



CURRENT STATE OF TRAINING FOR AUTOMOTIVE MECHANICS IN VOCATIONAL (TECHNICAL) EDUCATION INSTITUTIONS

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Abstract

The relevance of this article is driven by the importance of professional training for automotive mechanics in the current environment, where the automotive industry is undergoing rapid and significant changes. The advancement of technological progress and the introduction of new technologies such as electric vehicles, hybrid cars, and autonomous transportation systems pose new challenges and set additional requirements for the training of specialists.

Objective: The study aims to analyze the current state and trends in the professional training of automotive mechanics within vocational (technical) education institutions.

Methods: Theoretical analysis of scientific literature, review of regulatory frameworks, and examination of curriculum planning documentation were conducted to assess the development level of this issue and to identify directions for further research. Comparison was used to explore different scientific approaches to addressing this issue, while analysis and synthesis were employed to elucidate trends in the professional training of automotive mechanics and to substantiate the formation of their professional competencies.

Results: The main issues in preparing future automotive mechanics have been identified at the levels of general pedagogy, psychology, and didactics. Core didactic and innovative aspects for forming the professional competence of future automotive mechanics are characterized.

Conclusions: The essence of automotive mechanics training is characterized as a multifaceted process encompassing technical education, personal development, and adaptation to new technologies and labor market demands. The purpose of this training is defined as the sustainable development of the automotive industry, enhancement of vehicle safety and operational efficiency, and support for the economic stability of enterprises. Current trends in the professional training of automotive mechanics are identified, including a focus on improving educational quality, developing competencies aligned with digital labor market demands, and preparing specialists capable of working with the latest production technologies. Key strategies for enhancing the competitiveness of graduates from vocational (technical) education institutions in the global labor market, and their readiness to meet the challenges of the modern automotive industry, are outlined. These include implementing international education standards, readiness to utilize modern equipment and software, development of soft skills, collaboration with businesses, and fostering continuous education and professional growth.

Keywords: *automotive industry, future automotive mechanic, professional competence, competency-based approach, learners.*

Introduction. The professional training of automotive mechanics is a key aspect of the development of the automotive industry. Amidst rapid technological advancement and globalization, there is a growing need for highly qualified specialists who can

adapt to new conditions and labor market demands. Due to the constant renewal of the vehicle fleet and the introduction of cutting-edge technologies and systems, such as electric vehicles, hybrid cars, autonomous transport, and telematics systems, modern mechanics

must possess comprehensive knowledge in various technical fields and information technologies.

The importance of high-quality professional training cannot be overstated, as it ensures road safety, efficient vehicle operation, and the economic stability of companies engaged in automotive maintenance and repair. Highly skilled mechanics are capable not only of performing quality repairs and maintenance but also of diagnosing complex systems, identifying and rectifying malfunctions at early stages, which prevents severe breakdowns and accidents.

Educational programs for automotive mechanics must consider current trends and innovations in the automotive sector. This entails constant updates to curricula, the adoption of new teaching methods, and the use of modern equipment in the training process. Collaboration between educational institutions and automotive companies or service centers is also essential, as it allows students to gain practical skills in real-world settings.

It is worth noting that professional training for automotive mechanics includes not only technical knowledge and skills but also the development of qualities such as attentiveness, responsibility, decision-making autonomy, and teamwork ability. Mechanics must be prepared for continuous learning, as technologies and market requirements are constantly evolving.

Modern mechanics should be familiar with the basics of electronics, diagnostic systems, information technology, and software used for vehicle maintenance. They need to work with computer control systems, understand the principles of electric motors, batteries, and be acquainted with the basics of telematics and autonomous driving systems.

Additionally, mechanics should possess knowledge in ecology and energy conservation, as the contemporary automotive industry increasingly focuses on the development and implementation of environmentally friendly technologies. This includes the use of alternative fuels, reduction of harmful emissions, and improvements in energy efficiency.

Achieving a high level of professional training requires access to modern instructional materials, equipment, and technologies. Educational institutions must continuously invest in developing their material and technical base, attract highly qualified specialists for teaching, and collaborate with companies and organizations in the automotive sector.

