

# THE NEED TO INTRODUCE THE INTERNATIONAL EXPERIENCE OF DOCTORAL EDUCATION IN ARMENIA

ATOM MKHITARYAN

National Academy of Sciences of the Republic of Armenia  
International Scientific–Educational Centre, Dean  
PhD in Physical–Mathematical Sciences, Associate Professor  
*atom.mkhitaryan@isec.am*

DOI: 10.54503/2579-2903-2026.1-67

## Abstract

This article addresses the pressing need to integrate international models of doctoral education into the Armenian higher education system, situating the analysis within the broader discourse on the transformation of third-level education in the post-Soviet context. While doctoral education in Armenia largely reflects the model of individualised scientific supervision model inherited from the Soviet academic tradition, leading international universities have moved towards structured doctoral programs. These programs, frequently organised through doctoral or graduate schools, embed comprehensive educational components, distributed supervisory practices, systematic progress monitoring, and explicit mechanisms for preparing doctoral candidates for multiple career trajectories.

The study is based on an analytical review of open-source data from top-ranked universities included in the QS World University Rankings by Subject “Education”, complemented by relevant policy and institutional literature. The analysis focuses on five dimensions of doctoral education: organisational models, admission principles, program content and workload, monitoring and supervisory arrangements, and procedures for completion and defence. The findings reveal substantial divergences between Armenian practices and international norms. Specifically, admissions in Armenia remain exam-oriented rather than portfolio- and interview-based; the educational component is largely formalistic and lacks structured development of transferable skills; supervisory responsibility is concentrated on a single academic, in contrast to distributed models; and interdisciplinarity is constrained by rigid regulatory frameworks.

Systemic barriers—including inadequate financial support mechanisms, limited institutional capacity to deliver structured programs, and weak engagement with non-academic labour markets—further exacerbate challenges in aligning with international standards. Nevertheless, recent initiatives under EU-funded projects demonstrate incremental progress, providing a foundation for broader reforms.

The article concludes that a comprehensive, nation-wide reconfiguration of doctoral education in Armenia is imperative. Drawing on international best practices, reforms should prioritise the institutionalisation of doctoral schools, integration of structured curricula emphasising both research and transferable skills, diversification of supervisory models, and the establishment of stronger links with external stakeholders. Such measures are critical to ensuring the competitiveness of Armenian doctoral education and its capacity to prepare researchers for complex and evolving global academic and professional environments.

**Keywords:** Doctoral education, higher education reforms, structured doctoral programs, supervisory models, Armenia

## ԴՈԿՏՈՐԱԿԱՆ ԿՐԹՈՒԹՅԱՆ ՄԻՋԱԶԳԱՅԻՆ ՓՈՐՁԻ ՆԵՐԴՐՄԱՆ ԱՆՀՐԱԺԵՇՏՈՒԹՅՈՒՆԸ ՀԱՅԱՍՏԱՆՈՒՄ

### ԱՏՈՄ ՄԻԻԹԱՐՅԱՆ

ՀՀ ԳԱԱ գիտակրթական միջազգային կենտրոնի դեկան,  
Ֆիզիկամաթեմատիկական գիտությունների թեկնածու,  
մանկավարժության դոցենտ

*atom.mkhitaryan@isec.am*

### Համառոտագիր

Սույն հոդվածը վերաբերում է դոկտորական կրթության միջազգային մոդելները Հայաստանի բարձրագույն կրթության համակարգում ինտեգրելու հրատապ անհրաժեշտությանը՝ վերլուծությունը կատարելով հետխորհրդային տարածքում երրորդ մակարդակի կրթության փոխակերպման վերաբերյալ ավելի լայն քննարկումների համատեքստում: Մինչ Հայաստանում ասպիրանտուրան հիմնականում արտացոլում է խորհրդային ակադեմիական ավանդույթից ժառանգված անհատական գիտական ղեկավարման մոդելը, առաջատար միջազգային համալսարաններն անցել են կառուցվածքային դոկտորական ծրագրերի: Այդ ծրագրերը, որոնք հաճախ կազմակերպվում են դոկտորական դպրոցների միջոցով, ներառում են համապարփակ կրթական բաղադրիչներ, բաշխված ղեկավարման պրակտիկա, առաջընթացի համակարգային մոնիթորինգ և ուսանողներին բազմաբնույթ կարիերայի պատրաստելու հստակ մեխանիզմներ:

Հետազոտությունը հիմնված է QS World University Rankings-ում («Կրթություն» ուղղությամբ) ընդգրկված լավագույն համալսարանների բաց առցանց տվյալների վերլուծության վրա, որը լրացվում է նաև վարվող քաղաքականության վերաբերյալ համապատասխան գրականության

ուսումնասիրությանը: Վերլուծությունը կենտրոնանում է ասպիրանտուրայի պատրաստման հինգ չափանիշների վրա՝ կազմակերպական մոդելներ, ընդունելության սկզբունքներ, ծրագրի բովանդակություն և ծանրաբեռնվածություն, մոնիթորինգի և ղեկավարման կարգավորումներ, ինչպես նաև պաշտպանության ընթացակարգեր: Արդյունքները բացահայտում են Հայաստանի պրակտիկայի և միջազգային չափանիշների միջև էական տարբերություններ: Մասնավորապես, Հայաստանում ընդունելությունը մնում է հիմնված քննությունների, այլ ոչ թե թեկնածուի կենսափորձի և հարցազրույցի վրա, կրթական բաղադրիչը մեծապես ձևական է, ղեկավարման պատասխանատվությունը կենտրոնացած է մեկ գիտական ղեկավարի վրա, ի տարբերություն բաշխված ղեկավարման մոդելների, իսկ միջգիտակարգայնությունը սահմանափակվում է կոշտ կարգավորումներով:

Համակարգային խոչընդոտները՝ ներառյալ ֆինանսական աջակցության ոչ բավարար մեխանիզմները, կառուցվածքային ծրագրեր իրականացնելու կազմակերպությունների սահմանափակ ներուժը և աշխատաշուկայի հետ թույլ կապը միջազգային ստանդարտներին համապատասխանելու հետ կապված լրացուցիչ մարտահրավերներ են առաջ բերում: Մյուս կողմից, ԵՄ-ի կողմից ֆինանսավորվող ծրագրերի շրջանակներում վերջին տարիներին կյանքի կոչված նախաձեռնությունները ցույց են տալիս աստիճանական առաջընթաց՝ հիմք նախապատրաստելով ավելի ընդարձակ բարեփոխումների համար:

Այսպիսով, Հայաստանում դոկտորական կրթության համապարփակ, պետական մասշտաբի ձևափոխումն անհրաժեշտություն է: Ելնելով միջազգային լավագույն փորձից՝ բարեփոխումները պետք է առաջնայնություն դարձնեն դոկտորական դպրոցների ինստիտուցիոնալացումը, կառուցվածքային ուսումնական պլանների ինտեգրումը՝ ընդգծելով և՛ գիտահետազոտական, և՛ փոխանցելի հմտությունները, ղեկավարման մոդելների բազմազանացումը և արտաքին շահագրգիռ կողմերի հետ կայուն կապերի հաստատումը: Նման միջոցառումները կարևորագույն նշանակություն ունեն Հայաստանի երրորդ մակարդակի դոկտորական կրթության մրցունակությունն ապահովելու, հետազոտողներին բարդ և զարգացող համաշխարհային ակադեմիական և մասնագիտական միջավայրերին պատրաստելու համար:

**Բանալի բառեր**՝ ասպիրանտուրա, դոկտորանտուրա, բարձրագույն կրթության բարեփոխումներ, կառուցվածքային դոկտորական ծրագրեր, ղեկավարման մոդելներ, Հայաստան:

**Introduction**

In recent years, the Armenian higher education system has been characterised by ongoing discussions about reforms. As a result, it is in constant search of a model for the effective functioning of third-level doctoral education. With the recently adopted Law (“On Higher Education and Science” 2025, Article 3), only PhD studies were included within the framework of higher education, while it was

considered postgraduate education (Mkhitarian & Tchughuryan, 2024, p. 143). In European countries, the transition to structured programs, typical of the United States, began in the late 1990s and early 2000s (Kehm, 2006). This was largely a response to the challenges faced by doctoral education worldwide: globalisation, massification, the growing proportion of young scientists entering non-academic labour markets, and the expanding range of competencies required of graduates (Nerad, 2006). According to the basic principles approved by the European University Association following the Bologna seminar in Salzburg (European University Association – EUA, 2005), doctoral education, in particular, should not be limited to conducting research but should also include a significant educational component aimed at developing both professional and general competencies (Mkhitarian & Begoyan, 2022).

