are formed according to the defined format (there is an exemplary format of descriptions of the bachelor's and master's academic programs), which define the goals of the academic program, LOs, teaching, learning and assessment methods in line with those LOs, mapping according to the LOs of particular courses, the curriculum of the program and the curriculum mapping are attached. Program LOs are defined on the basis of the NQF and, if available, the descriptors of the Sectoral Qualifications Framework (SQF).

Guide on “Development of Outcome-based Courses and Academic Programs” developed within the framework of TEMPUS ARMENQA project implemented in 2014-2017 which is available to the academic program developers also played a great role in the process of defining the LOs of the academic programs at the University. The study of self-evaluation and site-visit showed that there is a goal in the University to align the LOs of the academic programs with the descriptors of SQFs and to develop the content of the academic programs accordingly, and the University staff (teachers) are involved in the development of SQFs. All the academic programs at the University are developed in a unified format. The presented format assumes the availability of academic program LOs and includes their alignment tools with the modules that are part of the RA NQF / SQF (vertical alignment, providing visible link).

The observations made during the site-visit show that for the first time the review and development of the academic programs in accordance with the NQF have been carried out at the University since 2016, based on trainings and consultations within the framework of international projects. Over the years, efforts have been made to improve the academic programs to align the LOs with the NQF or, if available, with the SQF, to ensure the alignment of academic program LOs with the LOs of its components (courses) that is presented in the program specification maps.

As a result of the expert panel's observations, certain issues were identified, which are related to the inconsistency of the courses with the academic program LOs, as well as the incorrect expression of the course-LO relations in the program specification maps. For example, one extended course covers one LO, in contrast, one small course covers at least 7-8 different LOs at a time.

It should be noted that a number of academic programs have been developed under various international programs, taking into account the needs of external stakeholders, regardless that this process is regulated or not, as employers are also members of the review team for these academic programs.

It should also be noted that the University has appropriate structural subdivisions, groups, chairs that develop and conduct an academic program to coordinate program reform activities.

In the process of organizing academic programs at the University, it is necessary to mention the fact that in the master's academic programs there is a complete transition to "cyclical" education, and in the bachelor's academic programs it is piloted in several separate programs, which have not yielded results yet. At the University, the organization of several cycles of courses during the semester is considered as "cyclical" education, according to the schedule, 3-4 weeks of study and the ends of the course (assessment) are defined in a certain logical sequence, after which the study and assessment of other courses are organized thus having 3-4 study and assessment processes in sequence during the semester.

NUACA also conducts revision of academic programs making some changes as a result of comparison of similar academic programs in local and foreign universities. However observations made

during the site-visit showed that sometimes they are just comparisons of curricula rather than a deep and coordinated analytical study.

### **3.2 The Institution has a policy that promotes alignment between teaching and learning approaches and the intended learning outcomes of academic programs, which ensures student-centred learning.**

Exemplary formats of the academic programs adopted at the University envisage descriptions of teaching, learning and assessment methods in parallel with the description of the LOs. However, the policy set by the University in terms of the selection of teaching and learning methods, as well as assessment methods in accordance with academic program LOs is not so clear, the norms defining the latter are missing. There is no clearly accepted norm on the basis of which teaching and learning methods can be chosen which will be related to the content and volume of the course, course and program LOs. The main mechanism is the guide developed within the framework of TRMPUS ARMENQA project, based on which the developers can choose certain methods, which, however, is not accepted by the University as a normative document for the development of academic programs. It is not clear what norms are defined in the University on the basis of which academic programs, the correlation between the choice of lecture time / practical / seminar / laboratory classes in the curriculum, the choice of the limits of independent work.

It's not clear based on what norms the ratio of lecturing/practical hours/seminars/laboratory works involved in the academic program and curriculum is defined and which are the limits of individual works.

The University does not have norms related to the structure and content of academic programs, according to which academic programs can be developed where the modules aimed at formulating general capacity, general specialized courses, compulsory and optional course limits according to the number of courses and modules, assessment system for semester or the whole duration of the academic program, teaching and learning methods, distribution of student classroom load, educational and professional internships, modules of scientific-research and design works are presented.

Academic program developers use the above guide, which is general but not mandatory. The study of the academic program specifications gives the impression that the lecturing itself is missing in the described teaching methods, but the numerous observations made during the site-visit and questions asked prove that it is one of the main teaching methods in the University.

According to the SER one of the mechanisms for the evaluation of the effectiveness of teaching and learning methods mentioned in the academic program are regularly conducted surveys among the students. Based on the analysis of information got from the surveys the conclusion on the effectiveness of applied teaching and learning methods is made based on which improvements of methods are implemented if necessary.

During the site-visit, it became clear that, as a result of the surveys, changes were made in the teaching, learning and assessment methods of the courses, these changes were local in nature and depended on the existence of a specific problem and the survey result conducted to solve that problem as surveys and monitoring at the University are not regulated and regularly conducted.

Another mechanism for evaluating the effectiveness of teaching and learning methods of the academic programs is regularly carried out class observations at NUACA, the results of which are

summarized and presented in the form of a report for further discussion. If necessary, methods are improved based on the results obtained.

### **3.3 The Institution has policy on students' assessment according to the learning outcomes and promotes academic integrity.**

Assessment modes are defined in the academic program specifications. However, as already mentioned, the methodological and normative bases for the selection of assessment tools are not defined. Methods of assessing students' knowledge (as part of the policy) are mainly included in the "Procedure for Implementing Student Functions in Education Processes". The procedure defines the types of assessment (examination, test), assessment and academic debt repayment procedure, the assessment forms, the assessment scale, the procedure for appealing the assessment results and the scope of the lecturer's responsibility. This procedure envisages the implementation of the assessment according to the learning outcomes, at the same time there is no description of the assessment scale (explanatory matrix).

There is a "Procedure for Developing/Reviewing and Approving NUACA Course, which defines also the format of the course description and the availability of learning outcomes. According to the latter, in some courses current and final attestations of knowledge are envisaged (Appendix 3.3.2 "Certifications" section), testing stages. However, neither the order nor any other normative document defines the list of module-courses in which the current attestation is mandatory, or the courses that do not require current attestation, for example, due to the volume or nature of the course. The expert panel states that it is not clear on what grounds the course developer chooses the attestation methods and types, how the assessment methods are chosen depending on the teaching and learning methods, the peculiarities of their selection and the normative bases. It was not clear what changes have been made to the assessment system over the last 3-5 years due to the analysis of the results of the appeal or other student inquiries.

According to the SER, the issue of plagiarism control during studies is always in the center of attention of NUACA. A number of mechanisms are used to prevent plagiarism. At the same time, the measures aimed at ensuring academic honesty at the University are neither regulated nor implemented on a regular basis, they are held according to separate directions and programs. It is not clear how plagiarism is detected in projects and other kind of works. Inclusion of the list of literature, mandatory implementation of citations, analysis of works, etc. are not mandatory in all faculties or chairs. The requirements for master theses and final works do not have a general definition, but are acceptable for the specific profession according to the rules set by a chair or faculties.

From the observations made during the site-expert visit, it can be stated that the University did not define the term "academic honesty" acceptable to itself because of the peculiarities of the University and in fact, each (according to professions) views it differently and shows an individual approach.

### **3.4 The programmes of the Institution are contextually coherent with other relevant programs and promote mobility of students and staff.**

Benchmarking of NUACA academic programs with academic programs of other similar recognized professions is carried out at the University. However, it should be noted that the work of ensuring the study and assurance of alignment is mainly not regulated. Comparisons are made by the

ones who develop and provide the academic program to ensure consistency of their academic programs, international recognition of diplomas, mobility, sometimes on their own initiative or according to the order of University management in the direction of the main typical and traditional professions: construction and architecture.

The chairs and subdivisions developing and providing the academic programs have their own interest in ensuring the alignment of the academic programs, as they have the problem of ensuring the international recognition of their diplomas and the internationalization of the University, which is one of the main goals of the University. In order to ensure the alignment of the academic programs, the relevant professional academic programs of the universities of the CIS countries and Russian universities in the fields of architecture and construction, as well as European universities (Austria, Italy, Spain, France, etc.) are considered. An example of a successful experience in reviewing academic programs is the review of the academic program of Geodesy and Cadaster and the definition of a separate profession within the framework of the GEOTEC project. Another good experience is the implementation of the trilateral "project management" program jointly with ASUE in Valencia.

The positive impact of the University's internationalization processes, in particular the implemented international programs, noticeable on the formats of academic programs.

### **3.5 The Institution adopts policies in place ensuring academic programme monitoring, evaluation of effectiveness and enhancement.**

It is concluded from the SER that the processes of monitoring, evaluating the effectiveness and improving academic programs are based on the results of benchmarking of academic programs, class observations, the results of surveys "regularly" conducted among teaching staff and students, as well as the recommendations and considerations made by the final attestation commissions, and the proposals of various organizations operating in the Republic of Armenia are the basis for the development and implementation of new academic programs. There is a procedure for developing/reviewing and approving course descriptions at the University, which is presented as the main document for the revision and evaluating the effectiveness of academic programs.

At the same time, it should be noted that the course syllabus does not assume a requirement for review, for example, as a result of class observations or issues revealed from surveys conducted among students and suggestions made.

The university does not have a document (procedure, guide or manual) based on the principles of the PIB cycle, which includes mechanisms for taking into account the needs of internal and external stakeholders. The needs of external stakeholders / employers are not taken into account in a regulated manner during the development of the academic programs. The latter are taken into account to the extent that the external stakeholders are at the same time employees of the University and participate in the development of the academic program. Students are not directly involved in the development of academic programs and student needs assessment and inclusion mechanisms are incomplete.

The monitoring carried out at the University, in the form of class observations with unclear regulations or frequency, refers only to separate courses. The latter have nothing to do with the content and structure of the academic program or course, the identification of problems in them and the improvement. Moreover, the class observations were mainly conducted to get answers to some of the questions raised by the chairs or faculties, to study the problems, which were mainly related to the

effectiveness of the course conduction by the lecturer, to clarify the existing lecturer-student problems, and other similar issues.

The SER states that the new academic programs introduced in NUACA during the last five years were mainly based on the proposals of the leading organizations in the field. In particular, based on the suggestion of the RA Cadastre Committee, "Geomatics" was introduced as a new profession, which included "Geographic Information Systems" and "Geodesy and Cadastre" academic programs. Based on the suggestion of the RA Ministry of Territorial governance and Infrastructure Water Committee, the academic programs on "Design, Construction and Management of Water Supply and Drainage Systems" and "Hydrotechnical and Hydropower Structures" were separated and introduced. Based on the suggestion of the "South Caucasus Railway" CJSC, the academic programs "Railway Construction, Railway and Line Economy" is being implemented. These changes were also evident in the observations made during the site-visit, when focus group participants also proved the impact of external stakeholder / employer proposals for curriculum changes.