Thus, professional training of automotive mechanics is a multifaceted process that includes not

only technical training but also the development of personal qualities, adaptation to new technologies, and market demands. This ensures sustainable growth in the automotive industry, enhances vehicle safety and operational efficiency, and contributes to the economic stability of enterprises.

Sources

The issue of professional training for future specialists has been thoroughly studied at the level of general pedagogical, psychological, and didactic principles, as explored by A. Aleksyuk (1998), V. Bondar (2013), S. Honcharenko (1997), R. Hurevych (2011), I. Zyazyun (2001), V. Kremen (2003), N. Kuzmina (2011), N. Nychkalo (2008), V. Yahupov (2002), among others. The challenges in training future specialists, as identified at the general pedagogical, psychological, and didactic levels, include several main aspects, such as:

- Inadequacy of curriculum content with current professional requirements;
- Lack of integration of theoretical knowledge with practical skills;
- Low interest in the chosen profession;
- Lack of intrinsic motivation for independent learning and professional development;
- Use of outdated and ineffective teaching methods;
- Insufficient implementation of innovative technologies and interactive teaching methods;
- Lack of a systematic approach to developing professional competencies;
- Discrepancies between expected competencies and actual learning outcomes.

These issues are complex and require a systematic approach to address them, involving collaboration between educational institutions, employers, and students.

Regarding the training of specialists in the transportation sector, this topic has been examined by M. Kozlenko (2008) and O. Kravets (2019). Didactic aspects of training future automotive industry specialists have been studied by D. Homeniuk (2014), O. Dubinina, V. Radkevych, P. Luzan, T. Pashchenko (2022), A. Kononenko (2016), V. Manko, H. Romanova, and L. Nesterova (2014). Their works focus on various educational process aspects, including theoretical training, practical exercises, and the use of modern technologies and teaching methodologies.

Key didactic aspects of automotive industry training, as proposed by scholars, include:

- Study of mechanics, electrotechnics, and vehicle construction fundamentals;
- Mastery of regulatory documents and standards governing the automotive sector;
- Conducting lab work and practicums, enabling students to consolidate theoretical knowledge through practical application;
- Organizing internships at automotive companies where students can gain real-world experience;
- Integrating information technology into the educational process, using specialized software for modeling and analyzing transportation processes;
- Using virtual labs and simulators for training;
- Applying problem-based learning, fostering critical thinking and problem-solving skills, among others.

The works of these scholars contribute significantly to the development of methodological approaches and the improvement of the automotive industry training system, which is vital for ensuring the quality of education and the professional competency of graduates.

Innovative aspects of vocational training, highlighted by researchers such as M. Artyushyna (2014), N. Kulalaeva, and H. Romanova (2019), include key elements such as:

- Integrating ICT in the educational process to enhance learning efficiency, develop digital competencies, and provide access to current knowledge and resources;
- Development and implementation of modular programs, allowing students more flexible mastery of educational materials and adapting the learning process to individual needs and capabilities;
- Utilizing online platforms and distance learning technologies to provide access to educational programs regardless of students' geographical location;
- Focusing the educational process on forming key competencies necessary for professional activities, which includes the development of critical thinking, creativity, and problem-solving skills;
- Engaging students in real-life projects to develop practical skills and apply theoretical knowledge in practice;
- Using interactive methods (discussions, role-playing, simulations) to increase student engagement and activity in the educational process;
- Encouraging students to conduct research and experiments as part of the educational process;

- Developing individual educational plans and programs that consider students' personal interests, abilities, and needs;
- Integrating knowledge from different fields to create a comprehensive understanding of professional activities and complex problem-solving;
- Regularly updating curricula and materials according to current labor market requirements and scientific-technological progress.

These aspects enhance the quality of vocational education, make it more adaptable to societal and economic changes, and prepare students for effective professional activities in today's fast-changing world.

The competency-based approach in vocational education institutions has been developed, implemented, and realized by V. Radkevych (2012), T. Herlyand (2013), P. Luzan, V. Yahupov, H. Lukianenko, T. Pyatnychuk (2015), among others.

The introduction of new technologies, such as electric vehicles, hybrid cars, and autonomous vehicles, presents new challenges and requirements for specialist competencies. An analysis of the current state of mechanic training in vocational education institutions reveals major trends and issues that need to be addressed to ensure efficient and safe vehicle operation.

