DOI https://doi.org/10.30525/2661-5150/2025-3-6

INNOVATIVE MODELS OF PRICING FOR DIGITAL EDUCATION PRODUCTS IN UNIVERSITIES

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Abstract. *Purpose.* This study aims to develop innovative pricing models for digital educational products in higher education institutions, focusing on diversification and digitalization, especially for short-term and online programs. The research addresses a significant gap in pricing methods for online courses and digital learning materials, which have become increasingly important as universities expand beyond traditional degree programs. *Methodology.* The study uses a multi-method approach combining comparative analysis of European pricing practices, typological classification of educational products, and mathematical modeling for cost calculation and price setting. Mathematical algorithms are created for both synchronous and asynchronous online courses, integrating cost-based foundations with market-driven adjustment coefficients that reflect institutional reputation, seasonal demand, level of innovation, digital marketing effectiveness, content relevance, labor market needs for skills, and instructor expertise. *Results.* The study presents a comprehensive two-part typology that distinguishes traditional educational products (degree programs, professional development courses, corporate training) from online programs (synchronous online courses, asynchronous video courses, electronic materials). Each type shows different cost structures, demand elasticity, and scalability potential. The proposed pricing algorithms factor in fixed costs, variable costs per student, marketing expenses, and nine adjustment coefficients ranging from 0.80 to 1.40, with built-in limits to prevent overpricing. The research shows that digital products have high demand elasticity, substantial economies of scale due to minimal marginal costs, and need to incorporate behavioral and value-based factors along with traditional cost calculations. Financial modeling includes break-even analysis and scenario planning for various enrollment levels. *Practical implications.* The models developed enable universities to set prices that are economically justified and competitive, adopt flexible pricing strategies (such as subscriptions, freemium, pay-per-course), predict financial outcomes under different scenarios, optimize marketing spending, and diversify revenue sources, especially important during wartime when government funding is limited and institutional relocations have disrupted operations. *Value/originality.* This research fills a critical methodological gap by developing concrete, formula-based pricing algorithms specifically for digital learning environments. The integration of behavioral factors, quality measures, and labor market relevance with cost-based calculations presents a new approach to competitive pricing in higher education, situated within Ukraine's wartime context and the urgent need for financial independence while maintaining educational accessibility.

Keywords: economics of higher education, higher education institutions, digital educational products, pricing algorithms, synchronous and asynchronous courses, cost-based pricing, market-driven pricing, diversification, demand elasticity, Ukraine.

JEL Classification: I23, I22, D40, L86, M31

1. Introduction

The modern higher education system is undergoing profound global transformations driven by the accelerated obsolescence of knowledge, the proliferation of digital technologies and new communication tools, and other socio-cultural, political, and economic factors. University education is gradually shifting toward a multi-level model in which traditional educational offerings and learning formats coexist with short-term programs, hybrid courses, online formats,

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and individualized learning trajectories. Under these conditions, the importance of economic rationality, marketing communications in the development and dissemination of educational products, and innovative approaches to price formation is steadily increasing.

The market for educational services demonstrates a growing pragmatic orientation among consumers, who increasingly focus not only on the prestige of higher education institutions (HEIs) but also on practical value, rapid return on educational investments, and flexibility of learning formats. In this context, innovative educational offerings capable of responding promptly to individual learning demands, evolving labor market needs, and technological transformations acquire particular significance.

In Ukraine, the transformation processes within the higher education system are taking place under the influence of several specific factors: the Russian military aggression, the HEIs' relocation from occupied territories and regions of active hostilities, the growing scale of external educational migration, and the limited capacity of state financial support for HEIs.

Under wartime conditions, Ukrainian HEIs strive to adapt their economic behavior to ongoing changes, particularly through the introduction of blended learning formats (online/offline), the development of short-term digital educational offerings, and the refinement of approaches to pricing determination. For Ukrainian universities, these issues gain particular importance due to the limited financial resources available during wartime, increased competition with non-formal education providers and international educational platforms, and the growing influence of behavioral and reputational factors in shaping the perceived value of educational products.

The analysis of contemporary scholarly works reveals a growing interest in the issue of pricing formation for educational services in higher education institutions. Setiawan et al. (2023) propose a pricing concept for electronic educational programs that takes into account not only the costs of content creation but also the financial aspects of scaling digital infrastructure. Diachuk (2024) suggests directions for applying digital marketing tools within HEIs in the context of individualized learning, incorporating the experience of foreign non-formal education providers.

