

### 3. Educational program

#### 3.1. Profile of the educational program in the specialty 073 «Management» (specialization «Business management»)

*Head of the project team (guarantor of the educational program)*

*Candidate of Economic Sciences (PhD in Economics), Associate Professor  
Pidkaminnyi I.M.*

| <b>1 – General information</b>   |   |
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| <b>Full name of IHE and structural subdivision</b>   | Kyiv National University of Trade and Economics,<br>Faculty of Economics, management and psychology,<br>Department of Management  |
| <b>The degree of higher education and the name of the qualification in the language of the original</b>  | The degree of higher education «bachelor»<br>specialty «Management»<br>specialization «Business management»   |
| <b>The official name of the educational program</b>  | «Business management»   |
| <b>Type of diploma and volume of educational program</b>   | Bachelor's degree, unitary, 240 ECTS credits,<br>term of training 3 years 10 months   |
| <b>Availability of accreditation</b>   | The certificate of accreditation issued by the Ministry of education and science of Ukraine (Ukraine) valid up to July 01, 2024 in accordance with the order of MES of Ukraine dated 19.12.2016, No. 1565 |
| <b>Cycle / Level</b>   | NQF of Ukraine – level 6,<br>FQ-EHEA – first cycle,<br>EQF-LLL – level 6.   |
| <b>Prerequisites</b>   | <ul style="list-style-type: none"> <li>- complete secondary education;</li> <li>- the rules of admission to the program are regulated by the rules of admission to KNUTE</li> </ul>                       |
| <b>Language(s) of teaching</b>   | Ukrainian   |
| <b>The validity of the educational program</b>   | Valid up to July 01, 2024   |
| <b>Internet address of the permanent placement of the educational program description</b>  | <a href="https://knute.edu.ua">https://knute.edu.ua</a>   |
| <b>2 – The purpose of the educational program</b>  |   |
| Training of specialists capable on the basis of mastering the basic management concepts and principles to implement professional business management activities aimed to form an effective management system in a turbulent environment in order to make effective management decisions. |   |
| <b>3 - Characteristics of the educational program</b>  |   |
| <b>Subject area (branch of knowledge, specialty,</b>   | Branch of Knowledge 07 «Management and Administration»<br>Specialty 073 «Management»,<br>Specialization «Business management»   |

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| <b>specialization)</b>  |   |
| <b>The educational program orientation</b>                              | Educational-professional, applied, research.<br>The program consists of disciplines of social and humanitarian, fundamental natural science, professional and practical training.<br>The program is aimed at studying modern methods of enterprise management and at developing of skills to create and manage business in any type of economic activity in an unstable environment.  |
| <b>The main focus of the educational program and specialization</b>     | Formation of a set of theoretical knowledge and skills to solve complex problems and practical problems in the field of professional activity with the use of modern theories and methods of business management.<br>Key words: organization, management, business, management decisions, business strategy, strategic enterprise management, innovation, risk management.  |
| <b>Features of the program</b>  | The cycle of general and practical training includes disciplines, which allow students to master the theoretical knowledge and practical skills for the functioning and development of an effective business management system.   |
| <b>4 – Eligibility of graduates for employment and further training</b> |   |
| <b>Eligibility for employment</b>                                       | The graduate is eligible for employment and work in accordance with the National Classifier of Ukraine "Classifier of occupations" DK 003: 2010, in particular:<br>1475.4 Supply Manager, Sales Manager.<br>1496 Social and Corporate responsibility Manager<br>2412.2 Labor Market Analyst<br>2419.2 Enterprise Performance Specialist.<br>2419.2 Public Procurement Specialist.<br>2419.2 Commodity market research Analyst.<br>3114 Information Communications Specialist.<br>3411 Corporate Governance Specialist.<br>3413 Real Estate Agent.<br>3429 Business and Advertising services Specialist.<br>3436.3 Assistant Manager of a small business without management.<br>3436.1 Assistant of the General Manager (CEO) of the enterprise (institution, company).<br>3436.1 Assistant of the Head of the department (division).<br>Professions, job titles are eligible for work in accordance with the current edition of International Standard Classification of Occupations 2008 (ISCO-08):<br>1223 Research and Development Managers<br>1229 Production and Operations Department Managers Not Elsewhere Classified<br>1227 Production and Operations Department Managers in Business Services<br>1237 Research and Development Department Managers<br>1222 Production and Operations Department Managers in Manufacturing<br>2421 Management and Organization Analysts.<br>2419 Business Professionals Not Elsewhere Classified<br>Under the conditions of gaining relevant experience it can be adapted to the following areas of related professional activities: economic, marketing, external economic, education, research. |
| <b>Further training</b>   | Have the right to continue their studies at the second (master's) level of  |