Purpose: To analyze the current state and trends in the professional training of automotive mechanics in vocational education institutions.

Methods: Theoretical analysis of scholarly works, examination of regulatory requirements, and academic planning documentation to assess the level of problem development and directions for further research; comparison for studying different scientific approaches to the problem; analysis and synthesis to identify trends in professional training of automotive mechanics and justify the content for forming their professional competencies.

Results and Discussion: Since February 24, 2022, due to the full-scale invasion of Russia on the territory of Ukraine, war has been ongoing in our country, which undeniably affects the economy and the labor market. Although car sales declined initially, 2023 has seen a resurgence. Analytical data indicate (Orel, 2023) that:

- In the first half of 2023, Ukrainians purchased 29,314 new passenger cars worth nearly \$1 billion;
- The number of cars sold in the first half of 2023 increased by 58% compared to the first half of 2022;

- The record year for Ukraine was 2021, with nearly 104,000 new cars sold.
- These data suggest that the car sales market in 2023 has practically reached 2021 levels, meaning the

labor market requires highly qualified specialists capable of quality automotive service.

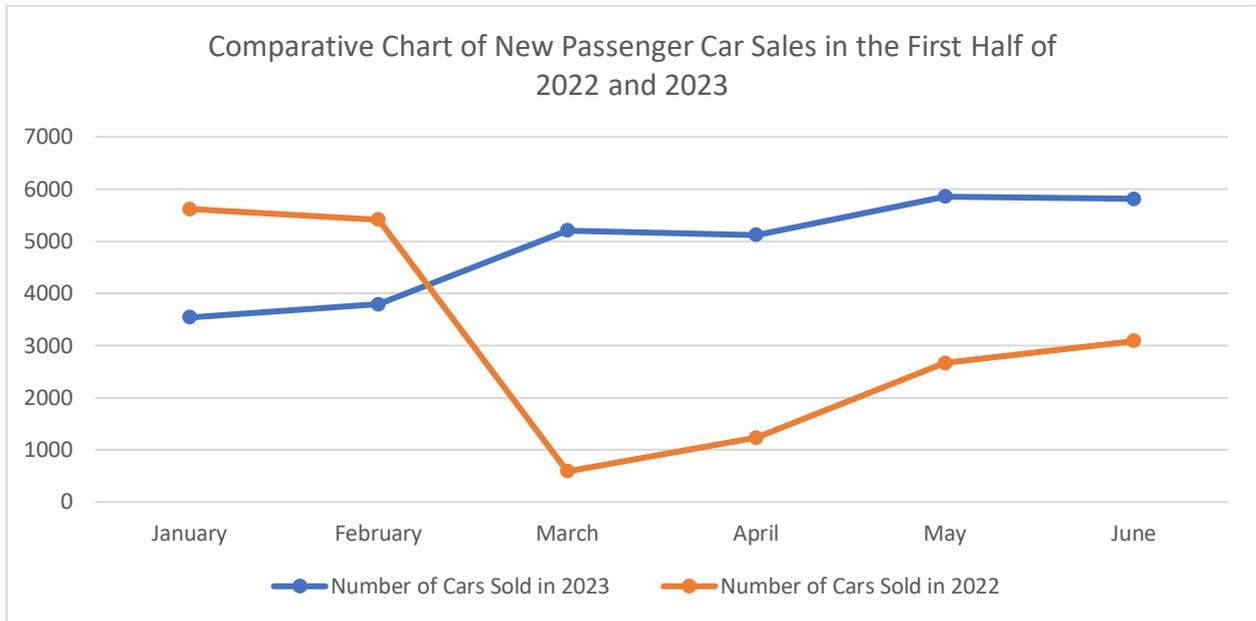


Fig. 1. Comparative Chart of New Passenger Car Sales in the First Half of 2022 and 2023 (Orel, 2023).

The current characteristics of the domestic automobile sales market include:

- A significant share of premium car sales, constituting 20% in 2023 compared to 14-15% in 2022.

- The main drivers of market growth: government agencies, law enforcement, and business sectors, rather than the general population.

Published research results reveal that the most popular car brands on the sales market in 2023 were "Toyota," "Renault," "Volkswagen," "Skoda," "BMW," and others (see Fig. 2).



