

# CONCLUSION

# On Accreditation of Institutional Capacities of State Engineering University of Armenia

### General Information about the Institution

Full name of the Institution	State Engineering University of Armenia
Acronym	SEUA
Official address	105 Teryan str., Yerevan 0009, Yerevan, Armenia
Previous accreditation decree and date	Not available

#### LEGAL BASIS

Guided by the regulation on "State Accreditation of RA Institutions and their Educational Programs" approved by the RA Government on 30 June, 2011 N 978-U decree; by RA Government decree N 959-U (30 June, 2011) on "Approval of RA Standards for Professional Education Accreditation" as well as by the Procedure on the Formation and Functioning of Accreditation Committee of "National Center for Professional Education Quality Assurance" foundation (ANQA), the Accreditation Committee of "National Center for Professional Education Quality Assurance" foundation (hereinafter referred to as the Committee) discussed the ANQA draft conclusion on the institutional capacities of State Engineering University of Armenia (SEUA) on the basis of self-analysis presented by SEUA, Expert Panel report, SEUA Action Plan for the elimination of shortcomings mentioned in the Expert Panel report as well as Expert panel opinion based on the SEUA Action Plan with the presence of the ANQA representatives, the Expert Panel, and ANQA coordinator of the accreditation procedure.

## As a result of discussion the following was registered:

#### The main phases of accreditation procedure were carried out within the following periods:

Submission of application	7 March 2012
Submission of self-evaluation report	18 December 2012
Site-visit	20-24 May, 27 May, 6 June, 2013
Submission of expert panel report	17 December 2012
Submission of action plan for elimination of	18 February 2014
shortcomings	

#### **RESULTS OF PEER REVIEW**

The expertise of SEUA has been carried out by an independent expert panel formed in compliance with the requirements set forth by the ANQA Regulation on the Formation of Expert Panel<sup>1</sup>. The evaluation has been made according to 10 criteria of institutional accreditation approved by N 959-U Decree of the RA Government, 30 June 2011<sup>2</sup>.

#### EXECUTIVE SUMMARY

While carrying out the evaluation the Committee has taken into consideration the fact that SEUA is a polytechnic higher education institution the mission of which is "to develop and implement academic and scientific programs and to provide services for meeting educational and technological needs of society and economy of the Republic of Armenia; to prepare students for life and career choice as well as professional development for proper functioning in the changeable socio-economic environment, to create favorable environment for comprehensive personal development and upbringing with national, moral and human values". There is no special emphasis on research direction in the SEUA's mission.

Throughout its activity SEUA did not undergo accreditation; the bases of quality assurance (QA) policy were established at SEUA in 1996 by the first strategic plan of the University. In the mentioned strategic plan main issues aimed at enhancement of education quality are put forward. SEUA does not have any experience of processing accreditation but it carried out its first self-analysis based on its educational experience in the Department of Mathematics. The aim of the self-analysis is to do a comprehensive assessment of the SEUA's activity. At the same time the self-analysis aims to foster self-development and improvement of the University.

SEUA provides 4 main academic programs for vocational, higher and postgraduate professional education and respectively grants qualification degrees of junior engineer, bachelor, master and researcher. Besides the mentioned main programs, the University offers additional academic courses through networking with its continuing education structures. The specialization scope of the University includes all the main branches of engineering and technologies represented by 44 BA and 39 MA specialties of engineering and engineering-economic profiles.

SEUA academic programs are mainly in compliance with the mission and state education standards. However, there are some problems concerning the application of modern teaching methods, struggle against plagiarism and assessment of students' knowledge. Since 2012 SEUA has given importance to the process of reviewing academic programs which is aimed at defining intended outcomes in accordance with the qualifications. Before that SEUA had such an experience within the scope of a limited number of professions.

The strategy reflecting research interests and ambitions of SEUA are presented in the strategic plan. The chairs carry out research activities in compliance with their profiles, however, there isn't any clear policy on selection of research areas. There is collaboration between internal and external markets, however, the financing is insufficient. The link between research and educational process is weak at SEUA which decreases the level of effectiveness of the University's activity.

<sup>&</sup>lt;sup>1</sup> APPENDIX 1: EXPERT PANELCOMPOSITION AND ANQA SUPPORT STAFF

<sup>&</sup>lt;sup>2</sup> APPENDIX 2` SUMMATIVE EVALUATION

SEUA effectively cooperates with local and international institutions. The University organizes trainings for the teaching staff which aims to improve their foreign language proficiency. Nevertheless, the effectiveness of the activities carried out towards improvement of foreign language proficiency of both students and teaching staff is not clear when viewing it as an important precondition for international cooperation and implementation of exchange programs.