From the detailed study of the SER and the observations made during the site-visit, it can be stated that the processes of developing, monitoring and revising the academic programs are not coordinated at the University. Correspondingly, the policy of monitoring, evaluating and improving the effectiveness of the academic programs is not clear or is missing.

### **Considerations:**

The expert panel considers it positive that the activities towards the improvement of the academic programs are carried out at NUACA which will contribute to the realization of the goals set by the University SP and the preparation of specialists in accordance with the needs of the labor market.

It is positive that NUACA has developed sample formats of the specifications of the bachelor's and master's academic programs, based on which the specifications of the academic programs are developed, but the latter do not have any legal approval (order, directive, etc.), the latter will contribute to more regulated work.

The existence of the link between the academic program and course outcomes presented in the academic program specification maps (the map) is welcome, at the same time there is a strong need to intensify and improve the work in this direction, to develop the capacities of academic program and course description developers and professors, and to make the maps as efficient as possible. which will contribute to the identification of problems in academic programs and continuous quality improvement.

It is welcome and more effective to have the description of the LOs along with the alignment with NQF or, if available, the SQF descriptors in the specifications of the academic programs, which makes more clear the relevance of academic program to the expected outcomes of the awarded qualifications.

Communication of program and course LOs is still under development, implementation and improvement at NUACA.

It is positive that the teaching and learning methods are described in the specifications of the academic programs, but there is no policy of choosing the methods corresponding to the LOs of the course programs. The lecturer chooses the teaching method based on his experience and taking into

account that mostly the lecturers are experienced specialists of the field, the choice of teaching methods contributes to the formation of LOs among the students.

The expert panel considers it positive that there are great opportunities for students to work on real projects, as a result of which students are mostly able to apply the "working" tools correctly and become specialists.

There is a requirement to present assessment methods in accordance with the LOs in the format of the academic programs, which is positive and shows that the University values the choice of assessment and teaching methods and pays attention to them. At the same time, there are different approaches to using the evaluation scale in different chairs.

The current indicators of the mobility of students and teaching staff of the University are impressive, but to what extent it contributes to the effective formation of the LOs of academic programs and the increase of the internationalization indicators of the University, it is not possible to clearly assess, because there are no measurable KPIs in the strategic plans and no relevant visible analyzes are carried out. The obstacles and positive aspects that allow students and teachers to study a whole semester or a course separately in another university or country are not revealed.

Sometimes ensuring the consistency of academic programs at the University is viewed just as the similarity of content of the academic programs (curricula) however the latter does not take into account both the national and local characteristics and the actual content of the given courses, which in some cases can have negative consequences.

As the main tools for monitoring and evaluation of the effectiveness of academic programs, the University considers class observations and surveys, but they are not regulated and regularly conducted at the University.

Approaches to the review of existing CSIs in the university are individual in nature, there is cooperation with external stakeholders/employers, which is mainly based on personal interests.

The approached to the revision of the academic programs at the University are individual, there is a cooperation with external stakeholders/employers which is mainly based on personal interests.

There are no clear mechanisms and regulations for monitoring and evaluating the effectiveness of academic programs, which will contribute to continuous and planned improvements of academic programs.

Providing feedback is carried out in a way that the graduates work in the field and keep in touch with NUACA staff, thereby contributing to the presentation of recommendations for the improvement of the academic programs. The changes implemented in the academic programs may sometimes not be justified and may not contribute to the improvement of the latter, as there are no clear evaluation and monitoring tools.

### **Summary:**

Taking into account that the academic programs at the University are mainly in line with NUACA mission as well as are developed and described in details according to the expected LOs of the awarded qualifications, NUACA takes aimful steps towards the improvement and reforms of the academic programs, the development of policy for students' assessment and the selection of teaching and learning methods in line with the LOs, investment of the tools for ensuring academic honesty, studies and analysis are carried out to align the content of academic programs with the labor market requirements, steps are also taken towards alignment with other similar noted programs, mobility of students and staff, activities are carried out towards internationalization of NUACA, there is a great

readiness and motivation at the University to introduce a clear policy on the monitoring, evaluation of effectiveness and improvement of academic programs, also taking into account the results of the activities carried out since 2016, the readiness to continuously increase the effectiveness of the carried out activities, understanding the needs, readiness for changes and innovations, the expert panel finds that NUACA meets the requirements of Criterion 3.

### **Conclusion:**

The compliance of NUACA institutional capacities to the requirements of Criterion 3 is satisfactory.

## **IV. STUDENTS**

### **CRITERION: The Institution provides support services to students ensuring productive learning environment**

#### **Findings**

#### **4.1. The Institution has set mechanisms for promoting students' recruitment, selection and admission procedures.**

The admission to all academic programs of NUACA is organized in accordance with the procedures established by the decisions of the RA government, which, however, does not include the procedure for conducting intra-university professional examinations of NUACA. NUACA applies various mechanisms to recruit applicants such as Expos, use of NUACA official website and social media, events organized by NUACA Admissions and Careers Department, printing of brochures, and dissemination of promotional information through radio and television.

NUACA also organizes "Profession Days" in different cities of the regions of the RA. Appendix 4.1.1-2 attached to the SER defines the applicant recruitment mechanisms. The university conducts cognitive and informative meetings in different high schools of the RA, and at the same time, applicants' visits to the University's professional laboratories are organized.

During the expert visit, it turned out that the Education Quality Assurance and Development Center of NUACA is also included in the process of recruiting students. At the same time, the Admission and Career Department of NUACA provides consultancy to the applicants with the aim of professional orientation.

A survey was carried out among the students admitted to the university by the State University, in which the main reasons for making the decision to choose the university and the sources of information about the university were also presented.

A survey was carried out among the students admitted to NUACA, in which the main reasons for choosing the University and the sources of information about the University were also presented.

There is a high school and a college in the structure of NUACA, which provide an opportunity to carry out effective recruitment of students. Cooperation with various educational institutions: schools, colleges also has an important influence on the process of recruiting students. Admission to the bachelor's program at NUACA is based on the results of unified exams, except for design and architecture specialties (admission is based on the results of drawing and painting exams at the University).

#### **4.2. The Institution has policies and procedures for assessing student educational needs.**

Surveys carried out among the students and graduates at different time intervals are considered as a policy of revealing needs, but they do not have a defined periodicity. Meetings of NUACA Rector and Vice-Rectors with students, for which clear schedules are defined, as well as the involvement of students in various governing bodies of the University are also mechanisms for revealing the needs of students.

During the site-visit, it was found out that the responsables of academic programs of the University receive suggestions from the Education Quality Assurance and Development Center as a result of the surveys conducted among the students in order to improve the academic programs.

Students also raise their issues by turning to the dean's office or the staff of the chairs.

#### **4.3. The Institution provides opportunities for extra-curricular activities and advising services aimed at supporting student effective learning**

Before the new structure of the University approved by the decision of the Board of Trustees as of January 14, 2022 would enter into force, in order to organize the effective study of students, the Department of Additional Education of the University carried out needs assessment based on the receipt of relevant applications from the chairs and the surveys conducted by the Education Quality Assurance and Development Center.

After January 14, 2022, the mentioned function is carried out by NUACA Center of Innovation and Entrepreneurship Support.

During the site-visit, NUACA students mentioned about the participation in various courses, in particular, the students and professors participated in the courses organized by the University's Language Center free of charge as well as in the courses aimed at learning Autodesk Revit and AutoCad programs. At the same time, the Center of Innovation and Entrepreneurship Support organizes paid courses, for example, providing a 10% discount for University professors and students for the "Project Management Basics" course.

The staff and professors of the University chairs regularly provide consultancy to students in order to improve their professional knowledge, at the same time providing an opportunity to work together in studios and get acquainted with real work in the field. The provision of consultancy is regulated in NUACA, in particular, during the process of calculating the workload of the teaching staff, additional class hours are allocated for providing consultancy to students regarding course paper and final papers.

At the same time, during the site-visit there were groups of 4-5 students in the studios who were doing their individual works with the supervision of the lecturer.

#### **4.4. There are precise regulation and schedule set for students to turn to the administrative staff for additional support and guidance.**

During the site-visit, it became clear that NUACA staff is always ready to provide support to students and provide appropriate solutions to all problems. The Rector and Vice-Rectors have setschedules for receiving students, which enables students to participate in meetings with the Rector and Vice-Rectors and raise their concerns, and the dean's offices and chairs are always open for discussion of students' issues. During the discussions, it was also noted that in some cases, the professors also support and guide the students.

#### **4.5. The Institution has student career support services.**

Until January 14, 2022 the responsible structural unit at NUACA was Alumni Support and Career Center, whose functions were defined in the order regulating the Center's activities. Since January 14, the functions of providing services that promote students' career are mainly coordinated by the Center of Innovation and Entrepreneurship Support and the Department of Admission and Career, the aforementioned center, as already mentioned, organizes professional courses, and the Department of Admission and Career conducts surveys among graduates. Surveys aim to collect information on the scope of students' employment and professional activities, forming an appropriate database.

NUACA also plans to create a database of autobiographies of graduates on its official website.

#### **4.6. The Institution promotes student involvement in research activities.**

NUACA makes efforts to integrate the students in research activities by involving them in different research works and promoting the lecturers to carry out joint research works. NUACA envisages to create a Student Scientific Union (a charter was developed) the aim of which is to become a unit that will raise interest among the students.

During the site-visit the students mentioned that they have participated in different conferences and they presented that there are some articles which were published in the journals published by the University.

Examining the articles included in the journals published by the University, it can be noticed that there are scientific articles, the authors of which are the students (without co-authors).

Various research works are carried out in the University, in which the students are also included. It is also noteworthy that the University organizes internal grant programs, the participants of which include students of different years of study.

#### **4.7. The Institution has a special body, which is responsible for the protection of students' rights.**

The Student Council of the University (SC) is the body for the protection of students' interests at NUACA. During the site-visit, it became clear that the protection of students' rights is mainly carried out by chairs, deans' offices and lecturers.

According to the data presented by the chairman of the SC, the SC includes approximately 150 members, of which 25-30 are included in the governing bodies. The members of the SC are made up of mandatory and voluntary members, the members of the academic groups are mandatory members.

The SC has a separate budget, which, according to the representatives of the SC is sufficient for solving the problems they have. The SC members are presented in NUACA Board of Trustees and in Scientific Council (requirements for nomination of students to the governing bodies of the University by SC are activity and GDP) it is also noteworthy that the SC is included in the reform processes implemented in the University.

#### **4.8. The Institution has set mechanisms for the evaluating and ensuring the quality of educational, consultancy and other services provided to students.**

Surveys are the main mechanisms for evaluating and ensuring the quality of educational, consultancy and other services provided to students at NUACA, the purpose of which is to assess the degree of satisfaction of students with the work of the chairs and lecturers, as well as surveys are carried

out within the scope of various subjects / by the lecturer / regarding the effectiveness of the subjects.