Fig. 2. Top ten automobile brands in Ukraine by sales in the primary market (Orel, 2023).

The above-listed points, on the one hand, indicate the need for highly qualified specialists in the repair and maintenance of wheeled vehicles and, on the other hand, underscore the heightened training requirements for these specialists, particularly in relation to the use of vehicles by law enforcement agencies during wartime.

In Appendix B of the Handbook of Occupational Qualification Characteristics for Employees, presented in Issue No. 69, “Automobile Transport,” specific qualification characteristics related to our research topic are provided, specifically for professions (specializations) such as: service mechanic for wheeled vehicles, electromechanical technician for wheeled vehicles, and reception-delivery mechanic for technical services of wheeled vehicles. This document states that the Handbook forms part of the foundation for establishing a company's professional system, setting qualification requirements for knowledge and skills of automotive transport workers, defining their tasks, duties, and conditions for skill level advancement. It may also serve as a basis for developing professional standards, higher education standards, and state standards for vocational (technical) education while emphasizing the importance of regulatory legal acts and documents in shaping the company's professional system. These documents include (Official Portal of the Parliament of Ukraine, 2006):

- The updated national classifier of Ukraine “Classifier of Occupations DK 003:2010,” which defines job titles, their classification, organization, and coding;
- Updated Issue 69, “Automobile Transport,” of the Handbook of Occupational Qualification Characteristics for Employees;
- Professional standards as outlined by the Law of Ukraine “On Vocational (Technical) Education”;
- Higher education standards in accordance with the Law of Ukraine “On Higher Education”;
- State standards of vocational and technical education according to the Law of Ukraine “On Vocational (Technical) Education.”

These documents play a crucial role in organizing the educational process within institutions that prepare future specialists in the automotive sector. Additionally, the educational program is a

mandatory document in the educational process. The specifics of professional training for future automotive mechanics can be observed in the educational program “Automobile Maintenance and Repair” at the Kyiv Professional College of Automotive Transport Technologies, where the educational-qualification level is junior bachelor, field of knowledge: 27 “Transport,” specialization: 274 “Automobile Transport,” qualification: “mechanic.”

The program's scope comprises 120 ECTS credits, covering a two-year study period. The program's objective is to provide students with general and professional competencies in the transport (automotive) sector, enabling graduates to solve standard production tasks and situations in fulfilling their professional duties in positions aligned with their specialty. The orientation of the program is professional training of students for making effective professional decisions in automobile transport maintenance and repair.

The program's main focus is on the graduates' ability to carry out production activities in automobile and engine maintenance and repair at automotive service enterprises. This goal is achievable through integrating general professional and theoretical training specific to automobile and engine maintenance and repair.

It is noteworthy that, as indicated in the educational program, a junior bachelor in the specialty 274 “Automobile Transport” can be employed in the following positions:

- Mechanic;
- Fleet Mechanic (garage);
- Transport Repair Mechanic;
- Division Mechanic;
- Workshop Mechanic;
- Production Mechanic;
- Design Technician (mechanics);
- Process Technician (mechanics);
- Vocational Training Instructor in Driving.

It should be noted that the profession of an auto mechanic is in high demand in the labor market. As of June 17, 2024, there are 425 job vacancies for this profession listed on the website of the State Employment Service. The number of vacancies by region is shown in Fig. 3.