SEUA infrastructures and resources are currently satisfactory for providing education. Like the central campus, the branches also have halls and sports grounds. There are also halls for holding conferences, seminars, student activities and skype-conferences which are equipped with respective technical facilities. There are medical centers, food service outlets, studios, entertainment places for students, laboratories. However, there is a lack of modern literature in Armenian and English. There is a lack of academic and support surfaces especially in Yerevan and Gyumri. The establishment of laboratories for online education both in Yerevan campus and in branches is a step forward.

The majority of the main teaching staff (the number of who exceeds 900) hold scientific degrees. Currently the University has a proficient staff with great experience which fosters the implementation of main goals of the academic programs. The University has set clear requirements for professional qualities of the teaching staff for each academic program, however, from the perspective of effectiveness, that policy and respective mechanisms have not been assessed. The University has not yet developed clear mechanisms for appreciating the best pedagogical-methodical experience and encouraging teachers. There is a problem concerning the implementation of trainings especially regarding the application of modern teaching methods and improvement of English.

SEUA carries out activities directed to the recruitment of students. At the same time the incomparable increase of the number of part-time students is worrisome. The reasons of the mentioned problem are not identified yet, and the standards for the admission of part-time study are not clear.

With the aim to identify the educational needs of students, the University regularly conducts surveys among students on teaching quality and student satisfaction with provided education.

The SEUA management system is aimed at the fulfillment of the mission and goals. The strategic goals are quite operational, and the internal stakeholders (staff and students) are engaged in different governing bodies but there are some gaps in the communication with external stakeholders. There is a mechanism of data collection which, however, is not fully invested. There are short-term and long-term plans at the University, and the annual reports are viewed as a mechanism of monitoring those plans. The University doesn't have mid-term planning the existence of which would make the functioning of the management system more targeted.

#### STRENGTHS

- 1. SEUA strategic goals are quite clear and realistic.
- 2. Internal stakeholders (staff and students) are engaged in different governing bodies.
- 3. Support staff is mainly recruited by new alumni who demonstrated high academic performance and respective qualities.
- 4. There is an expanded electronic library and students are satisfied with it.
- 5. Students' involvement in the processes of governance and councils of the University is well coordinated.

- 6. The University currently has a proficient staff with great experience which fosters the implementation of main goals of the academic programs.
- 7. The internal and external stakeholders are actively involved in QA processes of the University.

## WEAKNESSES

- 1. The direction of research is not mentioned in the mission.
- 2. There are some gaps in the communication with external stakeholders in governance/management system.
- 3. SEUA has a problem with planning.
- 4. The investment of modern teaching methods in educational process is not sufficient.
- 5. The ratio of full-time and part-time studies is not balanced as far as in recent period there is an incomparable increase of the number of part-time students.
- 6. The scope of students' involvement in scientific-research activities is not sufficient; PhD students are mainly involved, and the engagement of BA and MA students is not sufficient.
- 7. The link between research and educational process is missing at SEUA.
- 8. There is a lack of basic scientific-research laboratories at the University.
- 9. There is a problem concerning trainings of the teaching staff and their proficiency in English.
- 10. There is a lack of academic and support surfaces.

#### RECOMMENDATIONS

#### Mission and Goals

- 1. To make the SEUA's mission and goals more ambitious tending to become a research university in the future.
- 2. To make a clarification in the strategy about what kind of engineers the country needs and can prepare by particularly differentiating the academic programs for operating-engineers and researcher-engineers.
- 3. To develop and apply a mechanism for evaluating, monitoring and improving the results of fulfilled strategic goals which will allow to give a quicker feedback to the occurred changes, as well as to make amendments towards improvement in the plans.
- 4. To make a comprehensive study on satisfaction of main employers and professional associations with alumni and academic programs which aims to develop guarantees directed to the modernization of academic programs and increase of professional competences of alumni. The commercialization of knowledge created by the University can be the best mechanism of satisfying alumni's needs, and SEUA still needs to act towards that direction.

#### Governance and Administration

- 5. To review the place and role of the SEUA Department of Education Quality Control and Management in the administrative-organizational system.
- 6. To increase the scope of participation of SEUA teaching staff and employers in the governance of the University and to diversify participation modes.

7. To specify the mechanisms evaluating the collection, analysis and application of information on SEUA processes, as well as to define what department will fulfill and control the application of those mechanisms.

#### Academic Programs

- 8. SEUA needs to increase the number of programs set for foreigners which will foster student mobility and internationalization of educational process.
- 9. To ensure the 50:50 proportionality of academic and scientific blocks through the distribution of 120 credits for MA programs.
- 10. In order to make the academic programs more compatible with SEUA's mission, the following steps are recommended to take:
  - ✓ assurance of special educational toolset for the efficient organization of part-time study;
  - ✓ development and implementation of scientific-educational joint programs through collaboration between chairs and faculties.
- 11. It is necessary to use up-to-date computer technologies in final papers and master theses to identify and prevent plagiarism.