Unlike the surveys attached to the SER in appendices and submitted by the university, which were carried out in 2016 and 2017 which do not have a periodic nature, during the site-visit it became clear that additional surveys have been conducted at the University in recent years and the mentioned surveys are mainly aimed at evaluating the problems existing at the current moment.

It is also noteworthy that the students met during the site-visit stated that the results of the surveys are not discussed with the students and they do not have additional information about their consequences.

### **Considerations:**

The expert panel finds positive the fact that there are a number of mechanisms operating at the University to make the admission procedure more effective. Different meetings and visits are organized to better inform about the University professions which impacts the increase in the number of applicants and also helps to professional orientation.

The fact that a number of mechanisms are used to assess students' needs is positively evaluated: surveys that do not have a defined frequency, meetings with the management of the University. It is positive that in order to solve the issues raised by the students, a clear schedule of meetings with the Rector and Vice-Rectors has been established at NUACA, besides that, the dean's offices, chairs and teaching staff are always ready to provide advice to students. The mentioned activities contribute to identifying the educational needs of students and creating an effective student environment.

It is also positive that the University gives students the opportunity to participate in additional classes, which contributes to the professional progress of students.

The expert panel positively evaluates the presence of the Students' Council at the University and the fact that the Student Scientific Council is in the process of being created. At the same time, there is a need to activate the works of SC, particularly in terms of assessing the needs of students who are not members of the SC and presenting their interests, as well as taking into account the circumstances of the reforms implemented in the University, the involvement of the SC and students who are not members of the SC in the mentioned processes will contribute to identifying the educational needs of students and increasing the effectiveness of the academic programs that are being developed.

The expert panel highlights the opportunity that NUACA has created to facilitate student involvement in research. Internal grants and incentives contribute to the development of research and creative skills among students.

It's positive, that the University has Innovation and Entrepreneurship Support Center and an Admissions and Careers Department that support students' professional development and keep in touch with alumni.

### **Summary:**

Considering that the University has a student recruitment and admission procedure, mechanisms for addressing students' educational needs, as well as students are given the opportunity to participate in additional professional courses and receive appropriate consultancy, the expert panel finds that the University generally provides an effective educational environment for students. and meets the requirements of Criterion 4.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 4 is satisfactory.

## **V. FACULTY AND STAFF**

**CRITERION: The Institution has a highly qualified teaching and support staffs to achieve the set goals for academic programs and institution's mission.**

### **Findings**

**5.1. The Institution has policies and procedures promoting recruitment of a highly qualified teaching and supporting staff for the provision of academic programs.**

According to the SER, the ambitions of NUACA in the direction of providing teaching and support staffs with the necessary professional qualities to realize the goals of the academi programs is derived from the Strategic Plan and strategic goals of NUACA. In particular, the 2021-2025 SP is intended to ensure the compliance of the number of academic, administrative and support staff per student with internationally accepted indicators, as well as to ensure the growth of the number of teachers with a scientific degree and young (up to 35 years) to be included in the teaching staff.

There is a procedure for the selection of elective positions through a competition in NUACA. The recruitment of teaching staff and all its sub-functions are carried out on the basis of the relevant Procedure on the formation of the teaching staff, job descriptions and the processes and functions arising from it.

According to the SER and the submitted documents, the majority of the representatives of the teaching staff working in NUACA are leading specialists in architecture, construction and other fields with long-term (10 or more years) work experience.

One of the processes that ensures the effectiveness of the staff recruitment policy at NUACA is the involvement of graduates with high achievements in the teaching process. The majority of the teaching staff representatives at NUACA are graduates of the University.

There is no clearly defined regulation for the recruitment of the support staff at NUACA, but there are norms that ensure the effectiveness of the management of human resources of the support staff.

The University has a regulation on the promotion of staff. Especially great attention is paid to the promotion of young lecturers and their involvement in scientific and research activities with the application of the respective promotion mechanisms.

The internal disciplinary rules of employees define not only labor disciplinary rules, but also hiring, setting rates and a number of other functions, which primarily refer not to disciplinary rules, but to organizational and other issues.

**5.2The requirements for qualifications of teaching staff per academic program are comprehensively stated.**

According to the SER and based on the results of questions and answers during the site-visit it became clear that the selection of the teaching staff at the University is carried out based on the requirements defined in job descriptions and according to the following categories: lecturer, assistant, associate professor, professor.

However, the professional requirements necessary for the implementation of each academic program are not distinguished in the job descriptions. In the respective chair, there is a formed understanding of the requirements presented to the teacher of each course. The presented professional abilities are evaluated in the respective chairs through regular class observations.

One of the main criteria for the selection of specialists in the chairs is the circumstance of being an employee of the field, the mastery of practical skills of the field of the specialist is given importance to.

### **5.3 The Institution has well established policies and procedures for the periodic evaluation of the teaching staff.**

The evaluation of the professional qualities of the teaching staff is carried out by the relevant units of NUACA. The issues raised as a result of conducting student surveys and class observation are discussed with the representatives of the teaching staff, heads of chairs, deans, at the meetings of the Scientific Councils of the Faculties, the Rectorate, and during the session of the Scientific Council of the University. As a result of the discussions, proposals aimed at the professional and pedagogical development of the teaching staff are developed.

Class observations allow observing the professional activity of teachers in the actual educational process. The degree of professional, pedagogical and methodical preparedness of the lecturer, organizational, formation and development of "student-lecturer" relationships, the use of modern methods of organizing and conducting the lesson and their effectiveness, etc are evaluated with the application of the mechanism of class observation.

### **5.4 The Institution promotes professional development for the teaching staff in accordance to the needs outlined during regular evaluations (both internal and external).**

There is a regulation of the educational-scientific program for training and quality enhancement of NUACA teaching staff. In order to improve the teaching staff, NUACA organizes various trainings, with the aim of developing both professional and methodical skills.

The needs for the implementation of training courses are raised by the relevant structural units through surveys conducted among the teaching staff and based on the recommendations received by the professional chairs.

In-chair and inter-chair trainings in the form of professional seminars are also carried out at NUACA. The lecturers participate in the trainings outside the University, both on the initiative of the University and on their own initiative. The training courses organized within the framework of the grant projects also play a significant role in the training process of NUACA teaching staff. During the site-visit, the participants of the meeting also mentioned that participation in various programs/projects, events, seminars, workshops and scientific conferences, exhibitions, etc. are also considered as professional trainings. Teachers take an active part in various conferences and workshops, seminars and accept it as professional trainings, because narrow professional trainings in the field are otherwise problematic, based on the professional characteristics of the field.

In recent years, around 450 participants from NUACA have been involved in various training courses.

Taking into account the need to implement BIM technologies in engineering and architectural education, complex events are continuously held at NUACA, among which the training of lecturers

and the revision of academic programs play a key role. For this purpose, with the efforts of the Innovations and Entrepreneurship Support Center of NUACA, trainings of NUACA lecturers are organized in the direction of "AUTODESK AutoCAD Civil 3D", REVIT STRUCTURE, REVIT ARCHITECTURE software packages. This is mentioned both in the SER and is stated by the representatives of the teaching staff.

Trainings are also organized derived from the external demand, taking into account the problems of internationalization of the University, trainings are carried out in order to increase the level of knowledge of a foreign language. In the framework of various cooperative programs, trainings are also carried out by other international partners, both online and through visiting lecturers or business trip of trainees. The training programs of international cooperation also provide an opportunity for the teaching staff representatives of NUACA to acquire a second profession and be trained. Individual trainings allow lecturers to make changes to their course programs, sometimes including new courses in entire curricula.

### **5.5 The Institution ensures that there is a permanent staff for the stable provision of the academic programs.**

To ensure the stability of the teaching staff, NUACA engages its graduates. The university has an promotion mechanism for young personnel engaged in science and teaching at the same time (Decision of the Scientific Council on the allowance of young professionals).

According to the studied materials, in recent years the average age limit of the main employees of the teaching staff has been increasing. Young workers are mainly involved in a part time mode. As a result, over the years, the total number of the main (full-time) employees at NUACA has decreased and the number of part-time employees has increased over the same period. According to the self-analysis, this trend is due to the desire of NUACA to attract distinguished, recognized specialists in a narrow specialty with up-to-date abilities as lecturers at the University.

To attract young professionals and to train future specialists NUACA applies studio approach.

### **5.6 There are set policies and procedures for the staff promotion.**

The requirements for the candidates applying for the categories of the teaching staff have been developed at NUACA. Each chair has its own approach (as mentioned in the previous standards, these are mostly studio-based approaches) in supporting and mentoring beginner lecturers. There are active mechanisms of promoting engagement in science at NUACA, in particular, the young candidates and doctors of sciences teaching at NUACA, as well as additional payments are allocated in the case of articles published in international periodicals. There is a regulation on incentives for employees and other persons of NUACA.

### **5.7 The Institution has necessary administrative and support staffs to achieve the strategic goals.**

According to the SER and the results of the meetings with the representatives of the relevant departments during the site-visit, the activity of NUACA administrative and support staffs is aimed at ensuring the planning, control and efficiency of the educational process implemented in the University. In the last years, systemic reforms have taken place in NUACA aimed at optimizing the administrative structure, effective distribution of functions among departments, and clarifying the functions of each

administrative unit. Due to the structural changes, NUACA provides the necessary quantitative indicators of the administrative and support staffs. The number of students and lecturers, academic workload of the chair, the existence of educational or research laboratories and studios is taken into account in deciding the support staff composition. During the selection of candidates for support staff, the Head of the Chair takes into account the compliance of their professional abilities and qualities with the professional orientation of the department, their work experience and other criteria.

### **Considerations:**

In order to carry out academic programs and fulfill the mission of NUACA, there are teaching and support staffs with the necessary qualifications, as well as policies and procedures for their selection. In order to fill the existing gaps in the existing procedures, the necessary measures are being taken by the University that will contribute to the improvement of the process.

Lecturers are involved in the academic programs, who are practically also representatives of the field and bring their experience to the University, as well as involve students in practical work, which is positive from the point of view of forming practical skills among students.

The University pays great attention to generational change and involving young professionals in both educational and research activities. The process of staffing with own graduates is encouraged. These processes have a positive effect from the point of view of ensuring sustainability.

The job description of a lecturer defines the criteria of general professional knowledge, skills and abilities, and the actual professional knowledge and abilities are considered/verified by the chairs, mainly taking into account professional work experience, scientific and creative activities.

It is positive that the support staff of the University is also involved in research works, they understand/are aware of the problems of the field, which contributes to the realization of the goals set by the University.

NUACA applies the provision of allowances/additional payments and incentives to engage young professionals/lecturers, which promotes the involvement of young people in the teaching process.

The expert panel considers it positive that the experienced lecturers of the older generation support the newly admitted young staff, engage the young lecturers in their lectures and practical trainings, and after the exchange of experience, gradually transfer the hours of conducting courses and conducting practical trainings.