However, most studies on the diversification and pricing of HEI educational products focus primarily on the question: *"How does the introduction or increase of tuition fees affect the number of applications, enrolled students, and graduation rates?"* The variations in such studies mainly concern different categories of students and countries. For instance, Mathies, Karhunen, and DesJardins (2025) examine how the introduction of tuition fees in Finland for non-EU international students influenced applicants' behavior during the application, admission, and enrollment processes. Bietenbeck, Leibing, Marcus, and Weinhardt (2023) analyze the effects of tuition fee implementation in Germany on the number of applicants, students, and the probability of graduation. McCaig and Lightfoot (2019) employ the concept of a *"dual pricing mechanism"* to describe processes in England's higher education system, where tuition costs and admission requirements together shape a hierarchy of universities and unequal learning opportunities for students from different social groups.

In Ukrainian academic discourse, the economics of education is predominantly examined through classical cost-based approaches to pricing. Zatonatska (2012) emphasizes the interrelation between cost structure, demand elasticity, and the role of university branding in determining the price of an educational product. Pysarchuk (2025) analyzes the methodological foundations for determining the minimum cost of education, while Yurchyshena (2023) explores the composition of total expenditures associated with the training of higher education students.

Skrypnyk and Kostenko (2020) analyze the potential for adapting European models of education financing to Ukrainian conditions. Trunina, Pryakhina, and Andriienko (2021) emphasize that an effective pricing model combines cost-based justification with market flexibility and a value-oriented approach to educational products. Panchyshyn, Hrynkevych, Marets, Demchyshak, and Popadynets (2020) propose determining the optimal tuition fee for a specific degree program using a regression model that accounts for the university's reputation, the program's popularity, and regional household income levels. Sas (2021) examines the impact of introducing indicative cost estimation and concludes that the number of fee-paying students decreased in public HEIs where tuition fees had risen significantly.

Most academic publications on pricing focus on the traditional segment of bachelor's and master's programs – while overlooking the specific characteristics of short-term courses and digital learning formats. The absence of established methodologies for determining the value of educational products in the digital environment creates a research gap that requires further investigation. In this context, the development of innovative approaches to competitive pricing that integrate both internal and external factors in determining the value of digital educational products becomes increasingly relevant.

For a systematic understanding of pricing approaches in HEI educational policy, considering the specific features of educational products, we propose the following research logic: 1) substantiate a typology of HEI educational products by identifying key classification attributes; 2) develop a pricing algorithm for digital educational products, considering established pricing practices in the traditional segment and the distinctive characteristics of the digital format.

2. Typology of Traditional Educational Products in Universities

Market-based economic relations within the higher education system, along with its evolution as a distinct form of economic activity in the context of the knowledge economy, have led to a shift in focus from the traditional concepts of *"knowledge," "competencies,"* and *"educational services"* toward the notion of higher education products, their range, price, quality, and competitiveness.

In market-oriented types of activity, products or services are broadly understood as useful outcomes delivered by an organization to all its stakeholders. Accordingly, the products of the higher education system, in our view, encompass various forms of outputs produced by formal (HEIs) and non-formal higher education providers, developed in the course of fulfilling their core functions: teaching, research, and public service designed to meet stakeholder needs and measurable in quantitative terms (Hrynkevych, 2018).

The classification of educational products carries not only analytical but also economic significance. Each type of educational offering is characterized by its own cost structure, demand dynamics, and scalability potential. The accurate identification of these parameters provides the foundation for sound pricing, profitability forecasting, and strategic positioning of HEIs within a competitive environment.

In distinguishing educational products within the market for educational services, we consider the following classification criteria to be of particular importance: 1) the purpose of learning; 2) the duration of study; 3) the form and technologies of instruction; 4) the target audience; 5) the characteristics of demand and supply for the educational product.

Taking into account the first three criteria, which, in our view, are the most decisive for pricing, it is possible to identify two main segments of educational products: 1) the traditional format; 2) the digital format.

The defining characteristics of the traditional segment of educational products include the purpose for which consumers choose them such as obtaining a degree or improving qualifications, and the format of study, which may be online, offline, or blended. Within the traditional segment of educational products, we propose distinguishing three main groups: long-term academic programs, short-term professional courses, and corporate educational solutions. Their common and distinctive features are presented in Table 1.