#### Students

- 12. The curatorial work should be reflected in the annual load of the teachers which will undoubtedly increase the curators' responsibility and the effectiveness of their activity.
- 13. To establish an official body, e.g. Ombudsman Institute of the University, which will deal with the protection of student rights.

## Teaching and Support Staffs

- 14. To make the mechanisms of teaching staff selection more available to potential external candidates.
- 15. To define differentiated salaries for the teaching staff aimed at assurance of education quality.
- 16. In SEUA, particularly in Yerevan campus, to necessarily present the student survey results in accordance with the detailed content of the surveys to the teaching staff and to put them under discussion at chair sessions.
- 17. To develop special policy on preparation of pedagogical staff aimed at ensuring regular generation change of the SEUA teaching staff. The University should make efforts to ensure significant increase of the number of places for postgraduate study.

#### Research and Development

- 18. Based on the adopted state policy on creating knowledge-based economy, to specify the strategic directions of scientific research activities of the University.
- 19. To ensure the link between research and educational process. To pay attention to the students' participation in research activities.
- 20. Taking into consideration the peculiarities of the University, to expand the volume of activities carried out on economic-contractual basis.

21. To foster scientific publications in leading international scientific periodicals with high impact factor.

#### Infrastructure and Resources

- 22. To find means to make the academic and support surfaces per student in Erevan and Gyumri branch compatible with the functioning standards.
- 23. To find ways to modernize the laboratory of physics with modern equipments.
- 24. To create building facilities and educational conditions for students with special needs.

#### Social Responsibility

- 25. To equally develop the media system of the branches as well especially taking into consideration the fact that there is a free Wi-Fi zone in all branches.
- 26. To evaluate the effectiveness of the functioning mechanisms of accountability to the society and the government.

#### External Relations and Internationalization

27. To enhance foreign language teaching and to develop efficient ways of foreign language teaching including newest technologies which will ensure more flow of foreign students and will foster the mobility of internal stakeholders - students and teaching staff throughout the international scientific-educational area.

#### Internal Quality Assurance System

28. To engage a respective unit in QA processes which will also carry out internal audit of the University's units besides implementing academic programs.

# SEUA ACTION PLAN ON THE ELIMINATION OF SHORTCOMINGS MENTIONED IN EXPERT PANEL REPORT

# State Engineering University of Armenia accepts that the recommendations presented by the Expert Panel are within the scope of the University's strategy, and it has submitted for the action plan and time schedule on the elimination of shortcomings (hereinafter: Action Plan).

Having examined the University's Action Plan on the elimination of shortcomings mentioned in Expert Panel report, **it can be concluded** that according to the Action Plan, SEUA undertakes the commitment to implement all the recommendations presented by the Expert Panel within the scope of all the 10 criteria. The Expert Panel finds that all the recommendations requiring urgent changes are involved in the Action Plan, and necessary resources will be provided for the implementation of those activities according to the time schedule within the upcoming two years, till the end of 2016.

However, the Expert Panel differentiates a number of recommendations about the actions which do not sufficiently reflect the picture of steps for improvement set by the University. In particular:

- In the Criterion on **"Mission and Goals"** it would be desirable if the University made a clearer mentioning about what especially it will adjust in the current 2011-2015 strategic plan or what it intends to do in the 2016-2021 strategic plan.
- In the Criterion on **"Academic Programs"** the necessity to add scientific-educational block in MA programs is not understood clear enough, and the Expert Panel finds that the approaches the University suggests are indirect.
- In the Criterion on **"Students"** there are discrepancies as well; particularly in the section of Judgements on the **"Students"** criterion presented by the Expert Panel it was mentioned that the decrease of the number of full-time students and the significant increase of the number of part-time students of SEUA was worrisome. It would be desirable if the Action Plan reflected the above mentioned issue from the perspective of standards set for the admission of part-time education system, and special attention was paid to the toolset of organizing part-time study. The solutions suggested by the Unviersity are long-term while the problem needs urgent solution.
- In the Criterion on **"Teaching and Support Staffs"** there isn't a clear action plan aimed at rejuvenation of the teaching staff, and this issue needs urgent development of respective approach.
- In the Criterion on **"Infrastructure and Resources"** SEUA has mentioned that on the base of the modernized laboratories, it will also establish new methodical instructions for engineers to make experiments (planned by the program of physics) on modern equipments. However, the Expert Panel finds that the Action Plan partially gives solution to the problem and only for the Yerevan campus. It would be desirable to include urgent action plan, to plan findraising for the Yerevan campus as well as to equip the laboratories of physics with modern facilities.