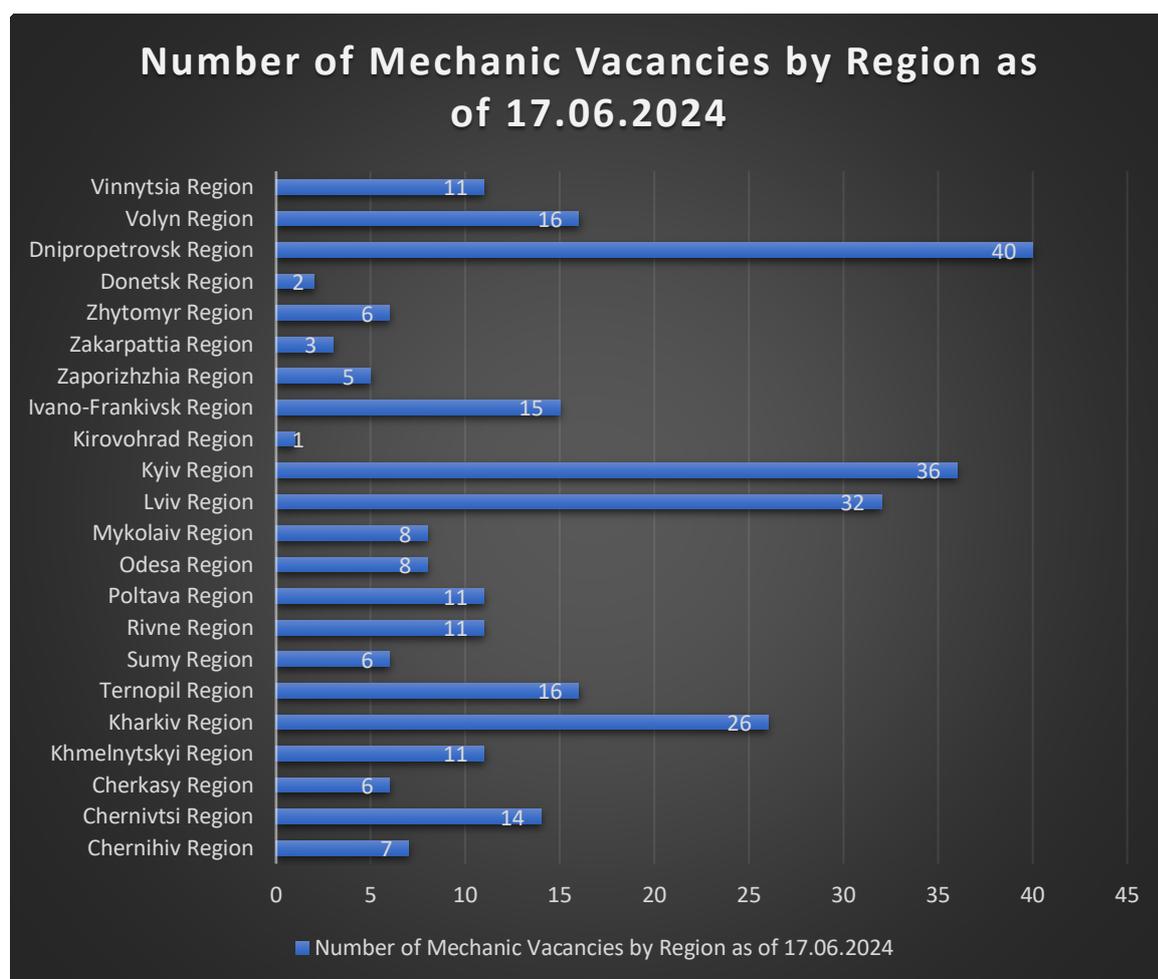


Figure 3. Number of Mechanic Job Openings by Region as of 06/17/2024

As shown, the highest numbers of job openings are observed in the Dnipropetrovsk, Kyiv, and Lviv regions, while the lowest numbers are in the Donetsk, Zakarpattia, and Kirovohrad regions, influenced by various factors, including the ongoing war led by the Russian aggressor against the Ukrainian people.

An important indicator of demand is represented by job openings in Kyiv city, where 132 vacancies as of 06/17/2024 indicate an acute need for training future mechanics within the capital.

It is worth noting that the salary range for this profession spans from UAH 7,500 to UAH 70,000. The tasks and requirements for applicants in these positions are detailed in Table 1 below.

Table 1

Primary Responsibilities and Requirements for Automotive Mechanic Positions (State Employment Service, 2024)

Location	Tasks	Requirements
Kyiv, "Autonomy Auto Service"	<ul style="list-style-type: none"> – Diagnosis and repair of vehicles; – Execution of scheduled and current technical maintenance; – Detection and resolution of vehicle malfunctions. 	<ul style="list-style-type: none"> – Minimum of 2 years of experience in a similar role; – Knowledge of modern automotive systems; – Ability to work in a team and demonstrate responsibility; – Willingness to continuously improve skills.
Kharkiv, "BMW Garage Racer"	<ul style="list-style-type: none"> – Diagnosis and repair of BMW and Mini vehicles. 	<ul style="list-style-type: none"> – Understanding of vehicle operation principles, structure, and repair technology; – Responsibility;