Today, more than 20 years after joining the Bologna Process, the transition to structured doctoral programs in Armenia has either not yet taken place or, in some cases, has not been implemented effectively. This highlights the importance of carefully studying foreign experience in the context of adapting it to the institutional specifics of implementing PhD programs in Armenia.

### **Methodology**

The analytical review presented below is based on data from open sources (primarily university websites) and publications that examine the specifics of implementing doctoral programs across different countries. The selection of universities was carried out as follows: first, the analysis included the websites of all universities ranked in the top 10 of the QS World University Rankings by Subject for Education (QS Rankings 2025). Second, to account for the diversity of national approaches to doctoral education systems, the analysis also included the websites of universities ranked in the top 100 of the same subject ranking (Mkhitarian & Želvys, 2025), representing different countries (covering all countries whose representatives appeared in the top 100 rankings).

The following topics were the focus of the study:

- a. The organisational model of doctoral education,
- b. Admission principles for doctoral programs,
- c. The educational program and academic workload,
- d. Principles and mechanisms for tracking doctoral students' progress,
- e. Principles and procedures for completing educational programs and defending dissertations.

### **The results**

#### **a) Model of Doctoral Education Organisation**

The principles of organising the educational process in doctoral programs vary significantly across countries and universities under consideration. Overall, three main models for implementing doctoral programs can be identified:

- 1) A management and training model organised through doctoral schools,

which are independent structural units specifically created to organise and oversee doctoral students' activities,

- 2) A management and training model organised through the interaction of multiple structural units. (this typically involves an interdisciplinary approach with the involvement of specialists from various fields),
- 3) An individual academic supervision model.

**This first** model can be implemented in two ways: either as a school limited to the doctoral level (doctoral school) or as a school encompassing both master's and doctoral levels (graduate school). The latter is most common in American universities, Japan, and some European universities, such as those in the UK (Oxford, Cambridge), Germany (Free University of Berlin, Humboldt University), Denmark (Aarhus University), and Sweden (Stockholm University).

**Doctoral and research schools**, whether as independent structural units or as units based on multiple structural entities, typically involve the implementation of structured doctoral programs. These programs include a significant educational component, a distributed system of oversight for doctoral activities, clear benchmarks, and requirements for progress during the course of study. These include expectations related to dissertation preparation, conducting research, preparing publications, participating in seminars and conferences, and more. This approach to doctoral education emerged in response to the massification and globalisation of doctoral studies, as well as to labour market demands for a broader range of skills among graduates.

**The individual supervision model** is a historically earlier approach, where education is centred on the interaction between the doctoral student and their academic supervisor. In this model, there is no significant mandatory educational component, and the only oversight of the student's activities comes from the academic supervisor. This model is based on the mentorship phenomenon, where doctoral education is viewed as a source of talent primarily for academia, and the doctoral student is seen as an apprentice learning and gaining experience from a scientist supervisor. It should be noted that this model was mainly used in the USSR, including in Armenia.

The results of a large-scale study conducted across 250 European universities by the European University Association indicate that most universities have now adopted the model of doctoral training organised through doctoral schools (Hasgall et al., 2019). In 45% of the universities surveyed, the entire doctoral training process is organised through doctoral schools. Only one in five universities (19%) does not have doctoral schools as separate structural units, and only 4% implement doctoral training exclusively in the format of individual academic supervision.

## **b) Admission Principles for Doctoral Programs**

At foreign universities, the admission procedure for doctoral programs often does not involve formal entrance exams, unlike in Armenia. Admission decisions are frequently made based on the review of an applicant's submitted documents,

and in-person interactions, if they occur, are usually in the format of an interview to get to know the candidate better. In some universities, the first year of doctoral studies serves as an extended selection period with an intermediate exam. Only after passing this exam does the student begin working on their dissertation. This approach can serve as an effective selective mechanism that allows doctoral students to determine whether this type of activity is of interest to them and, if so, to build a foundation for further work. For universities, it provides an opportunity to select the most successful students, which may positively affect doctoral program performance indicators of doctoral programs.