The responsible people and working groups as well as provided resources are clearly mentioned for all the steps. For most of the steps realistic deadlines are set.

Generally taken, it can be concluded that the sequence of actions and time schedule of the activities mentioned in the SEUA Action Plan are logical; there are clearly set actions and steps in all the areas except for the above mentioned omissions. It is also clearly described how each step should be taken, and the responsible people and the deadlines for the fulfillment of respective actions are mentioned. As the Action Plan showed, SEUA has apprehended and accepted the majority of the recommendations of the Expert Panel.

*Conclusion:* In case of more concrete implementation of the steps mentioned in the Action Plan within the upcoming two years SEUA will have an opportunity to improve the normative framework regulating the University's processes, as well as the implementation of the main activities after which the evaluation of their impact and effectiveness can be addressed.

Taking into consideration the above mentioned, ANQA suggests the Accreditation Committee to pay special attention to the implementation of the following activities while making decision:

- To give urgent solution to the problems existing in the spheres of "Academic Programs", "Teaching and Support Staffs", "Infrastructure and Resources", "Internal Quality Assurance System".
- According to the requirements of clause 12 of the Regulation on "State Accreditation of RA Institutions and their Educational Programs" or according to the deadlines set by the Accreditation Committee, regularly present a written report to ANQA on the results of the carried out activities;
- 3) To take into consideration the remarks about the Action Plan mentioned in the current conclusion while reviewing the Action Plan for the elimination of shortcomings mentioned in the Expert Panel report.

ANQA finds that the presented improvements will foster the fulfillment of the University's ambitions mentioned in the SER and will serve as a basis for the next evaluation.

Eduard Ghazaryan Head of Expert Panel Ruben Topchyan, ANQA Coordinator

# EXPERT PANEL COMPOSITION

- **Eduard Ghazaryan** Doctor of Sciences in Physics and Mathematics, Professor, Academician of the National Academy of Sciences, Director of the Institute of Mathematics and Higher Technologies in Armenian-Russian (Slavonic) University
- **David Woodhouse** Member of Public Accreditation Commission of the United Arab Emirates, Founder of the International Network for Quality Assurance Agencies in Higher Education (INQAAHE), Expert Panel member
- **Grigor Alaverdyan** PhD in Physics and Mathematics, Associate Professor, Head of the Wave Process and Physics Chair, Faculty of Radiophysics, YSU, Expert Panel member
- **Edvard Danoyan** PhD in Physics and Mathematics, Associate Professor, Deputy Dean of YSU Faculty of Informatics and Applied Mathematics, Expert Panel member
- Laura Simonyan- MA 1<sup>st</sup> year student of Romanic-Germanic Faculty of YSU, Expert Panel member

# ANQA support staff

- Ruben Topchyan ANQA Director, coordinator of SEUA institutional accreditation
- **Varduhi Gyulazyan** Specialist at Institutional and Program Accreditation Division at ANQA, assistant of coordinator
- Arpine Mkrtchyan graduate of Chair on Education Management and Planning, YSLU, secretary-stenographer of SEUA institutional accreditation
- Ani Mazmanyan specialist at Center for Quality Assurance, YSLU, translator of SEUA institutional accreditation

#### SUMMATIVE EVALUATION<sup>3</sup>

The expert panel presented its evaluation per accreditation criterion in the following table:

CRITERION	EVALUATION
1. Mission and Goals	SATISFACTORY
2. Governance and Administration	SATISFACTORY
3. Academic programs	SATISFACTORY
4. Students	SATISFACTORY
5. Teaching and Support Staffs	PARTIALLY SATISFACTORY
6. Research and Development	PARTIALLY SATISFACTORY
7. Infrastructure and Resources	SATISFACTORY
8. Social Responsibility	SATISFACTORY
9. External Relations and Internationalization	SATISFACTORY
10. Internal Quality Assurance System	SATISFACTORY

<sup>&</sup>lt;sup>3</sup> While carrying out the evaluation the expert panel followed the Regulation on "State Accreditation of RA Institutions and their Educational Programs" and the procedure described in the ANQA Accreditation Manual carrying out firstly evaluation per standards and then per criteria. "Satisfactory", "Partially Satisfactory" and "Unsatisfactory" evaluation scale was applied.

The expert panel followed the below mentioned principles while carrying out the evaluation:

<sup>-</sup>**unsatisfactory:** if the University does not meet the demands of the criterion and it is not allowed to continue the activities that way and urgent improvements are needed

**<sup>-</sup>partially satisfactory:** if the University does not meet all the demands of the criterion but it is realistic that the University can make necessary improvements within reasonable period of time and meet the demands of the criterion

<sup>-</sup>satisfactory: if the University meets the demands of the criterion yet there might be need for improvements as well