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|                                    | higher education according to the second cycle program FQ-EHEA, EQF-LLL - level 7, NQF of Ukraine - level 7.   |
| <b>5 – Teaching and evaluation</b> |  |
| <b>Teaching and learning</b>       | Teaching course is focused on student-centered, problem-oriented learning and self-learning. The Combined approach to learning is used: combination of traditional and non-traditional teaching methods using thematic, problem-oriented, review lectures, including lectures-conferences with the participation of practitioners, conducting and application of presentations, discussions, case-study method with solving real tasks, calculation-analytical and situational tasks; work in small groups, extracurricular work of students, preparation of term papers, industrial practices (including educational training), teachers' consultations.  |
| <b>Evaluation</b>                  | <b>Types of evaluation:</b> current, final evaluating the learning outcomes.<br><b>Methods of evaluation:</b> oral and written interviews (polls), tests and individual tasks, analytical and situational exercises, essays, digests, defense of individual and team projects, reports on internships, written exams, final certification (defense of the final qualification work), etc.<br>The assessment is carried out in accordance with the "regulations on evaluating the learning outcomes of students and postgraduates" and "regulations on the organization of the educational process of students" in KNUTE.   |
| <b>6 – Program competencies</b>    |  |
| <b>Integral competence</b>         | Ability to solve the complex tasks and practical problems in the process of professional activity or training in the field of <i>business management</i> and/or in the course of training, transferring the theory and methods of social and behavioral sciences.  |
| <b>General competencies (GC)</b>   | <b>GC 1.</b> Ability to realize their rights and responsibilities as a member of society, to understand the values of a free democratic society and the need of ensuring sustainable development of Ukraine, the rule of law, the rights and freedoms of the people and the community in Ukraine.<br><b>GC 2.</b> Ability to preserve and increase moral, cultural, scientific values and increase the achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and the development of society, equipment and technologies, to use different types and forms of physical activity for active recreation and healthy living.<br><b>GC 3.</b> Ability to abstract thinking, analysis, synthesis.<br><b>GC 4.</b> Ability to apply knowledge in practice.<br><b>GC 5.</b> Knowledge and understanding of the subject area and professional activity.<br><b>GC 6.</b> Ability to communicate in the state language both orally and in writing.<br><b>GC 7.</b> Ability to communicate in a foreign language.<br><b>GC 8.</b> Skills in the use of information and communication technologies.<br><b>GC 9.</b> Ability to learn and master modern knowledge.<br><b>GC 10.</b> Ability to conduct research at the appropriate level.<br><b>GC 11.</b> Ability to adapt and act in a new situation.<br><b>GC 12.</b> Ability to generate new ideas (creativity). |