In many cases, admission to a doctoral program requires prior agreement with a supervisor. Sometimes, the chosen supervisor must be approved by the faculty administration. In some cases, the faculty itself seeks a supervisor for the applicant; if none is found, admission is denied. In any case, the scenario where a supervisor is assigned after the student is admitted is almost unheard of.

It is worth noting that admission strategies differ when doctoral students are treated not as students but as employees. In the first scenario, the admission campaign sets deadlines throughout the year, while in the second, there is no strict time frame, and students are recruited for specific projects. If doctoral students are treated more like employees and hired for a research project, they are required to demonstrate their professional skills (e.g., by providing a list of publications). This practice also applies to part-time doctoral programs, serving as a guarantee that students can independently manage their dissertation projects despite reduced engagement.

### c) Educational Program and Academic Workload

Structured programs significantly increase doctoral students' academic workload, largely in response to the growing importance of not only research skills but also other competencies. This shift aligns with the trend of training highly qualified professionals for a broader labour market beyond academia. According to a study by the European Council for Doctoral Education, research skills are considered the most important (97%). Additionally, general academic competencies (e.g., grant writing, research ethics) are highly valued (82%), as are knowledge transfer skills and teaching abilities (47% and 45%, respectively) (Hasgall et al., 2019). Several objectives are addressed through coursework:

- **Familiarisation with the chosen field and professionalisation:** These courses are typically offered at the start of the program, serving not only to enhance the professional level of doctoral students but also to provide professional orientation for new applicants.

- **Preparation for conducting independent research:** These courses help doctoral students develop the skills necessary for research activities.

Research methods courses and courses specific to the field of study are mandatory in nearly all cases. Additionally, many universities offer courses aimed at promoting student well-being during their studies, such as communication

and academic writing, dissertation project management, and career planning. At some universities, an educational module dedicated to the principles of academic integrity and communication is a separate part of the program. This module includes a series of courses and workshops on Research ethics, intellectual property rights and data protection, research and project management, and scientific communication. Furthermore, universities strive to incorporate modern scientific trends by including courses on advanced methods and emerging research areas.

In some universities, doctoral students are required to acquire an additional specialisation (a minor), which is particularly relevant for those whose fields of study differ between their master's and doctoral programs. Typically, coursework and dissertation preparation are separated in time. Students begin their dissertation projects only after completing the required courses and, often, only after passing a milestone exam. Teaching practice (usually as a teaching assistant) is common at many universities but is not universally included in doctoral programs.

#### **d) Monitoring the Progress of Doctoral Students**

The traditional model of Third-level study implies interaction between a doctoral student and his/her supervisor. The transition to structured programs implies an expansion of the circle of those responsible for the success of the doctoral student, and the practice of distributed supervision is widespread in foreign universities. Our research shows that most universities follow the Salzburg Principles of shared responsibility for doctoral student progress. Thus, half of the universities studied use a model with more than one supervisor in all or most doctoral programs. Different options for distributed supervision are possible: two academic supervisors, a dissertation committee consisting of several scholars, or active involvement of supporting administrative structures of the university. In addition, some universities practice including representatives from industry as part of the academic supervisors. In such cases, the PhD student may be employed by an organisation outside the university, provided the job responsibilities align with the dissertation topic.

In supervisory teams, there is usually a division of responsibilities and accountability among the participants: one team member is designated as the principal supervisor, while the others serve as co-supervisors. It is the principal supervisor who bears the main responsibility for the doctoral student's training. This includes preparing annual (or quarterly) reports on the student's progress, providing a review of the readiness of the dissertation for defence, coordinating individual study plans, making proposals for the composition of the dissertation defence committee, etc. Typically, the interaction between the principal supervisor and the PhD student is strictly regulated in terms of the frequency and scope of meetings. Some universities have a dedicated scheduling system where the duration and regularity of meetings between the student and the principal supervisor are prearranged. The principal supervisor must be a staff member of the department that runs the doctoral program. Co-supervisors, in most cases, act as consultants

and can be staff from other departments within the university or even from other universities. The criterion for selecting a co-supervisor is their expertise in the dissertation's subject area. Different universities employ various models of work for supervisory teams. In most cases, interactions with team members occur in a parallel, individual mode. However, some universities enforce strict regulations requiring mandatory joint meetings with all team members to discuss the PhD student's progress. The outcomes of such meetings are documented in a formalised report, which records the completion of set tasks and outlines plans for the future.