There is a procedure for conducting class observations at NUACA, which also defines the format of the class observation and the evaluation standards of lecturers, which mainly refer to the assessment of general abilities, the use of teaching methods, the organization and conduct of the teaching process, and in many cases do not refer to the assessment of the lecturer's professional knowledge, especially if it refers to very narrow professional directions. In such cases, the main evaluations are carried out by the Heads of Chairs, who have certain professional knowledge in the given direction. Student surveys are also carried out at NUACA, but neither class observations nor student surveys have a clear periodic nature, they are mainly aimed at raising and studying specific problems and questions and are carried out based on the problems and demands raised by deans' offices and various administrative units.

The training process of the lecturers does not have a definite periodicity, the courses are organized based on the need and imperative of the moment. Sometimes the identified needs and training are not interconnected.

From the data available in the list of trained participants, it can be concluded that most of them were trained within the framework of various programs, mainly on the topics of developing academic programs and forming LOs, in order to develop methodological skills.

It is positive that NUACA carries out an assessment of the training needs of the teaching staff and organizes training courses based on them. It sometimes allocates funds for the teaching staff to be trained abroad with international partners, which is a commendable practice.

The expert panel considers it positive that NUACA implements a certain policy in order to ensure the stability of the provision of academic programs with the appropriate teaching staff, by hiring its graduates and post-graduate students, applying the studio approach, establishing certain financial incentive mechanisms for young personnel, recruiting young people with the principle of double jobbing (part-time). These works contribute to the stability of the teaching staff and the realization of the University's strategic goals.

There are defined requirements for candidates applying for the positions of the teaching staff at NUACA, policies and procedures for ensuring the professional progress of the teaching staff in various ways such as trainings, seminars, involvement in scientific research works, and the use of incentives, but it is not estimated how much the existing procedures and regulations contribute to assurance of professional progress and motivate the teaching staff.

NUACA has the necessary administrative and support staffs, and if in case of the support staff we can talk about the normalization of their number, selection procedures and evaluation of professional abilities, then in terms of the administrative staff, it can be said that as a result of the changes of recent years, the reforms of the structural units and new structure definition is visible. Defining specific goals and functions for each structural unit has led to noticeable positive trends, including certain personnel changes and implementation of new approaches and clear functions. Each department has its own distinct functions and can plan its own work.

### **Summary:**

Taking into account that there are teaching and support staffs at the University with the necessary professional qualities to implement the goals of the academic programs, there is a policy for the selection of teaching and support staffs, for the assessment of the teaching staff, for ensuring professional advancement, and appropriate procedures are established to ensure the stability of the teaching staff, mechanisms and actions aimed at the improvement of teachers in accordance with the needs are implemented, which are derived from the mission of the University, the expert panel finds that NUACA meets the requirements of Criterion 5.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 5 is satisfactory.

## VI. RESEARCH AND DEVELOPMENT

**CRITERION: The Institution ensures the implementation of research activity and the link of the research with teaching and learning.**

### Findings

#### **6.1 The Institution has a clear strategy promoting its research interests and ambitions.**

In NUACA 2015-2020 SP the main goal of the research is the use of the scientific and creative potential in research, consulting, project work aimed at solving the economic, cultural and social problems of the country, and in 2021-2025 SP the ambitions of the science sector are the realization of internationally competitive scientific research works, the proposal of innovative solutions and the commercialization of research results.

The interests and ambitions of NUACA in the field of research are reflected in the 5<sup>th</sup> goal of 2015-2020 SP: "Using the scientific and creative potential of the University in research, consulting, project works aimed at solving the economic, cultural and social problems of the country."

The objectives are clearly described in the SP, there are defined objectives and actions, but there is no schedule for actions. KPIs are not measurable, do not contain the data needed to assess progress, and do not contain expected values of progress. People responsible for the implementation and evaluators are not defined. There are dynamics in the reporting period, particularly in 2018-2020 NUACA organized 6 scientific conferences with foreign partner universities, the representatives of the teaching staff, researchers, post-graduate students and students participated in a total of 80 scientific conferences, 51 of which were international, 29 were national. 610 scientific articles were published, 385 of them in Armenian periodicals, 225 in foreign periodicals, 87 of them in the periodicals included in the Scopus list (5 of them with impact factor).

In the same period, 13 books and monographs, 28 educational manuals were published, 8 useful models (inventions) were registered. 246 reports were presented at scientific events, 203 of which were international. 17 research works were co-authored with employees of Armenian organizations, and 33 with employees of foreign organizations.

NUACA is a member of 7 international scientific societies and organizations. The researchers of NUACA are members of 19 international scientific societies and organizations. They are also involved in the editorial boards of various scientific periodicals (in 2018-2019 in 78, of which 7 are foreign, in 2020 in 38, of which 7 are foreign).

#### **6.2 The Institution has a long-term strategy and med term and short-term programs that address its research interests and ambitions.**

The long-term strategic directions of NUACA are defined in the Strategic Plan developed for 5-years, and the mid-term and short-term programs are reflected in the grant programs implemented with basic and thematic funding of scientific and scientific and technical activities.

Mid-term programs are developed for 3 years and are financed by the Science Committee. Particularly, in 2018-2020 9 projects were implemented, 1 of which was within the framework of the "Research Support Program for Young Researchers", 1 was a dual-purpose applied research project. Starting from 2021, NUACA has been providing internal short-term annual grants with the involvement of students, 2 million drams is allocated for each project. 4 such projects have been implemented.

During the observation of the resources, in addition to the experiments planned in the educational process, scientific research was carried out with the participation of master's and postgraduate students in the laboratories.

### **6.3 The Institution ensures the implementation of research and its development through sound policies and procedures.**

Research activities are organized according to clear procedures and responsible persons, coordinated by the Scientific- Technical Council, Scientific Policy Department under the supervision of the Vice-Rector for Scientific Activities. All the mentioned units have relevant approved regulations. It should be noted that in order to promote the publication of University employees in the periodicals included in the "Web of Science" and "Scopus" scientific databases, incentive fees from the University budget have been defined for each article published in the mentioned periodicals, in the amount of 30-200 thousand AMD, depending on the impact factor of the periodical. In addition, the provision of internal grants introduced from 2021 is also aimed at promoting research activities.

Young people's research works occupy a significant place in scientific periodicals. In particular, the "Collection of Scientific Works" 2021 out of 15 articles published in Issue 1, 8 are authored by students (5 without co-authors), 3 are PhD students or applicants. Of the articles published by students, 4 are in the sphere of architecture, 3 are in the sphere of construction, and 1 is in the sphere of transport. Young researchers are also actively involved in base-funded research.

The qualification (certification) of researchers will be carried out for the first time in the current year at NUACA, in order to evaluate their suitability for the positions they hold.

### **6.4 The Institution emphasizes internationalization of its research.**

Together with 9 partner universities from abroad, NUACA is the organizer of international conferences under the title "Modern Problems of Architecture and Construction". In the previous 5 years, the conferences were held in 2016 in NUACA, in 2017 - in Batumi, in 2018 – in Pekin, in 2019 in NUACA, in 2020 - in St. Petersburg.

In 2018, the staff members of NUACA conducted 14 research works in co-authorship with the staff members of foreign organizations, in 2019-2020 – per 10 research works.

Since 2021 English periodicals have been published jointly with partner universities, in which the directions of technical sciences and architecture have been included. It became clear from the site-visit that 1 has already been published.

### **6.5 The Institution has well established mechanisms for linking research with teaching.**

The research component, which occupies a significant part of master's theses, and the individual works carried out by students, which also contain a research component and are evaluated by the lecturer are considered as a mechanism interconnecting research with educational processes at NUACA. Individual researches carried out by the scientific and educational potential of NUACA are reflected in various course programs, in particular, in the specialty of architecture 4 courses, and in the specialty of construction – 3 courses. Among the courses are: Calculation and Construction methods of Building Structures, Basics of Restoration and Reconstruction of Monumental Buildings and Structures, Calculation of Prestressed Constructions, etc.

It should also be noted that educational manuals are published as a result of research conducted by the lecturers.

### **Considerations:**

The expert panel positively evaluates the work carried out by NUACA in recent years in the direction of research and development of scientific activity. It's positive, that the interests and ambitions of the NUACA in the field of research are reflected in the SP, which clearly describes the goals, objectives and activities of the field, which contributes to the comprehensive development of the field. At the same time, the expert panel notes that the definition of clear and measurable indicators and implementation of planning based on them will foster the development of research and scientific activity.

It is commendable that students and lecturers are actively involved in research work, publish joint articles, and there are incentive mechanisms from the University side, which contribute to increasing the motivation of professors and students and the development of research skills among students. It is also positive that research results are available to both internal and external stakeholders. The expert panel notes that the results of the research are recognized at the international level, which is evidenced by the large number of publications in periodicals with an impact factor. Although the University is active in the development of international cooperation, the results of the cooperation are still not available to the global research community, there are few citation indicators.

It is positive that research results are also a source of income, thanks to which equipped scientific laboratories and computer equipment are available.

The expert panel considers it positive that the budget of the University provides financial support for research, which is envisaged in the SP, there is an international and local cooperation with the production and scientific-educational society, which contributes to the internationalization of research.

The topics of master and PhD theses are related to research conducted by lecturers. There is a distribution of research works according to the University's research directions and faculties, which leads to the realization of the goals set by the SP.

The expert panel also notes that although some research has been reflected in various subject programs, the connection between science and educational processes is still weak, as the results of scientific research work are not fully incorporated into the educational process.

### **Summary:**

Taking into account that the goals in the direction of research defined in 2015-2020 SP and in 2021-2025 SP are derived from the mission and generally reflect the needs of internal and external stakeholders, there are incentive mechanisms for the expansion of research and scientific activities, lecturers and students are involved in research works, there are elements of internationalization of research, as well as there are mechanisms linking the research carried out by lecturers with the education process, the expert group finds that NUACA meets the requirements of Criterion 6.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 6 is satisfactory.

## VII. INFRASTRUCTURE AND RESOURCES

**CRITERION: The Institution has necessary resources to create learning environment and to effectively support the implementation of its stated mission and goals.**

### **Findings**

#### **7.1 The Institution has an appropriate learning environment for the implementation of current academic programmes.**

The educational environment of NUACA includes building areas: classrooms, subject cabinets, computer rooms, laboratories, workshops, studios, library-reading hall, gymnasium, medical unit as well as hotel-hostel, catering, security services. Based on the resource needs of each academic program and scientific research works, NUACA is equipped as much as possible and is regularly replenished with modern computers and testing/experiment/ equipment. All computers have access to the Internet, are provided with technical support for effective organization of courses. Based on the specifications of the academic programs, the appropriate structural units are equipped with the necessary furniture, the laboratories are also equipped with modern test/experiment/ equipment and the necessary literature for the organization of laboratory work, including Armenian-language educational-methodical guidelines, authored by the University staff members.