Degree programs are characterized by stable yet low-elastic demand, which leads to the dominance of cost-based pricing models. The tuition fees for contract-based education in public HEIs of Ukraine are regulated by the Resolution of the Cabinet of Ministers of Ukraine *"Certain Issues of Introducing Indicative Cost Estimation"* (2020, with amendments in 2024 and 2025), which defines the procedure for determining the minimum tuition fee based on indicative cost estimation and taking into account the average salary in the region where the HEI operates. Short-term professional courses and corporate formats operate within a competitive environment characterized by market-driven mechanisms, rapid thematic shifts, and a high demand for flexibility. These offerings target solvent demand, rely heavily on marketing, and require frequent content updates.

3. Funding and Pricing of traditional educational products in EU countries

European countries demonstrate diverse models for determining the cost of educational programs, depending on the structure of the educational services market, the level of public funding, the degree of university autonomy, and the share of the private sector. In most EU member states, a combination of budgetary and market mechanisms is applied, where the cost of education is influenced not only by

Table 1
Typology of traditional educational products in the HEIs of Ukraine

Type of educational product	Forms of learning	Duration	Target audience	Additional characteristics
Degree programs (Bachelor's, Master's)	Full-time, part-time, online, on-site, blended	Long-term (1-6 years)	Applicants and higher education students	Demand is relatively stable and price-inelastic; pricing is predominantly cost-based, with significant influence of government regulation for public HEIs.
Short-term professional programs and advanced training courses	On-site, online, blended	From 1 week to 6 months	Individuals of various ages and professional categories	Demand is elastic; the competitive environment determines pricing; the product has a short life cycle; marketing strategy plays a crucial role.
Corporate educational programs	On-site, online, blended	Short- or medium-term, adapted to client needs	Business, non-profit companies, teams	Individual closed formats; high profitability; customized pricing; focus on personalization and practical outcomes.

Source: compiled by the authors

expenditures but also by social, reputational, and performance-related factors. Table 2 summarizes the approaches to financing and pricing in the segment of traditional higher education programs across EU countries.

A comparative analysis shows that in EU countries, socially oriented models of higher education financing prevail, with accessibility, transparency, and efficient use of public resources serving as key principles. At the same time, in several countries such as the Netherlands, Spain, and Poland, there is a growing integration of market-based and value-oriented elements. Universities in these countries enjoy greater autonomy, allowing them to determine pricing policies based on demand, international competitiveness, and program outcomes.

In the European context, the price of an educational product is viewed not only as a reflection of costs but also as an indicator of the expected value of the knowledge and competencies acquired through learning. Taking into account the experience of EU countries and the best Ukrainian practices, a mixed model appears most relevant for Ukraine, one that combines cost-based tuition determination with consideration of market competition and the uniqueness of educational offerings. This approach promotes the development of innovative educational products, strengthens the financial autonomy of universities, and creates additional conditions for improving quality.

4. Typology of Educational Products in the Digital Segment

Digitalization in the educational services market has led to the emergence of a new segment of educational products, including asynchronous video courses (online in a pre-recorded format) and synchronous online courses (real-time online learning via platforms such as Zoom, Teams, etc.). These educational offerings constitute the core of the modern higher education segment, combining academic quality with market adaptability. The dynamics of this development highlight the need to improve methodological approaches to pricing that take into account not only production costs but also additional market factors such as demand, relevance, product uniqueness, instructor expertise, and the innovativeness of teaching technologies. The typology of educational products in the digital segment according to the aforementioned classification criteria is presented in Table 3.

Synchronous online courses are best suited for educational products that require regular updates of content relevance and direct instructor–learner interaction, particularly in fields such as digital marketing, project management, and data analysis. Asynchronous video courses, by contrast, are more effective for disciplines with a longer knowledge life cycle (for example, fundamentals of statistics, Excel, or financial analytics). The use of digital formats provides universities with opportunities to optimize costs, scale content, and enhance pricing flexibility depending on the target audience and the perceived value of the product.