Since coursework and dissertation writing are separated in time, after passing the qualifying exam, the PhD students fully focus on their dissertation project. Consequently, assessment activities primarily relate to progress on the dissertation. Doctoral students periodically (every six months to a year) submit a report on their completed work, plans, and other relevant details. The review of the report can be conducted either remotely or in person with the participation of the dissertation committee. Additionally, almost all universities require participation in research seminars. These seminars provide a platform for PhD students to present their research projects, including both the research plan and the results obtained.

### **e) Principles and Procedures for Completing Studies and Defending the Dissertation**

At the final stage of their studies, PhD students must pass a specialty exam. Sometimes there may be multiple exams in different formats (oral and written), but the main purpose of such exams is to assess the candidate's knowledge in their professional field and in the specific area related to their dissertation project. The final defence can take place either in the traditional format of an oral presentation, where the PhD student presents the main results of the dissertation research and defends or clarifies them in response to audience questions, or in the format of remote review by experts in the dissertation's field. The evaluation of the dissertation text and its defence is conducted by a specialised committee consisting of experts in the dissertation's subject area. The size of the committee varies, ranging from two to ten members.

Universities adopt different approaches to forming committees and setting requirements for their members. The key differences relate to whether or not the student's academic supervisor participates in the committee's work. In some cases, the supervisor is required to be a member of the committee and participate fully alongside other members. In other cases, the supervisor may be part of the committee and participate in the defence by asking questions and providing comments, but without voting rights. Finally, the dissertation defence or its remote evaluation may take place without the involvement of the supervisor.

Another distinction concerns the institutional affiliation requirements for members of the dissertation committee. In all the universities reviewed, there is a requirement for the participation of at least one member external to the department responsible for the doctoral program. Some universities specifically

encourage the involvement of a faculty member from an international university. In certain cases, the entire committee must consist of individuals external to the university.

In some universities, in addition to the committee, opponents – experts in the relevant field – also participate in the defence. These opponents provide a review of the candidate’s work but do not have voting rights; the final decision is made by the committee members through a vote. This setup resembles the traditional format in Soviet / Russian dissertation councils, where each candidate is assigned two opponents whose opinions are considered in the final decision, though the opponents themselves do not have voting rights.

**The requirements for the final dissertation** vary, but certain commonalities exist. In most of the universities reviewed, the dissertation is defended as a cohesive text of 70,000 to 100,000 words. Having published works at the time of the defence is not a mandatory requirement for many universities. If the PhD student has published works, the content may be included in the dissertation without verbatim duplication, preserving the cohesiveness of the text. The full text of the articles can be appended as supplementary material. Previously published articles by the doctoral candidate can only be incorporated into the dissertation text with the approval of the doctoral school director, and they must be integrated into a unified text. If the articles were co-authored, written consent from the co-authors is required, along with their acknowledgement in the text. Some universities allow dissertation defence based on a collection of articles, but the PhD student must either be the sole author of the research or have made the most significant contribution to it. In such cases, an additional text is required to explain how the articles are interconnected and the role of each.

Particular attention is given to conflicts of interest and authorship in foreign universities. When forming the dissertation committee, the presence or proportion of the candidate’s co-authors in the committee is strictly regulated. For including co-authored articles (especially with the supervisor) in the dissertation text, confirmation of the student’s contribution and an evaluation of his/her role are necessary. Furthermore, all works are thoroughly checked for plagiarism.

### **Opportunities and Limitations of Introducing International Experience in Armenia**

Today’s global agenda for organising doctoral education focuses on addressing several challenges:

- **Preparing researchers for diverse societal roles:** This includes expanding the educational component of the doctorate and emphasising the development of "soft" skills.
- **Shifting from a single career track to multiple career paths:** There is a particular emphasis on enhancing mechanisms to help young researchers transition to non-academic markets and providing university and supervisor support in career exploration during doctoral studies.