Location	Tasks	Requirements
		<ul style="list-style-type: none"> – Teamwork skills; – Openness in communication; – Willingness to develop; – Ability to acquire new information.
Zaporizhzhia, "Progress LLC"	<ul style="list-style-type: none"> – Conduct diagnostics and preventive inspections of vehicles; - Reject defective parts after disassembly and cleaning; – Perform mechanical processing of parts, static balancing of components and assemblies; – Disassemble, repair, and assemble units and mechanisms in accordance with the manufacturer's technical standards and other regulatory documents; – Install, adjust, and replace spare parts, assemblies, and equipment as per work orders; – Address identified defects and malfunctions after consultation with the shift supervisor; – Ensure high-quality work completion. 	<ul style="list-style-type: none"> – - Knowledge of disassembly, defect assessment, and repair principles of parts, assemblies, and devices; – Experience is preferred; - Relevant education.

An analysis of the Unified Job Portal of the State Employment Service reveals that certain job listings pertain to the repair and maintenance of military vehicles. For instance, the duties listed for an auto mechanic position include (State Employment Service, 2024):

- Diagnosing and repairing various makes and models of vehicles utilized by the military unit;
- Planning and performing regular vehicle maintenance according to military unit standards;
- Detecting and correcting breakdowns and faults within mechanical, electrical, and electronic vehicle systems;
- Parts and tools management: ordering and ensuring the availability of spare parts and tools necessary for repairs;
- Maintaining cleanliness and order at the workstation.

The requirements are as follows:

- Experience in vehicle repair and maintenance;
- Knowledge of automotive technology, electricity, and electronics;
- Proficiency in using diagnostic equipment and tools;
- Ability to work in a team and adhere to a set work schedule;

- Responsibility, attention to detail, and the ability to make quick decisions.

An analysis of the listed duties, tasks, and requirements for candidates in these positions shows that essential conditions for their professional activity include the development of both soft skills and hard skills, or key, general, and professional competencies.

Concerning soft skills, these include teamwork, responsibility, a desire for continuous skills enhancement, openness to communication, readiness for development, and the ability to learn new information, among others. These qualities contribute to the formation of general competencies. According to the educational and professional program "Maintenance and Repair of Vehicles and Engines" at the Kyiv College of Automotive Transport Technologies, these competencies include:

- GC1 – Social competence: the ability to work in a team and take responsibility for specific tasks.
- GC2 – Communicative competence: the ability to communicate effectively both orally and in writing in one's native language, as well as using foreign language skills in professional activities.
- GC3 – Civic competence: the ability to apply knowledge of Ukrainian legal and regulatory acts in the operation, repair, and maintenance of vehicles and their systems.

- GC4 – Ethical competence: the capacity to shape a worldview that encompasses human existence, society, nature, physical, and spiritual culture.

- GC5 – Interdisciplinary competence: the ability to utilize fundamental knowledge of mathematics and physics when solving tasks in mechanics, electromechanics, and electronics.

- GC6 – Health preservation competence: possessing knowledge about the basic principles of human, society, and nature interaction; understanding the impact of anthropogenic factors on the environment; and methods for managing natural resource use.

A key trend in the professional training of automotive mechanics within vocational (technical) education institutions is the integration of international education standards. The Bologna Process, initiated in 1999, represents a significant step in the harmonization of educational standards across Europe (State Employment Service, 2024). Its objective is to establish a European Higher Education Area, enabling mobility for students and teachers and mutual recognition of diplomas and qualifications across countries. For automotive mechanics, this entails access to internationally recognized education and opportunities for participation in educational programs and internships abroad.

The integration of international standards contributes to enhancing the quality of education and ensuring the global competitiveness of graduates. Moreover, it allows educational institutions to implement best practices and teaching methods proven effective in leading countries worldwide.

Incorporating international education standards into the vocational training of automotive mechanics facilitates alignment of educational programs with global requirements and standards, enhancing mobility and competitiveness in the international labor market. It also ensures a higher quality of training, meeting current labor market demands and the technological advancements in the automotive industry.