A comparative analysis carried out by the University has shown that the resource base of NUACA has improved significantly as compared to that of in 2016. In order to ensure the comfort of the necessary environment for the implementation of the academic programs, in 2016-2021 35 classrooms and work rooms for general use, 15 computer classrooms were thoroughly renovated and furnished, 5 laboratories equipped with modern laboratory equipment and techniques were opened, and the former 10 laboratories were re-equipped with new modern equipment, techniques and furniture. In 2016-2021 657 units (about 140 million AMD) of computer technique and equipment and 487 units (about 410 million AMD) of laboratory equipment, furniture and technique were obtained. A new 30-seater Toyota Coaster 4.2D bus was purchased for the purpose of organizing internships and extracurricular activities. A canteen with about 60 seats has been built in the yard of the University, a large-scale 3D printer is in the process of being purchased, and the process of replenishment and enrichment of resources is continuous in NUACA.

Despite the lack of individual library conditions and the need for the latter mentioned by the University, during the site-visit it was noticeable that the chairs and laboratories are equipped and provided with the necessary literature.

#### **7.2 The Institution provides appropriate financial resources with necessary equipment and facilities as needed to achieve its mission and goals.**

In order to fulfill its mission and goals, the University allocates financial resources to provide the necessary equipment and resources for both the educational process, scientific-research and design works, including the services provided by the University. From the SER, it becomes clear that in the processes of replenishment of resources and acquisition/obtain of property and equipment, grant and international programs the University has autonomy.

### **7.3 The Institution has policy on financial distribution and capacity to sustain and ensure the integrity and continuity of the programmes offered at the Institution.**

According to the SER and the observations made during the site-visit, management of financial activities at NUACA are carried out by the Rector of the University, and the control is carried out by the Department of Financial-economic Affairs and the Chief Accountant. NUACA has financial resource allocation system for the implementation of academic programs, each faculty is given some amount of resources.

According to the SER, during the planning of expenses, the requests submitted by NUACA structural units for their needs are taken into account: "NUACA structural units actively participate in the formation of the budget. The administrative divisions for the implementation of their functions, and the chairs and dean's offices for the resources (laboratory equipment, computer equipment, literature, etc.) necessary for the organization of the academic programs/courses, submit the applications in a developed special format to the Department of Financial and Economic Affairs of NUACA (Appendix 7.4.1)". However, in the presented documents e.i. in the submitted applications by the structural units only a list of literature is included. These formats are different and the headings indicate only the name of the department (it is not indicated what the purpose of the list is: informative, internal use, acquisition, educational process or other). There is no clear procedure at NUACA for submitting these applications, and it is done mainly based on the documentation and individual instructions, and there are no established mechanisms for identifying the needs of the departments. The University also lacks specially defined mechanisms for identifying priorities for the acquisition of resources included in the bids submitted by various departments for the purpose of purchase.

The effectiveness of the performance of the financial budget is reflected in the form of the Rector's annual report, which is discussed and approved by the Board of Trustees.

### **7.4 The Institution's resource base supports the implementation of Institution's academic programmes and strategic plan, which promotes sustainability and continuous improvement of quality.**

As it was already mentioned NUACA envisages respective financial resources in its budget for the implementation of SP and continuous improvement of academic programs. Separate means are allocated for the renovation of the main assets, services, capital and current renovations, equipment, acquisition of transportation means. Besides NUACA main means, NUACA resource base is also continuously replenished especially due to the grant projects as a result of which NUACA classrooms and laboratories are enriched with modern equipment for making experiments, computer techniques and software.

Surveys conducted among the students in different years /especially final years of study/ show that the resource base gives an opportunity to implement academic programs and SP, they are pleased with the classroom conditions, equipment, laboratories. This was also obvious during the focus groups meetings, question and answer and resource observation during the site-visit.

NUACA uses Moodle electronic system of education management with the application of which a number of courses are organized with both distance and traditional modes of education. University actively uses also the opportunities of partners and uses their resources (classrooms and laboratories) as well for the implementation of academic programs, e.g. Education Center of Cadaster Committee where courses of the students of Geodesy and Cadaster are organized.

## **7.5 The Institution has a sound policy and procedure to manage information and documentation.**

The documentation process of NUACA is mainly carried out by the General Department which implements receipt and registration of documents, their transfer (electronically) to respective structural units, as well as other functions which are stipulated in the Charter of the General Department (Regulation on Documentation at NUACA/Appendix 7.5.1/). Formation of incoming and outgoing documents, organization of internal documentation circulation is gradually changing and being implemented through the recently introduced Mulberry system of electronic documentation circulation at NUACA (has been operating since September 2021). Internal circulation of documentation is carried out through Mulberry system, but conditioned by incomplete investment of the latter, there is also an internal network of documentation circulation at NUACA ensuring links among the structural units and actively using the email addresses provided by NUACA.

Receiving and sending documents to NUACA structural units is not yet fully carried out through electronic system thus it is organized both electronically and in person through registering in the special registration journals by the relevant employee and with signature.

There is also an archive at NUACA the activity of which is also regulated. Digitization of the archived documents has started.

## **7.6 The Institution creates safe and secure environment through health and safety mechanisms taking into account the students with special needs.**

One of the strategic goals and objectives of University is the creation and provision of the necessary environment. NUACA emphasizes taking of measures aimed at maintaining the health and safety of internal stakeholders, NUACA allocates appropriate financial, material and human resources for the implementation of these services.

The educational environment of NUACA is provided with health and safety-oriented services. NUACA security system includes a fire alarm system, external video recording of the buildings and a guard post. The health care services in NUACA are provided by a special structural unit, the Medical Unit, which has been especially re-equipped in recent years due to the epidemic and the conditions ensuring the obey of anti-epidemic norms. The Medical Unit is equipped with the positions of a senior doctor, a doctor and a nurse.

In order to evaluate the effectiveness of health and security services, NUACA plans conduction of surveys among staff and students as a result of which problems will be revealed and based on them respective action plan will be developed.

Renovation and improvement works of the canteen in the main building of NUACA are in progress.

Despite all of this and the work carried out by departments (faculties), the University still has problems with providing the students and employees with special needs with a safe and secure environment, which is probably hindered first of all by the building conditions (there are no special facilities for students with mobility problems). These problems are mainly caused by the lack of clear policies and procedures for identifying people with special needs and understanding their needs.

During the site-visit, the observation of the resources showed that the University pays a lot of attention to the safety rules and technical means of working in the laboratories, to the maintenance of the requirements for safe operation.

### **7.7 The Institution has special mechanisms in place for the evaluation of the effectiveness, applicability and availability of resources given to the teaching staff and learners.**

Internal and external stakeholders' opinions are collected by the University for the purpose of evaluating the availability and efficiency of the services and resources provided by the University. A survey is a common mechanism for gathering feedback in NUACA. However, surveys and opinion gathering processes at the University are not regulated and regularly implemented. Mechanisms for the evaluation of effectiveness at the University are not regulated and periodically conducted, sometimes the available information is outdated.

Surveys conducted among internal stakeholders (students, teaching staff) are one of the tools for evaluating the effectiveness of the use of the resource base for the implementation of the academic programs, which, however, as already mentioned, do not have a periodic nature and are not regulated. For example, as a result of a survey conducted by the Education Quality Assurance Center in 2016, it was revealed that 66.44% of students and 82.82% of lecturers were satisfied with the resource base necessary for the implementation of the academic programs, but no surveys were conducted after 2016, and taking into account the rapid change in the situation, it is difficult to say whether the number of satisfied people has increased or decreased even as a result of the improvements that have taken place.

#### **Considerations:**

Activities for the improvement of NUACA infrastructure, buildings and material-technical base are always in the center of attention of NUACA. Particularly NUACA activities in terms of resource assurance is aimed at the development of the infrastructure and structural units, improvement of classroom and laboratory conditions for students and teaching staff, material-technical base.

In order to ensure the comfort of the educational environment, during the last 3 years, the University's classrooms, centers were thoroughly renovated and equipped with modern equipment, and the laboratories were equipped with modern equipment for making experiments, which will contribute to the realization of the goals set by the academic programs.

At NUACA great attention is paid to the process of replenishment and enrichment with resources, which is a continuous activity and is an integral part of the SP and the budget, but it is primarily carried out at the expense of scientific research and grant programs, for the purposes of their necessary material and technical support, which is also used for the provision of resources for academic programs. During the resource observation while site-visit, the expert panel noticed that the necessary environment for the practical and laboratory activities of the organization of education is in place. The expert panel also noticed that in recent years, the University has also provided money from its funds for the purpose of maintenance and development of laboratories, for which funding was previously received through the base funding of state programs.

Despite a certain degree of satisfaction with the necessary resources, the University still has a problem of lack of space and non sufficient provision of the latter for the proper organization of the

educational process. In a number of cases the resources of partners, for example, the Cadastre Committee, are used. Regarding the satisfaction with spaces and resources in the University, a corresponding study was carried out, as a result of which the necessity of enlarging the space, improving the library environment, etc. was proposed.

The University also focuses on the activities aimed at creating a favorable environment for students and employees with special needs and carrying out work in that direction.

The main mechanism for revealing the needs for obtaining the necessary resources at the University can be considered only the process of submission of applications by departments, which still needs regulation and definition of clear procedures. In terms of the efficiency of the distribution of financial resources, it can be even more effective to allocate certain financial resources to each department, and each department, having its own budget, can distribute them according to the priority of their needs.

The procedures and tools for managing information and documentation processes at NUACA are available and relevant work is being done to improve them.

It is positive that the University aims to provide a safe and secure environment, certain financial resources are allocated in that direction, but there are still problems, which are mainly related to the provision of necessary conditions for internal stakeholders with special needs.

The mechanisms for evaluating the application, availability and efficiency of the resources provided at the University are not clear and mostly absent. Surveys are mainly considered as an efficiency evaluation mechanism, but they are not regulated and do not have a periodic nature.

### **Summary:**

Taking into account that the infrastructure and resources necessary for the creation of an educational environment and the effective implementation of the defined mission and goals are available at NUACA, financial resources are allocated for the creation and provision of the necessary educational environment, and the issue is in the center of attention of the University's management and departments, financial resources are allocated for the implementation of the goals of the programs and for ensuring their continuity, attention is paid to the creation of a safe and secure environment and there is a willingness to improve the latter and an awareness of the need for the latter, the expert panel considers that NUACA meets the requirements of Criterion 7.

### **Conclusion:**

The compliance of the University's institutional capacities to the requirements of Criterion 7 is satisfactory.

## **VIII. SOCIETAL RESPONSIBILITY**

**CRITERION: The Institution is accountable to the government and society for the education it offers and the resources it uses as well as for the research it conducts.**

### **Findings**

#### **8.1 The Institution has clear policy on accountability.**

The accountability frameworks of NUACA are defined in NUACA Charter.