- **Strengthening interdisciplinary connections:** This reflects a broader trend of blurring boundaries between disciplines, aimed at increasing researchers' productivity and mobility.

**Engaging with external stakeholders:** To strengthen the practical relevance of research, universities are increasingly involving representatives from industry as supervisors or co-supervisors and including them in dissertation defence committees. Moreover, international institutions emphasise the importance of delivering research outcomes to those who can benefit from them and collaborating with the communities being studied or affected by the research results.

The practices of leading universities highlight a number of differences that we inherited from the Soviet/Russian system, particularly in terms of admission rules and procedures (Bekova & Terentev, 2020).

Unlike the model prevalent in the post-Soviet space today, which relies solely on entrance exams, most leading international universities place significant emphasis on applicants' portfolios. Additionally, the selection process often continues post-admission. For example, many institutions require candidates to pass a qualifying exam after one to two years of study. Only those who pass this exam proceed to their dissertation research. This differentiated approach helps avoid admitting "unknown quantities"—students who lack academic motivation and are at risk of failing to complete their doctoral education.

By integrating international best practices, Armenian third-level education can address these challenges while fostering innovation and global competitiveness. However, the successful implementation of these practices requires addressing systemic limitations and enhancing institutional flexibility (Mkhitarian & Begoyan, 2022). Secondly, the educational programs often implemented in Armenia formally repeat courses from previous levels of education or introduce new ones without a comprehensive curriculum design. Meanwhile, these courses should aim to level the playing field for doctoral students entering programs from different disciplines, universities, and countries, strengthening research skills and related competencies that are valuable for students' future careers. International doctoral programs place significant emphasis on developing soft skills, which are beneficial not only for those pursuing academic careers but also for those targeting broader job markets. Studies show that in Armenia, many doctoral students, especially in STEM fields, begin to engage in the external labour market while still in their studies. Therefore, fostering a wide range of skills, applicable both within and outside academia, is particularly relevant in the Armenian context. Thirdly, the responsibility for doctoral students' outcomes in most international universities is not limited to the pair of "student-supervisor." The progress of doctoral candidates often involves administrative departments, other researchers (as co-supervisors or committee members), and industry representatives. This approach reduces reliance on a single supervisor's individual qualities and qualifications of a single

supervisor. It also mitigates potential difficulties arising from differing perspectives between the PhD student and his/her supervisor. Additionally, it promotes greater integration of doctoral candidates into the academic community and helps address issues of research isolation.

### **Key Systemic Differences**

One of the significant barriers to adopting international best practices lies in the systemic differences between Armenian doctoral programs and those abroad. Overcoming these inconsistencies is crucial for successfully integrating global experience into the Armenian context.

**Finances.** Despite the availability of state-funded places, PhD students are often practically deprived of financial support. The standard government scholarship ranges from 60000 to 75000 AMD, which cannot be considered a primary source of income. Most doctoral students have to work: they combine work with studies. Some research institutes of the National Academy of Sciences have support mechanisms (special scholarships, additional opportunities for academic mobility, etc.). In some universities, PhD students also lecture in parallel. However, these initiatives are not widespread, leaving doctoral students to seek sources of income independently or enter the external labour market, which leads to a high dropout rate and prolonged periods between enrollment and dissertation defence.

**Formality of the educational component.** This is likely partly due to the lack of resources to ensure a qualitative transition to structured programs. Particularly vulnerable are PhD programs in research organisations, where the lack of funding for implementing educational programs is most acute. This is also facilitated by the small number of PhD students in the certain speciality.

**Limitations of the interdisciplinary.** The specialty passport, which strictly regulates the thematic boundaries of work, along with the academic profile of the supervisor and the members of the dissertation council, imposes direct limitations on interdisciplinarity. It is almost impossible to implement the principle of co-supervision in Armenia because the regulations do not allow it. They have not changed since the 1990s.

**Doctoral education remains academically oriented.** This is the prevailing view among both administrators and doctoral students themselves. However, in reality, a significant portion of PhD students, both during their studies and after graduation, enter the non-academic labour market, often taking positions unrelated to research. Third-level education does not prepare them for such outcomes; moreover, this is often perceived negatively by universities and students alike. At the same time, salaries in the non-academic labour market are generally higher. However, there is no clear premium for holding an academic degree, nor is there demand for personnel of this level. The situation could be improved by involving external stakeholders in the doctoral education processes; however, there are significant disciplinary limitations, especially in the social sciences and humanities.