5. Algorithm for Pricing in the Digital Segment of Educational Products

The economic nature of digital educational courses differs significantly from that of traditional academic (degree) programs, primarily in terms of cost structure and the factors influencing price formation. The key cost components of an educational product in

Table 2

Approaches to financing and pricing in the higher education systems of selected EU countries

Country	Dominant pricing approaches	Financing system	Additional characteristics
Germany	Cost-based	Predominantly public funding; tuition-free for EU citizens	No or symbolic tuition fees; efficiency control mechanisms; emphasis on transparency in budget allocation
France	Cost-based	Centralized funding model; dominant role of the state	Educational services regulated by national standards; minimal student fees; focus on equality of access
Netherlands	Cost-based and value-oriented	Combined system: public subsidies + private sources	Pricing reflects program quality, graduate employability, and international attractiveness; elements of market competition are applied
Poland	Cost-based and market-driven	Mixed financing: public and private universities	Private HEIs apply market-based pricing; public ones use normative cost; gradual expansion of autonomy in tuition setting
Spain	Cost-based and value-oriented	Public and regional funding with elements of private participation	Tuition varies by region; pricing considers service quality, university ranking, and performance indicators
Sweden, Denmark	Cost-based	Fully state-funded for EU citizens	Tuition-free education; focus on efficient use of public resources and quality assurance mechanisms

Source: summarized by the authors based on (European University Association, 2024; Organisation for Economic Co-operation and Development, 2023; Times Higher Education, 2023; World Bank, 2023)

Table 3
Typology of digital educational products

Type of educational product	Forms of learning	Duration	Target audience	Additional characteristics
Synchronous online courses	Real-time online learning (Zoom, Teams, Google Meet, etc.)	Short or medium-term modules	Broad audience, primarily professionals seeking to update their knowledge	Effective for dynamic topics; significant share of instructor-related costs; limited scalability; price depends on the instructor's reputation
Asynchronous video courses	Pre-recorded online format	Autonomous short modules	Broad audience, including students and professionals	Suitable for stable topics; high scalability; low marginal costs; optimal for passive income generation by HEIs
Electronic learning materials	Digital format (for self-study or as course supplements)	Depends on program structure	Students, hort-course participants, instructors	May serve as a standalone product or part of a learning package; fixed or bundled pricing models are applied

Source: compiled by the authors

the digital segment include: 1) the creation of learning content; 2) maintenance of digital infrastructure; 3) marketing and product promotion; 4) user technical support; 5) other related expenses.

At the same time, the marginal cost per learner remains minimal, creating economies of scale – an increase in the number of participants does not lead to a corresponding increase in total costs. Digital formats are characterized by high demand elasticity: consumers actively compare prices and are guided by the reputation of the educational brand, content quality, and perceived value of the course. Therefore, an effective pricing strategy in this segment combines cost-based, market-value, and performance-oriented approaches, ensuring the competitiveness of university courses in a dynamic educational market. To determine the cost of a synchronous online course, the following sequence is proposed:

1. Determining the cost structure: fixed costs C_f (including instructor and assistant remuneration, development of learning materials, technical support, etc.), variable costs per participant (c), and marketing expenses (C_m) are identified.

2. Calculating the unit cost per participant using the formula: $C_{os} = \left(C_f + C_m + c \times n\right) / n$; where n denotes the expected number of participants.

3. *Identification of additional factors and corresponding adjustment coefficients* that influence the price of the educational product. Such factors may include: the reputation of the HEI, market conditions and demand seasonality, audience loyalty level, willingness to recommend the course, instructor expertise, program innovativeness, content relevance, professional significance of acquired competencies, content quality, and the perceived value for learners. See Table 4.

4. *Determining the final course price* (P), taking into account the profitability margin and adjustment coefficients:

$$P = C_{os} \times (1 + M) \times K_{pos} \times K_{dem} \times K_{inn} \times K_{dm} \times K_{act} \times K_{prof} \times K_{exp} \times K_{trend};$$

where M represents the target profit margin (0.25); K_{pos} denotes the institutional reputation (1.05-1.10); K_{de} reflects demand seasonality (0.95-1.05); K_{inn} captures the innovativeness of the program (1.00-1.15); K_{dm} accounts for the effectiveness of digital marketing (0.8-1.3); K_{act} indicates the course relevance (0.85-1.10); K_{prof} measures the labor market demand for the competencies taught (0.90-1.30); K_{exp} corresponds to the instructor's professional experience in the course-related industry (0-1.2); and K_{trend} represents the forecasted demand for the course (0.8-1.2).

5. Calculation of financial results R (n, P) and the **break-even point** n* depending on the number of participants (under scenarios of minimum, average, and large enrollment): $R(n, P) = P \times n - \left(C_f + C_m + c \times n\right)$, and: $n^* = (C_f + C_m / (P - c)$; where R(n, P) – is the projected financial result, P – is the recommended price per participant, nnn is the number of participants, c – represents variable costs per participant, C_f denotes fixed costs, and C_m indicates variable marketing expenses.