One such standard is ISO 21001:2018, which specifies quality management system requirements for educational organizations. This standard aims to improve the educational process and learning outcomes by establishing transparent and effective quality management and control mechanisms. ISO 21001:2018 provides a framework for evaluating the quality of educational programs, teaching staff, and administrative processes.

Implementing ISO 21001 standards in the vocational training of automotive mechanics involves several key aspects:

1. Harmonization of training programs. Using international standards enables the development of educational programs that align with global requirements, thus preparing professionals who can work in any country where similar standards are upheld.

2. Improving the quality of education. ISO 21001 standards offer mechanisms for assessing and controlling the quality of the educational process, which contributes to raising the knowledge and skills levels of students.

3. Professional mobility. Through the alignment of educational programs with international standards, graduates can more easily obtain recognition of their qualifications abroad, thereby enhancing their competitiveness in the global labor market.

4. Development of Professional Competencies. International standards establish clear requirements for professional competencies, which promote the formation of contemporary skills and knowledge in future specialists.

An example of successfully implementing international standards in the training of automotive mechanics is the use of the ISO 21001 methodology in educational institutions across Europe and the United States. In these countries, automotive mechanics programs have been reviewed and adapted to meet ISO 21001 standards, leading to significant improvements in educational quality and alignment of educational processes with the current demands of the labor market.

Despite the evident advantages, the implementation of international educational standards presents certain challenges. Key among these are the need to adapt existing curricula to new requirements, ensure a sufficient level of instructor training, and secure substantial financial investment for modernizing educational institutions.

However, overcoming these challenges holds substantial promise for the development of the educational system. Specifically, the implementation of ISO 21001 standards can contribute to creating a more competitive labor market, enhancing specialist training levels, and ensuring a higher quality of education.

The integration of international educational standards, such as ISO 21001, into the vocational training of automotive mechanics is a crucial step toward enhancing educational quality and aligning

curricula with modern labor market requirements. This alignment promotes the harmonization of educational programs with global standards, ensuring workforce mobility and competitiveness on the international labor market. Despite the challenges, the implementation of international standards opens new avenues for advancing the educational system and preparing qualified specialists in automotive mechanics.

The modern labor market demands that automotive mechanics possess not only deep technical knowledge but also the ability to work with the latest technologies. This includes not only vehicle maintenance and repair but also diagnostics, vehicle management, and other systems (AutoWorld, 2024).

One significant trend is the use of advanced equipment and software in the educational process. For instance, educational institutions are increasingly integrating simulators, diagnostic complexes, and other tools into their programs, allowing students to acquire practical skills in settings that closely resemble real-world conditions. Additionally, the rise of electromobility and alternative energy sources imposes new requirements for training mechanics, who must now be familiar with electric motors, hybrid systems, and other cutting-edge technologies.

Developing professional competencies that meet modern labor market requirements involves not only technical knowledge and skills but also the cultivation of soft skills. These include communication, teamwork, critical thinking, and adaptability to change.

Employers, in particular, increasingly value specialists' ability to communicate effectively with clients and colleagues, quickly adapt to new environments and technologies, and work in multifunctional teams. Consequently, educational programs incorporate courses aimed at developing these skills and regularly conduct various training sessions and workshops (Business Inform, 2024).

The collaboration between educational institutions and automotive companies is a vital component of an effective educational process. This partnership enables students to gain practical experience in real workplaces, thus providing relevant knowledge and experience.

Many educational institutions, in particular, have signed agreements with car service centers, dealerships, and automobile manufacturers. These partnerships allow students not only to become acquainted with modern technologies and equipment but also to secure employment opportunities after

graduation. Additionally, companies often supply educational institutions with training equipment and materials and organize workshops and lectures for students.

Despite numerous positive trends, there are also challenges that must be addressed. For instance, the rapid pace of technological advancement necessitates continuous curriculum updates and instructor professional development. Furthermore, ensuring access to modern equipment and software for all students may require significant financial resources.

At the same time, the outlook for vocational training in automotive mechanics is optimistic. Integrating international standards, utilizing innovative technologies, developing professional competencies, and fostering collaboration with businesses contribute to the formation of highly qualified specialists who meet the demands of the modern labor market.