The main and comprehensive document of the activities of NUACA is the annual report of the Rector, which reflects the results of the work and activities carried out in all directions of NUACA. Until 2021, the Rector's report was formed in a free style, including various information about the University's activities, but in 2022 it is planned to formulate the Rector's report according to the sections of the University's 2021-2025 SP.

During the site-visit, it became clear that there is an internal system of accountability at the University, in particular, each structural unit is accountable to the corresponding Vice-Rector, and the reports of the chairs are presented to the discussion of the scientific council of the relevant faculty, with the guarantee of which is submitted to the Vice-Rector for educational affairs, at the same time at the current stage internal accountability forms are being developed at the University.

### **8.2. The Institution ensures transparency of its procedures and processes and makes them publicly available.**

The main tools for making NUACA procedures, transparency, publicity and information available to the public are NUACA official website ([www.nuaca.am](http://www.nuaca.am)), NUACA facebook page (<https://www.facebook.com/nuacauniversity>), NUACA periodical, NUACA booklets, journal of architectural and engineering research (<https://jaer.nuaca.am/>), NUACA Student guide, Mass media (press conferences, interviews, etc.), etc.

The official website of the University is informative, a quadrilingual translation system of the website has been implemented, which makes it possible to expand the number of beneficiaries of the website while providing access to the published information.

At the same time, during the site-visit, the Students' Council representative, responsible for the information department mentioned that the published information is not accessible to many people, in order to solve the mentioned problem, additional meetings with students are held in the University, as well as announcements are made in the dean's offices.

### **8.3. The Institution has sustainable feedback mechanisms for establishing contacts with society.**

The main mechanism for establishing relations with the public is the use of various means of electronic communication, in particular the official website of NUACA, Facebook pages, e-mail addresses, mass media.

There is a platform for feedback on the University's website, where a quick response is given to the received information. Meetings and conduction of surveys among the employers and alumni is considered as another feedback mechanism at NUACA.

### **8.4. The Institution has mechanisms that ensure knowledge /value/ transfer to the society.**

The University provides both free of charge and paid courses for different groups of society at the same time conferences are also organized.

NUACA offers to the public different training programs and NUACA Language Center offers language courses.

NUACA is involved and conducts a number of activities in the sphere of architecture and construction providing architectural designs and calculation services. Based on laboratory bases operating at NUACA various experimental services are provided to the organizations of the sphere.

During the site-visit it turned out that the University participates in the construction of the RA railway station, Vedi reservoir and different road construction works in Armenia at the same time the equipment and toolkit involved in those works were presented.

At the same time the University regularly organizes local and international conferences as well as publishes scientific periodicals for the dissemination of scientific publications and innovations according to the directions of the University spheres.

### **Considerations:**

The expert panel is positive about the fact that the University has a bottom up and drop down accountability system. There is a system of presenting reports to external stakeholders, which fosters assurance of transparency. At the same time the expert panel mentions that there is a problem at the University to link those reports to SP and the solution to this problem will give an opportunity to monitor SP, reveal existing problems and to link the upcoming planning with the existing challenges. It's positive that the University has a quadrilingual website which gives an opportunity to publicise the existing information. The University makes its procedures and information available through website, social pages and fosters dissemination of information about the University. These activities also foster expansion of international relations.

It's positive that the University has an effective system ensuring feedback from the society, it gives an opportunity to receive information about the University activities. At the same time the expert panel mentions that there is a need to introduce stable feedback mechanisms with employers and alumni which will foster improvement of different processes. It's positive that there are various mechanisms in place for transferring knowledge to a wider layer of society through trainings and different field events which reinforces the close cooperation between the University and society.

### **Summary:**

Taking into account that NUACA accountability system is developing and improving, University functions and processes are available and visible to the public, the University has the ability to transfer knowledge and provide support to the public, the expert panel finds that NUACA meets the requirements of Criterion 8.

### **Conclusion:**

The compliance of NUACA institutional capacities to the requirements of Criterion 8 is satisfactory.

## **IX. EXTERNAL RELATIONS AND INTERNATIONALIZATION**

**CRITERION: The Institution promotes experience exchange and enhancement through its sound external relations practices, thus promoting internationalization of the Institution.**

### **Findings**

## **9.1 The Institution promotes its external relations through sound policies and procedures aimed at creating an environment conducive to experience exchange and enhancement and internationalization.**

In 2015-2020 and 2021-2025 SPs the importance of international cooperation and external relations is mentioned and is defined as a goal. The policies and procedures for promoting the processes of internationalization and the development of external relations are defined, which are aimed at the renewal of academic programs, the inclusion of the latest teaching methods, the implementation of educational, research, project works, and participation in scientific programs.

However, the schedule, responsible people and values of indicators for the actions derived from the SP objectives are not defined.

The NUACA has active cooperation with more than 120 universities and organizations from 29 countries. Since 1994 the diploma awarded to the graduates of the Faculty of Architecture at NUACA has been officially recognized as equivalent to the French one by the French government, being periodically re-recognized based on the results of academic programs, curriculum updates, and comparisons. The last decision on recognition was adopted on January 12, 2017 for a period of five years.

Joint defenses of final works are organized at NUACA and at the schools of Lyon, Clermont-Ferrand, Saint-Etienne, A Coruña in the presence of European and Armenian juries.

Currently NUACA is involved in 5 Erasmus+ projects [FlexWBL](#), [TACEESM](#), [SAH](#), [GEOTAK](#), [ALL4R&D](#), that ensure professional development of NUACA teaching staff, development of new courses and academic programs in line with European standards.

NUACA is involved in an important IACOBUS European project which has a practical significance and the members of the project are Higher National Architectural School of Clermon Feran, France, Universities of A Coruña in Spain and Regensburg in Germany and from 2021 the University of Liège in Belgium.

93 students participated in exchange programs in the last 3 years.

It should be noted that based on the need to improve teaching French language, in 2013 a French language cabinet was opened in the high school of NUACA. A cooperation agreement was signed with the French Embassy in Armenia for the purpose of teaching the French language and modern French civilization. During 2017-2018, 2018-2019 academic years, through the International Volunteer Mission of Francophonie, French volunteer teachers conducted free French language courses for students, lecturers and employees of NUACA.

The analysis of SER and the presented documents as well as the results of the site-visit showed that within the framework of the profession of Architecture international cooperation is on quite high basis.

## **9.2 The Institution's external relations infrastructure ensures regulated process.**

The process of internationalization of NUACA is regulated by the Vice-Rector for International Cooperation through the the following infrastructures operating under his supervision based on the regulations approved by NUACA Scientific Council:

1. Department of International and Interuniversity Cooperation, the aim of which is to ensure international cooperation of the University, mobility of students, lecturers, experts, organization of conferences and their conduction in the RA and abroad.

2. Department of Foreign Students, which organizes and coordinates the admission of foreign citizens and further study processes.
3. Center for Academic Achievement of Francophonie.
4. Language Center where they organize and coordinate the formation of separate groups according to the levels of knowledge of a foreign language, translation, as well as research and educational methodological works are carried out.

10 employees work in the infrastructures, who are able to ensure the regulated process.

The regulation of NUACA Center for Academic Achievement of the Francophonie is also operating. An annual report on international activities is presented every year.

At the same time, the contribution and activity of University faculties in the development of internationalization and foreign relations was not clear.

To evaluate the efficiency of the Department of International and Interuniversity Cooperation, indicators such as the increase in the number of students and lecturers involved in mobility programs, the increase in the number of participation in international competitions and conferences, the increase in the number of cooperation agreements signed with foreign universities and organizations, etc. are used. The involvement of faculties in University internationalization processes is not regulated.

### **9.3 The Institution effectively collaborates with local and international counterparts.**

Since 1990, NUACA has cooperation agreements with more than 120 universities and organizations from 29 foreign countries.

In the last 3 years, 26 cooperation agreements were signed and 2 cooperation agreements were resigned with foreign universities and organizations. Exchanges of 275 students, 256 lecturers and administrative staff were carried out.

The University has a membership in of the following international organizations:

- Association of CIS country Universities with the profession of architecture and construction
- REA-Central France and Eastern Europe network of higher schools of architecture
- AUF- Francophonie University Agency
- Italian "Romualdo Del Bianco Foundation" organization
- Interregional public organization of assistance to architectural education
- Belt and Road International Consortium of Architecture Universities
- International Association of Architects' Union

At the same time, it should be noted that cooperation with local educational institutions is not very active.

From the meetings with the employers, the expert panel was convinced that the cooperation with them is on a good basis, the employers are included in the commissions, quite a large number of the teaching staff are employers themselves, participate in the development of academic programs, etc.

Cooperation with companies operating in the RA is also quite active, particularly in 2021 within the framework of cooperation with "South Caucasian Railway" CJSC, BA academic program "Railway Construction, Line and Line Management" was introduced in the Faculty of Construction, in order to organize the training of employees of "South Caucasian Railway" CJSC.

There is a successful experience of implementing MA program in cooperation with local and international partner universities, with the awarding of a joint and double diploma, and there are also

academic programs conducted in a foreign language. There is also a positive and successful experience of organizing professional and second professional courses for lecturers within the framework of international programs.

The indicators on mobility of NUACA teaching staff and students for 2016-2020 presented in the SER is quite high. And the surveys of students and lecturers included in the mobility programs prove the effectiveness of the implementation of these programs. This was also visible in the observations made during the site-visit.

#### **9.4 The Institution ensures internal stakeholders' appropriate level of a foreign language to enhance efficiency of internationalization.**

The Language Center, the Center for Academic Achievement of Francophonie operate at NUACA, the activities of which are defined by relevant regulations.

85-90% of lecturers and 75-80% of administrative staff members know at least 1 foreign language, but the last time the level of foreign language knowledge was checked was in 2015.

In order to ensure the participation of NUACA administrative and teaching staffs in the activities of the international educational and scientific structures additional foreign language courses are organized, the level of foreign language knowledge is tested, both lecturers and students expressed their satisfaction with this during the meetings.

One of the functions of the Language Center is also to carry out translations of research and educational-methodical works free of charge, which will contribute to the publication of scientific articles of the University teaching staff in internationally ranked periodicals.

Active participation of teaching and administrative staffs in grant programs, involvement in activities implemented within the framework of bilateral and multilateral cooperation agreements also prove that they master foreign languages.

In order to promote the improvement of students' level of knowledge of foreign languages, NUACA has adopted the principle of forming separate groups of students according to the levels of foreign language knowledge, with the expectation of increasing at least by one level at the end of the semester.

In several professions there courses/ academic programs in a foreign language offered to foreign students. However, the possibilities of organization and implementation of academic programs in a foreign language are limited.

#### **Considerations:**

The expert panel positively assesses the fact that NUACA continuously develops its external relations, increasing the scope of cooperation with international organizations and universities as well as local sector organizations. At the same time, there is a need to strengthen cooperation between local sectoral universities and professions, which will contribute to the development of external relations and the introduction of new ideas.