Additionally, the high risks associated with long-term planning and the lack of transparency in the benefits for enterprises make it difficult to find long-term partners.

### Conclusion

Despite numerous limitations, several innovations have been implemented in the Armenian third-level education system. A notable recent development is the involvement of NAS RA and Armenian universities in EU programs that contribute to reforms in the management of doctoral education. Such projects include, in particular, the long-term VERITAS (ISEC of NAS RA, VERITAS, n.d.) and ARMDOCT (ARMDOCT, n.d.) projects, the institutional coordination of which was handled by the author of this manuscript. The International Scientific-Educational Centre of NAS RA and some universities have taken advantage of opportunities within the framework of international cooperation and are changing the approach to doctoral education. At the same time, these changes are mostly localised and fragmented. Moreover, there is a lack of studies examining the relationship between these changes and various indicators of doctoral education effectiveness. One thing is clear: Armenian doctoral education needs to be fundamentally and nationwide transformed. The experience of highly ranked universities (Mkhitarian & Želvys, 2025), international cooperation, and the newly launched joint doctoral programs can serve as a very good basis.

### References

- ARMDOCT. (n.d.).Home.<https://armdoct.com/>
- Bekova, S. K., & Terentev, E. A. (2020). Doctoral education: International experience and opportunities for its implementation in Russia. *Higher Education in Russia*, 29 (6), 51–64. <https://doi.org/10.31992/0869-3617-2020-6-51-64>
- European University Association. (2005, February 3–5). Bologna seminar on "Doctoral programmes for the European knowledge society" (Salzburg), conclusions and recommendations. <https://www.eua.eu/publications/positions/salzburg-2005-conclusions-and-recommendations.html>
- Hasgall, A., Saenen, B., & others. (2019). Doctoral education in Europe today: Approaches and institutional structures. EUA Council for Doctoral Education. <https://www.eua-cde.org/downloads/publications/online%20eua%20cde%20survey%2016.01.2019.pdf>
- ISEC of NAS RA, VERITAS. (n.d.).Structural development of the third cycle based on Salzburg principles. <https://www.isec.am/en/structural-development-of-the-third-cycle-based-on-salzburg-prin>
- Kehm, B. M. (2006). Doctoral education in Europe and North America: A comparative analysis. Portland Press.
- Mkhitarian, A., Begoyan, K. (2022). Development of the doctoral studies management process in NAS RA. *Katchar Scientific Periodical*, 1, 139–153. <https://doi.org/10.54503/2579-2903-2022.1-139>

Mkhitaryan, A., Želvys, R. (2025). Exploring the relationship between higher education financing and university ranking. *Economics, Finance and Accounting*, 1 (15). <https://doi.org/10.59503/29538009-2025.1.15-5>

Nerad, M. (2006). Globalisation and its impact on research education: Trends and emerging best practices for the doctorate of the future. In *Proceedings of the Australian Association for Engineering Education Conference*. Canberra, Australia.

QS Top Universities. (n.d.). QS world university rankings by subject. Retrieved September 28, 2025], from <https://www.topuniversities.com/subject-rankings>

«Բարձրագույն կրթության և գիտության մասին» ՀՀ օրենք, հոդված 3, ՀՕ-285-Ն [RA law “On higher education and science”], Article 3, HO 285-N. <https://www.arlis.am/hy/acts/214346>

Mkhitaryan, A., Tchughuryan, A. (2024). Կրթության կառավարման օրենսդրական կարգավորումներ, ՀՀ ԳԱԱ «Գիտություն» հրատարակչություն, Երևան 2024, 143 էջ [Legislative regulations for education management]. "Gitutyun" Publishing House of NAS RA. DOI: 10.54503/978-5-8080-1524-1

*The article has been submitted for publication: 27.08.2025*  
*Հոդվածը ներկայացվել է տպագրության. 27.08.2025*

*The article is sent for review: 03.03.2026*  
*Հոդվածն ուղարկվել է գրախոսության. 03.03.2026*

*The article is accepted for publication: 05.03.2026*  
*Հոդվածն ընդունվել է տպագրության. 05.03.2026*