For *asynchronous video courses*, which have a longer life cycle and scalability without significant cost increases, a combined approach to value determination is recommended. The proposed model is as follows:

$$P_v = \left(C_f / N_p + C_{var} + C_{mkt}\right) \times (1 + M) \times K_q \times K_v \times K_{act} \times K_{prof} \times K_{exp} \times K_{trend};$$

where C_f denotes the fixed costs of course development (including script writing, instructor remuneration, video recording, editing, hosting, and preparation of methodological materials); N_p represents the expected number of participants during the payback period (12-24 months); C_{var} indicates the variable cost per participant (such as certification, user support, and payment processing fees); C_m refers to the average marketing cost per participant (including digital campaigns, advertising, and SEO promotion); M – is the target profit margin (10-25%); K_q – is the content quality coefficient (1.0-1.3); K_v – is the value coefficient (1.0-1.5), which reflects additional learner benefits such as certification, templates, or instructor support; K_{act} measures course

Table 4

Coefficients reflecting academic and market factors in the value of digital educational products

Additional value factors	Coefficient and range	Method of determination
Employer trust and graduate employability. Academic reputation of the HEI	K_{pos} 1.00-1.12	Composite index (NPS 40%, employability 30%, academic performance 30%)
Short-term market conditions / seasonal demand fluctuations	K_{dem} 0.95-1.05	Historical enrollment analysis; monthly application share relative to average
Didactic innovativeness of the course (new formats, interactivity, case studies, real data)	K_{inn} 1.00-1.15	Expert rubric (0-6 points): K_{inn} 1.00 + 0.025· s_{inn}
Digital marketing effectiveness – LTV/CAC ratio	K_{dm} 0.80-1.30	K_{dm}= 0.80 + 0.10·(LTV/CAC)); limited to ≤ 1.30
Course relevance according to student evaluations (years 3-5, 0-10 scale)	K_{act} 0.85-1.10	K_{act} = 0.85 + 0.025·s, where s is the average student rating (0-10), n ≥ 384. At s = 0-4, the course is outdated; 5–6 requires updating; 7-10 is relevant.
Professional significance – labor market demand for competencies	K_{prof} 0.90-1.30	K_{prof} = 0.90 + 0.004· s_{prof} (index 0–100: job openings, wage premium, certifications)
Medium-term demand forecast (12 months)	K_{trend} 0.80-1.20	K_{trend} = 1 + 0.5·D (D = ±20%)
Instructor's professional experience in the course-related industry	K_{exp} 0.5 / 1.0 / 1.2	Depends on instructor's experience: <2 years – 0.5; 2–5 years – 1.0; 5+ years – 1.2; no experience (0) – course delivered only in co-authorship with an expert. For theoretical courses, K_{exp}= 1.0.
Content quality: structure, design, technical execution, logic	K_q 1.00-1.18	Expert rubric (0-6 points): K_q= 1.00 + 0.03· s_q
Learner value: certificate, templates, consultations, community	K_v 1.00-1.40	Expert rubric (0-5 points): K_v= 1.00 + 0.08· s_v

Source: compiled by the authors

relevance (0.85-1.10); K_{prof} reflects labor market demand for the competencies taught (0.90-1.30); K_{exp} represents the instructor's professional experience in the relevant industry (0-1.2); and K_{trend} indicates the forecasted demand (0.8-1.2).

All coefficients in the model are normalized to an average value of 1.00 at the beginning of each academic year, ensuring the stability of comparisons across periods and disciplines. The product of the performance coefficients $K_{act} \times K_{prof} \times K_v \times K_{trend}$ should not exceed 1.8, which helps prevent overvaluation of a course due to the simultaneous increase of several indicators. For theoretical disciplines without a practical component, a fixed coefficient value K_{exp} = 1 is allowed. The calculation and verification of coefficients may be carried out annually based on student survey results, labor market analysis, and internal monitoring of educational product quality.

6. Conclusions

This research facilitated the development of a comprehensive approach to pricing digital educational products offered by HEIs amid the diversification and digitalization of the academic environment. The study substantiates a typology of HEI educational products, distinguishing between traditional and digital segments, each characterized by distinct cost structures, demand elasticity patterns, and scalability potential.