NUACA recognizes the importance of internationalization and the development of external relations and internationalization is defined as a priority in the SP, a number of documents are developed for the development of the sphere, which contributes to regulated work. The work of the administrative departments of the University aimed at internationalization and the development of

external relations is commendable, these works contribute to increasing the visibility of the University both at the local and international levels. At the same time, the expert panel considers it important to develop and implement measurable indicators that will contribute to the balanced development of the sector and the implementation of the planned work.

A number of cooperation agreements have been signed with the leading universities of the CIS countries, Europe, Asia, the USA and foreign partners, within the framework of cooperation there are staff and student exchanges, joint international programs, conferences and other functions. Joint educational and research programs, international benchmarking are being implemented, which have a positive impact on the elaboration and improvement of academic programs.

The University pays great attention to increasing the level of knowledge of a foreign language, provides appropriate resources, organizes additional courses, but still knowledge of English is an obstacle to ensuring mobility. It is positive that the University emphasizes and encourages students and professors to know at least one foreign language and increase the level of various foreign languages, which will contribute to the application of the results of internationalization in the University at the chair level.

The participation in international programs operating at the University ensured the mobility of students and lecturers and contributed to the involvement of foreign students.

### **Summary:**

Taking into consideration that the University has made targeted efforts to create an environment fostering the exchange of experience, development and internationalization, policies and procedures encouraging the establishment of external relations are in place, there is a professional administrative staff operating the functions of internationalization, the expert panel finds that the institutional capabilities of the University meet the requirements of Criterion 9.

### **Conclusion:**

The compliance of NUACA institutional capacities with the requirements of Criterion 9 is satisfactory.

## **X. INTERNAL QUALITY ASSURANCE SYSTEM**

**CRITERION: The Institution has an internal quality assurance system, which promotes establishment of a quality culture and continuous improvement of all the processes of the Institution.**

### **Findings**

#### **10.1 The Institution has quality assurance policies and procedures.**

Until 2022 in order to implement the functions of internal quality assurance, the Center for Education Quality Assurance was operating at NUACA the aim, objectives, policy and principles of operation, authorities, management and procedures of which were stipulated in the regulation approved on July 6, 2015. According to the regulation, the policy of the QA Center was "The realization of the University's mission, goals and objectives, the preparation of skilled and capable, comprehensively developed professionals with higher professional education in accordance with international standards, the formation of an individual brought up in the spirit of philanthropy through the implementation of education and science development programs, as well as the development of the education quality assurance system and quality culture".

In 2017 the QA Manual was published which includes:

- Basics of QA in Higher education
- NUACA concept of internal QA
- NUACA policy and procedures
- NUACA feedback mechanisms

According to NUACA QA Manual: "The goal of the NUACA QA Policy is to increase the efficiency of the University's educational, research and management processes. It covers all the main areas of activity of the University with the aim of aligning them with the strategic goals of the University and ensuring the maximum contribution of efforts to the realization of these goals."

According to SER, as a definition of quality, the University adopted the approach of "compliance to the defined goals", and the internal system of quality assurance is based on NUACA SP and includes all educational, scientific and administrative departments of the University. The definitions in the above-mentioned documents also lead to the same conclusion.

The SER also states that the tool for evaluating the effectiveness of QA policies and procedures is surveys conducted among internal and external stakeholders. However, in 2016-2017 7 surveys were carried out: students' evaluation of courses in professional subjects, survey of the teaching staff, survey of the administrative staff, survey of the support staff, survey of enrolled students, surveys of graduating students (2 times in 2016 and 2017). ). And in 2019-2021 2 surveys were carried out: surveys among the students aimed at the evaluation of courses taught in the chairs of geodesy and design, surveys of lecturers who participated in Moodle training courses. Moreover, the above-mentioned surveys were conducted only among internal stakeholders, they are not periodic in nature, they do not cover all areas of the university's activities, they are not related to the SP and KPIs defined by it.

The employees of the Education Quality Assurance Center were actively involved in the international grant programs implemented at the University and in the processes of disseminating their results. During the site-visit, it was became clear that the staff of the Center have a significant contribution to the reforms implemented at the University.

## **10.2 The Institution allocates sufficient material, human and financial resources to manage internal quality assurance processes.**

NUACA QA Center has been operating since 2011 and had only one position at the time of its establishment. Later, in 2015-2021 it was expanded and it had 4 positions: head, chief specialist, senior specialist and specialist. As a result of NUACA structural changes as of January 14, 2022, the functions and structure of the Center were expanded. Now the center is called "Education Quality Assurance and Development Center" and includes the Division of Strategic Planning and Quality Assurance and the Division of Innovations and Grants. The Center is provided with necessary furniture, technical means and other necessary resources. The staff of the Center are highly valued by the teaching staff, they have the necessary knowledge and abilities to effectively implement the quality assurance processes, however they perform the function of consultants for the reforms implemented in the University<sup>4</sup>.

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<sup>4</sup> The text has been reviewed based on the TLIs observations.

### **10.3 The internal and external stakeholders are involved in quality assurance processes.**

External stakeholders are not involved in quality assurance processes, and the involvement of internal stakeholders is limited to their participation in surveys that do not cover all areas of the University's activities and do not have a clear periodicity, thus they cannot provide the necessary in-depth study. Mechanisms and tools for evaluation of the processes implemented at NUACA are incomplete, and the schedule is missing.

### **10.4 The internal quality assurance system is periodically reviewed.**

During study of the SER, the internal normative documents of NUACA and the site-visit, the experts did not manage to find any basis defining the principles or periodicity of the review of the internal quality assurance system. There is no clearly defined schedule for the review of the internal quality assurance system or mechanisms to link this review with the SP.

### **10.5 The internal quality assurance system provides valid and sufficient grounds for the external quality assurance processes.**

NUACA has prepared a self-evaluation report for the purpose of external evaluation. However, the information presented in the report is not primarily based on data collected from stakeholders.

The information presented in the standards does not apply to the requirements of the given standard in some cases.

The internal quality assurance system does not provide a full basis for external evaluation processes.

### **10.6. The internal quality assurance system ensures the transparency of the processes at the Institution providing valid and up to date information on their quality to the internal and external stakeholders.**

The transparency of the internal quality assurance system of the University is mainly ensured through the official website of the University. The mission, objectives and functions of the Education Quality Assurance Center, the QA Manual, the procedure for conducting class observations and the reports of the conducted surveys are available on the official website. It is planned to add the description of the quality assurance processes, which will increase the transparency of the activities of NUACA in the field of quality assurance.

#### **Considerations:**

NUACA QA Center is provided with the necessary human and material resources to carry out quality assurance processes. The University has defined quality, quality assurance policy and some procedures, but quality assurance activities are aimed only at evaluating some aspects of the University's educational activities, do not cover all areas of the University's activities, and are not aimed at identifying the needs of all internal stakeholders. There is a lack of mechanisms for linking quality assurance and SP and the need to review the quality system due to this link, in particular, the correlation of information collected through the quality assurance system and data defined by key performance indicators (KPIs) of SP progress assessment is not visible. The few quality assurance activities carried out by the University are transparent and available to internal and external stakeholders on the University's official website.

#### **Summary:**

Taking into account that the internal quality assurance system of NUACA is not complete, it is aimed at identifying the needs of not all internal stakeholders regarding only some aspects of the University's educational activities, it does not contribute to the continuous improvement of all processes and the formation of a quality culture, the expert panel finds that the University does not meet the requirements of criterion 10.

**Conclusion:**

The compliance of NUACA institutional capacities to the requirements of Criterion 10 is unsatisfactory.

## EVALUATION ACCORDING TO ACCREDITATION CRITERIA

<b>CRITERION</b>	<b>CONCLUSION</b>
<i>I. Mission and Purposes</i>	<b>Satisfactory</b>
<i>II. Governance and Administration</i>	<b>Satisfactory</b>
<i>III. Academic Programs</i>	<b>Satisfactory</b>
<i>IV. Students</i>	<b>Satisfactory</b>
<i>V. Faculty and Staff</i>	<b>Satisfactory</b>
<i>VI. Research and Development</i>	<b>Satisfactory</b>
<i>VII. Infrastructure and Resources</i>	<b>Satisfactory</b>
<i>VIII. Societal Responsibility</i>	<b>Satisfactory</b>
<i>IX. External Relations and Internationalization</i>	<b>Satisfactory</b>
<i>X. Internal Quality Assurance System</i>	<b>Unsatisfactory</b>

07 July, 2022



**Mkrtych Ayvazyan, Head of the Expert Panel**

## APPENDICES

### APPENDIX 1. CVs OF EXPERT PANEL MEMBERS

**Mkrtych Ayvazyan**—Graduated from Armenian State Pedagogical University after Kh. Abovyan in 2000 the Faculty of Physics-Mathematics. In 2003 he got the degree of a Candidate Physicamathematical sciences. In 2009-2013 he worked at National center for Professional Education Quality Assurance Foundation as a specialist in the Department of Elaborations and Development, Head of the Secretariat, Head of the Department of Institutional Expertize and Program Accreditation. Since 2012 has been working in State Academy of Fine Arts of Armenia first as a Head of the Education Department, then as a Vice-Rector for Educational-Scientific Affairs. He is an author of a number of scientific articles.

**Harutyun Movsisyan**—Graduated from postgraduate education of Yerevan State University in 2010 with the profession of "Geology of mineral deposits, search and exploration, metallurgy", he got the degree of a candidate of sciences in geology. In 2015 he became an associate professor in Geology. Since 2020 is an associate professor in the Chair of Economics of Nature Use in ASUE. He is the Director of "Republican Fund of Geology" State Non-commercial Organization of the RA Ministry of Territorial Governance and Infrastructure. He is an author of 21 scientific works and 3 educational-methodical works.

**Ashot Gyurjinyan**—Graduated from Armenian National Polytechnic University Vanadzor branch with the profession of engineer-constructor-technologist. In 2007 he became an associate professor, he is a candidate of technical sciences. Since 1996 he has been working in Armenian National Polytechnic University Vanadzor branch, since 2012 he has been the Head of the Chair of "Construction Engineering". He is an author of 48 scientific articles, 6 educational manuals, 9 methodical guides.

**Vaidotas Viliūnas**—Graduated from the Technological University of Kaunas (Lithuania) with the qualification of an Engineer in chemical technologies. He has been a Doctor of Chemical Sciences since 1987. Since 1991 he has been the Senior Researcher in the Chair of Organic Chemistry in the Technological University of Kaunas, in 1995 he was the Vice-Rector of Technological University of Kaunas and in 1999 he became the Director of International office of Technological University of Kaunas. He has been the Director of the Office of Students' Affairs in Vitautas Magnus University. Since 2018 he is the Head of Policy Development and Projects in European Association of Higher Education Institutions (EURASHE)

**Khachik Shahbazyan**—PhD student in the profession of Energy systems, complexes, power plants and their management at "Scientific-Research Institute of Energetics" CJSC of the RA Ministry of Territorial Governance and Infrastructure. He has participated in the training of student experts within the framework of Student's Voice project at ANQA.