Current trends in vocational training for automotive mechanics focus on providing high-quality education, developing essential competencies, and preparing specialists capable of working with the latest technologies. Key aspects of this process include implementing international educational standards, using advanced equipment and software, fostering soft skills, and promoting business collaboration. These changes enable graduates of vocational (technical) education institutions to become globally competitive and ready to meet the challenges of the contemporary automotive industry (Vocational-Technical Education, 2024).

The vocational training of automotive mechanics is undergoing significant transformations due to global trends and technological progress. Considering the rapid development of the automotive industry, there is an increasing demand for specialists who possess not only technical knowledge but also skills in working with cutting-edge technologies (President of Ukraine, 2024). This article aims to highlight current trends in the preparation of specialists in this field, focusing on ensuring high-quality education, developing necessary competencies, and preparing competitive specialists.

Conclusions. The vocational training of automotive mechanics is a multifaceted process that encompasses technical instruction, personal development, adaptation to new technologies, and responding to market demands. This ensures sustainable growth in the automotive industry,

enhances vehicle safety and operational efficiency, and supports the economic stability of enterprises. Current trends in vocational training for automotive mechanics focus on ensuring high-quality education, developing essential competencies, and preparing specialists capable of working with the latest technologies. The key components of vocational training for automotive mechanics include

implementing international educational standards, using modern equipment and software, fostering soft skills, and promoting business partnerships. These changes make graduates of vocational (technical) education institutions more competitive on the global labor market and prepared to face the challenges of the modern automotive industry.

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СУЧАСНИЙ СТАН ПІДГОТОВКИ МЕХАНІКІВ АВТОМОБІЛЬНОГО ТРАНСПОРТУ В ЗАКЛАДАХ ПРОФЕСІЙНОЇ (ПРОФЕСІЙНО-ТЕХНІЧНОЇ) ОСВІТИ

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Реферат:

Актуальність статті обумовлена тим, що професійна підготовка механіків автомобільного транспорту є надзвичайно важливою в сучасних умовах, коли автомобільна індустрія зазнає швидких і значних змін. Зростання технологічного прогресу, впровадження новітніх технологій (електромобілі, гібридні автомобілі, автономні транспортні засоби) створює нові виклики і вимоги до підготовки фахівців.

Мета: аналіз сучасного стану і тенденцій професійної підготовки механіків автомобільного транспорту в закладах професійної (професійно-технічної) освіти.

Методи: теоретичний аналіз наукових праць, вивчення вимог нормативно-правової бази, навчально-плануючої документації – для визначення рівня розробленості проблеми та напрямів подальших наукових досліджень; порівняння – для вивчення різних наукових підходів до вирішення проблеми; аналіз і синтез – для з'ясування тенденцій розвитку професійної підготовки механіків автомобільного транспорту та обґрунтування змісту формування їх професійної компетентності.

Результат: визначено основні проблеми підготовки майбутніх механіків автотранспортної галузі на рівні загальних положень педагогіки, психології та дидактики; схарактеризовано основні дидактичні та інноваційні аспекти формування професійної компетентності майбутніх механіків автомобільного транспорту.

Висновки: охарактеризовано сутність професійної підготовки механіків автомобільного транспорту (багатогранний процес, що передбачає навчання технічним аспектам, розвиток особистісних якостей, адаптацію до нових технологій і вимог ринку праці); визначено його призначення (сталий розвиток автомобільної індустрії, підвищення безпеки й ефективності експлуатації транспортних засобів, сприяння економічній стабільності підприємств); виявлено сучасні тенденції професійної підготовки механіків автомобільного транспорту (орієнтація на підвищення якості освіти, розвиток затребуваних цифровими ринком праці компетентностей, підготовка фахівців, здатних працювати з новітніми виробничими технологіями); виявлено основні шляхи підвищення конкурентності випускників закладів професійної (професійно-технічної) освіти на глобальному ринку праці та їх готовності до викликів сучасної індустрії автомобільного транспорту (впровадження міжнародних стандартів освіти, готовність до використання сучасного обладнання та програмного забезпечення, розвиток м'яких навичок, співпраця з бізнесом, здатність до безперервної освіти і професійного розвитку).

Ключові слова: *автомобільний транспорт, майбутній механік автомобільного транспорту, професійна компетентність, компетентнісний підхід, здобувачі освіти.*

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