Mathematical models for pricing synchronous and asynchronous courses have been developed, integrating cost components with market and behavioral factors through a system of adjustment coefficients. The proposed coefficients reflect institutional reputation, seasonal demand, program innovativeness, digital marketing effectiveness, content relevance, labor market demand for competencies, and instructor expertise.

The proposed algorithms enable the implementation of flexible pricing strategies for educational products and facilitate the diversification of funding sources – an aspect that is critically important under martial law conditions in Ukraine and amid growing competition in the educational services market. The incorporation of economies of scale principles into the pricing framework recognizes that digital educational products exhibit minimal marginal costs per additional learner, creating significant financial opportunities for HEIs when enrollment scales effectively. Furthermore, the multi-coefficient approach developed in this study allows universities to respond dynamically to changing market conditions while maintaining economic rationality and competitive positioning in both domestic and international educational markets.

References:

Bietenbeck, J., Leibing, A., Marcus, J., & Weinhardt, F. (2023). Tuition fees and educational attainment. *European Economic Review*, 154, 104431. DOI: https://doi.org/10.1016/j.euroecorev.2023.104431

Diachuk, I. (2024). Promoting higher education institutions' services: increasing the effectiveness of digital marketing through individualization and personalization. *Investments: Practice and Experience*, 12, 96–101. DOI: https://doi.org/10.32702/2306-6814.2024.12.96

European University Association (2024). Public funding observatory report 2024. Available at: https://eua.eu

Hrynkevych, O. (2018). Management of higher education competitiveness in Ukraine (methodology of analysis and monitoring systems): monograph. Lviv University.

Mathies, C., Karhunen, H., & DesJardins, S. L. (2025). If you charge them, will they come? The effect of levying tuition fees on international students. *Research in Higher Education*, 66(6), 34. DOI: https://doi.org/10.1007/s11162-025-09855-5

McCaig, C., & Lightfoot, N. (2019). Higher education, widening access and market failure: Towards a dual pricing mechanism in England. *Social Sciences*, 8(10), 268. DOI: https://doi.org/10.3390/socsci8100268

Organisation for Economic Co-operation and Development. (2023). *Education at a glance 2023: OECD indicators*. OECD Publishing. DOI: https://doi.org/10.1787/69096873-en

Panchyshyn, S., Hrynkevych, O., Marets, O., Demchyshak, N., & Popadynets, N. (2020). Simulation of tuition fees in competitiveness management of higher education institutions (case of Ukraine's universities). *The Bulletin of the National Academy of Sciences of the Republic of Kazakhstan*, 5. DOI: https://doi.org/10.32014/2020.2518-1467.155

Pysarchuk, O. (2025). Conceptual model of formation and regulation of the minimum cost of tuition. *Sustainable Economic Development*, *2*(53), 472–478. DOI: https://doi.org/10.32782/2308-1988/2025-53-66

Sas, S. (2021). The Impact of Indicative Costs on the Financial Potential of Higher Education Institutions in Ukraine. *Halytskyi Ekonomichnyi Visnyk*, *70*(3), 102–110. DOI: https://doi.org/10.33108/galicianvisnyk_tntu2021.03.102

Setiawan, R., et al. (2023). E-learning pricing model policy for higher education. *IEEE Access*, 11, 38370–38384. DOI: https://doi.org/10.1109/ACCESS.2023.3266954

Skrypnyk, A., & Kostenko, I. (2020). Econometric analysis of demand and supply of educational services in specialty 051 "Economics". *Business Inform*, *4*, 279–288.

Times Higher Education (2023). *Global university survey 2023: The future of higher education*. THE Publications. Available at: https://www.timeshighereducation.com

Trunina, I., Priakhina, K., & Andrienko, M. (2021). Pricing in the higher education market of Ukraine. *Efektyvna Ekonomika*, 10. Available at: http://www.economy.nayka.com.ua/?op=1&z=9422

World Bank (2023). *Higher education policy reviews: Trends and challenges in Europe and Central Asia*. Available at: https://www.worldbank.org/education

Yurchyshena, L. (2023). Methodological and practical aspects of developing a model for calculating the full cost of educational services. *Economics and Organization of Management*, *2*(50), 130–141. DOI: https://doi.org/10.31558/2307-2318.2023.2.127

Zatonatska, T. (2012). Foreign experience in financing education development: Prospects for application in Ukraine. *Visnyk of Taras Shevchenko National University of Kyiv. Economics*, 139, 44–49.

Received on: 07th of October, 2025
Accepted on: 16th of November, 2025
Published on: 28th of November, 2025