## APPENDIX 2. SCHEDULE OF SITE VISIT

	<b>14.03.2022</b>	<i>Launch</i>	<i>End</i>	<i>Duration</i>
1	Meeting with NUACA Rector	09:30	10:10	40 minutes
2	Meeting with Vice-Rectors	10:20	11:20	60 minutes
3	Meeting with the self-evaluation working group	11:30	12:10	40 minutes
4	Observation of resources	12:20	14:00	100 minutes
5	Break, discussions of the expert panel	14:10	15:10	60 minutes
6	Meeting with employers	15:20	16:20	60 minutes
7	Meeting with alumni	16:30	17:30	60 minutes
8	Observation of documents, close meeting of the panel	17:40	18:40	60 minutes

	<b>15.03.2022</b>	<i>Launch</i>	<i>End</i>	<i>Duration</i>
1	Meeting with members of NUACA Board of Trustees	9:30	10:10	40 minutes
2	Meeting with the Deans	10:20	11:20	60 minutes
3	Meeting with the Heads of Chairs	11:30	12:30	60 minutes
4	Break, discussions of the expert panel	12:40	13:40	60 minutes
5	Meeting with the teaching staff members /including teachers who are also employers/ (8-10 representatives)	13:50	14:50	60 minutes
6	Meeting with students (8-10 representatives)	15:00	16:00	60 minutes
7	Meeting with the members of Students' Council	16:15	17:00	45 minutes
8	Observation of documents, close meeting of the panel	17:15	19:00	105 minutes

<b>16.03.2022</b>			<i>Launch</i>	<i>End</i>	<i>Duration</i>	
1	Parallel meeting with the responsible/s/ of “Geodesy and Cadastre” academic program	Parallel meeting with the responsible/s/ of “Industrial and Civil Construction” academic program	Parallel meeting with the responsible/s/ of “Graphic Design” academic program	09:30	10:20	50 minutes
2	Parallel meeting with the teaching staff of “Geodesy and Cadastre” academic program	Parallel meeting with the teaching staff of “Industrial and Civil Construction” academic program	Parallel meeting with the teaching staff of “Graphic Design” academic program	10:35	11:35	60 minutes
3	Parallel meeting with the students of “Geodesy and Cadastre” academic program	Parallel meeting with the students of “Industrial and Civil Construction” academic program	Parallel meeting with the students of “Graphic Design” academic program	11:50	12:50	60 minutes
4	Break, discussions of the expert panel			13:00	14:00	60 minutes
5	Meeting with the Heads of structural units/departments/centers: <ul style="list-style-type: none"> <li>• Department of Academic Program Planning</li> <li>• Department of Additional Education</li> <li>• Department of Coordination of Academic Programs, Educational Department</li> <li>• Educational-Methodical Committee</li> </ul>			14:10	15:10	60 minutes
6	Open meeting			15:20	16:20	60 minutes
7	Observation of documents, close meeting of the panel			16:30	18:30	120 minutes

<b>17.02.2022</b>		<i>Launch</i>	<i>End</i>	<i>Duration</i>
1	Meeting with the staff of QA Department and Committee of Accreditation and Ranking	09:30	10:30	60 minutes
2	Meeting with the Heads of structural units/departments/centers: <ul style="list-style-type: none"> <li>• Alumni Support and Career Center, Department of Admission of Applicants and Career</li> <li>• Accounting Department</li> <li>• Department of International Relations, Division of Interuniversity and International Cooperation</li> <li>• Division of Foreign Students, Center of Academic Mobility and Involvement of Foreign Students</li> <li>• HR Department</li> </ul>	10:40	11:50	70 minutes
3	Observation of documents, close meeting of the panel	12:00	13:00	60 minutes
4	Break, discussions of the expert panel	13:10	14:10	60 minutes
5	Meeting with the members selected by the expert panel	14:20	15:20	60 minutes

6	Observation of documents and discussion of the expert panel	15:30	17:30	120 minutes
7	Final meeting with the Management	17:40	18:00	20 minutes

### APPENDIX 3. LIST OF DOCUMENTS OBSERVED

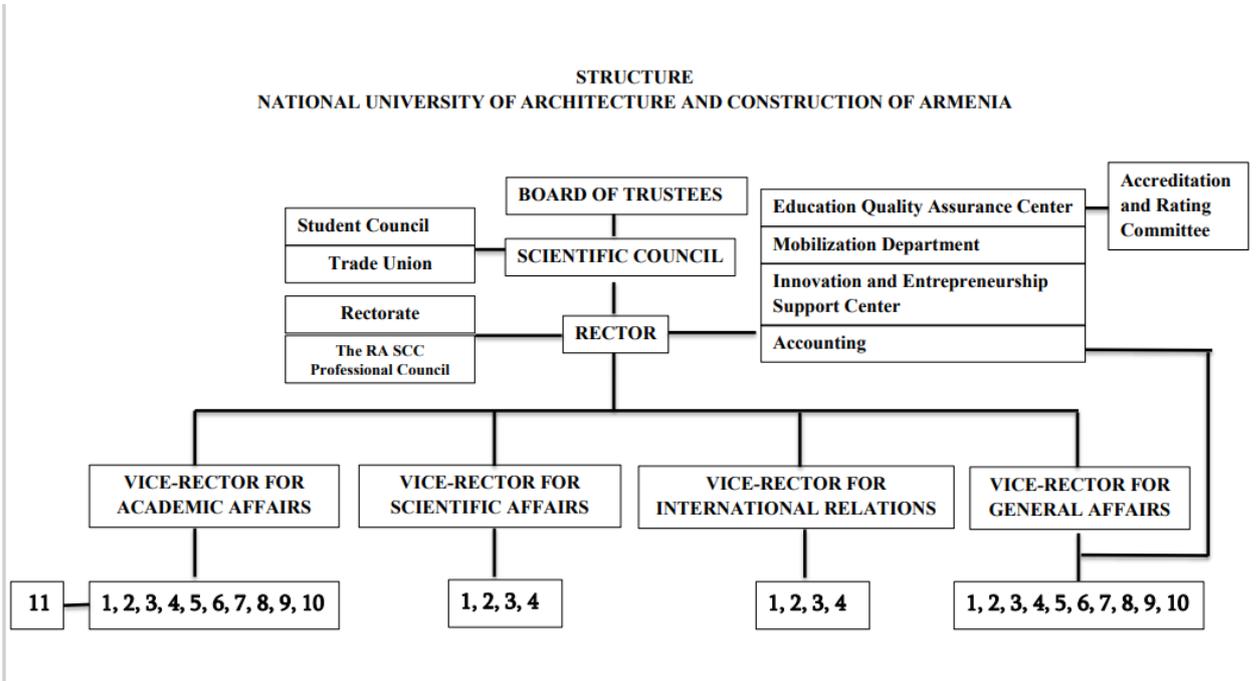
N	Name of the document	Criterion
1.	Reports on the survey results conducted within the framework of students admitted to NUACA in 2018-2021 about the reasons of choosing the University	1
2.	PEST analysis of external environment (political, economic, social-cultural, technological factors)	1
3.	Minutes of the workshops organized in February 2021 in Aghveran for developing the draft of 2021-2025 SP	1
4.	Table of indicators	1
5.	The draft new structure developed based on the result of internal audit	2
6.	Job descriptions, list of structural units, staff list	2
7.	The structure of the University since 2016 and changes made in it	2
8.	List and minutes of the meetings organized with staff and students for the last 1 year	2
9.	Grounds and conclusions of the surveys regularly conducted among the students (2016)	2
10.	Mid-term plan of accreditation and the report/analysis	2
11.	Paper version of Appendix 2.5.1	2
12.	“NUACA conducts surveys among the stakeholders for evaluating the provision of information and its availability” Conducted surveys and reports about the results	2
13.	Sample of reports presented by the Presidents of final attestation committees (3 different professions for 2017-2020)	2
14.	Action plans and reports of deans, heads of chairs	2
15.	Reports of Vie-Rectors	2
16.	“In 2016-2020 in the chairs of NUACA comparative analysis (benchmarking) of similar academic programs in the mentioned universities has been carried out” bring examples	3
17.	Regulation of the Department of Academic Programs	3
18.	Format of academic program revision	3
19.	Readable version of appendices of curricula	3
20.	Samples of references/summaries/ of examinations, final works	3
21.	Grounds and results of surveys of students and teachers involved in mobility programs	3
22.	List of joint MA programs	3
23.	List of courses/programs taught in foreign language	3
24.	In the direction of which programs have mobility been implemented / which by the Erasmus program and which by the initiative of the university/students	3
25.	Samples of theses papers	3
26.	Norms of calculating lecturer’s workload, definition and approval of graphics, mechanisms of control, principles of class distribution	4
27.	Number of NUACA students according to professions, number of the members of Studnets’ Council according to the professions	4

28.	Present the whole procedure of the issue mentioned in Appendix 4.2.1-1 and the decision made	4
29.	How many similar meetings have been conducted the SC regarding the quality of education and what solutions have been given to the mentioned issues? (it's desirable to present minutes of sessions and measures taken as a result)	4
30.	List of admitted and graduated students per academic programs for the last 3 years	4
31.	Employment of alumni per academic programs for the last 3 years	4
32.	List of laboratories or other units carrying out scientific research and the list of publications made in the direction of research carried out in each of them	6
33.	Samples of co-authored research with staff of foreign organizations	6
34.	Samples of theses papers	6
35.	Readable version of Appendix 7.2.1	7
36.	Present estimates and performances for the period of 2016-2020	7
37.	List of paid services provided by the University in 2018-2021	8
38.	List of trainings organized in 2019 and in 2020	8
39.	Samples of conducted meetings, surveys	10
40.	Present Appendix 10.2.2.	10
41.	"In 2016-2017 7 surveys were organized". Present the list of other events and analysis/summaries	10
42.	List of events conducted with external stakeholders, analysis/summaries	10
43.	Samples of surveys and analysis, analysis presented to the Scientific Council	10

## APPENDIX 4. RESOURCES OBSERVED

1. Classrooms
2. Archive
3. Library
4. Studio of architecture and projecting
5. Studio of sculpture
6. Design studio
7. Modelling laboratory
8. Laboratory of Energy Efficiency
9. Water laboratory
10. Laboratory of geodesy

APPENDIX 5. ORGANIZATIONAL STRUCTURE OF THE EDUCATION INSTITUTION



## APPENDIX 6. LIST OF ABBREVIATIONS

NUACA-National University of Architecture and Construction of Armenia

ANQA-National center For Professional Education Quality Assurance Foundation

AC- Academic Programme

TLI-Tertiary Level Institutions

QA- Quality Assurance

NQF-National Qualification Framework

SQF- Sectorial Qualification Framework

SP- Strategic plan