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|  | <p><b>GC 13.</b> Appreciation and respect for diversity and multiculturalism.</p> <p><b>GC 14.</b> Ability to work in an international environment.</p> <p><b>GC 15.</b> Ability to act on the basis of ethical considerations (motives).</p>  |
| <b>Professional competencies of the specialty (PC)</b> | <p><b>PC 1.</b> Ability to identify and describe the characteristics of the organization.</p> <p><b>PC 2.</b> Ability to analyze the results of the organization, to compare them with the factors of external and internal environment.</p> <p><b>PC 3.</b> Ability to determine the prospects for the development of the organization.</p> <p><b>PC 4.</b> Ability to identify functional areas of the organization and the relationships between them.</p> <p><b>PC 5.</b> Ability to manage the organization and its departments through the implementation of management functions.</p> <p><b>PC 6.</b> Ability to act socially, responsibly and consciously.</p> <p><b>PC 7.</b> Ability to choose and use modern management tools.</p> <p><b>PC 8.</b> Ability to plan the activities of the organization and use time management tools.</p> <p><b>PC 9.</b> Ability to work in a team and establish interpersonal interaction in solving professional problems.</p> <p><b>PC 10.</b> Ability to evaluate the work performed, ensure its quality and motivate the staff of the organization.</p> <p><b>PC 11.</b> Ability to create and organize effective communications in the management process.</p> <p><b>PC 12.</b> Ability to analyze and structure the problems of the organization, to make reasonable decisions.</p> <p><b>PC 13.</b> Understand the principles and norms of law and use them in professional activities.</p> <p><b>PC 14.</b> Understand the principles of psychology and use them in professional activities.</p> <p><b>PC 15.</b> Ability to form and demonstrate leadership qualities and behavioral skills.</p> <p><i>PC 16. Ability to generate business ideas and turn them into innovative business models.</i></p> <p><i>PC 17. Ability to make operational and strategic decisions in business.</i></p> <p><i>PC 18. Ability to manage risks in a changing environment.</i></p> |
| <b>7 – Program learning outcomes (PLO)</b>             |  |
|  | <p><b>PLO 1.</b> Know your rights and responsibilities as a member of society, be aware of the values of civil society, the rule of law, human and civil rights and freedoms in Ukraine.</p> <p><b>PLO 2.</b> Preserve moral, cultural, scientific values and increase the achievements of society, use different types and forms of physical activity to lead a healthy lifestyle.</p> <p><b>PLO 3.</b> Demonstrate knowledge of theories, methods and functions of management, modern concepts of leadership.</p> <p><b>PLO 4.</b> Demonstrate skills to identify problems and justify management decisions.</p> <p><b>PLO 5.</b> Describe the content of the functional areas of the organization.</p> <p><b>PLO 6.</b> Demonstrate skills of search, collection and analysis of information, calculation of indicators to justify management decisions.</p>  |

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|  | <p><b>PLO 7.</b> Demonstrate organizational design skills.</p> <p><b>PLO 8.</b> Apply management methods to ensure the effective activity of the organization.</p> <p><b>PLO 9.</b> Demonstrate skills of interaction, leadership, teambuilding work.</p> <p><b>PLO 10.</b> Have the skills to justify effective tools to motivate the organization's staff.</p> <p><b>PLO 11.</b> Demonstrate skills of situation analysis and communication in different areas of activity of the organization.</p> <p><b>PLO 12.</b> Evaluate the legal, social and economic consequences of the organization.</p> <p><b>PLO 13.</b> Speak and write in state and foreign languages.</p> <p><b>PLO 14.</b> Identify the causes of stress, adapt yourself and team members to a stressful situation, find ways to neutralize it.</p> <p><b>PLO 15.</b> Demonstrate the ability to act socially responsibly and socially consciously on the basis of ethical considerations (motives), respect for diversity and interculturalism.</p> <p><b>PLO 16.</b> Demonstrate skills of extracurricular work, flexible thinking, openness to new knowledge, be critical and self-critical.</p> <p><b>PLO 17.</b> Perform research individually and / or in a group under the guidance of a leader.</p> <p><b>PLO 18.</b> <i>Demonstrate the ability to analyze and calculate economic and non-economic indicators of the enterprise.</i></p> <p><b>PLO 19.</b> <i>Demonstrate the ability to design innovation processes (target formation, planning, organizational structure, incentives, control).</i></p> <p><b>PLO 20.</b> <i>Demonstrate the ability to develop plans and strategies for creating and developing a business in a challenging environment.</i></p> |
| <b>8 – Resource support for the program implementation</b> |   |
| <b>Personnel support</b>                                   | <p>The Department of management of KNUTE is responsible for training and graduation of specialists. The head of the department has the degree of Doctor of Science and the academic title of Professor.</p> <p>96% of lecturers who provide the process of learning bachelors in the educational program "Business Management" have a degree and / or academic title.</p> <p>Employment contracts have been signed with all scientific and pedagogical workers.</p> <p>The participation of foreign specialists and practitioners in the teaching of disciplines of the training cycle is possible.</p>   |
| <b>Material and technical support</b>                      | <p>Availability of premises for conducting training sessions and control activities – 4 m<sup>2</sup> per person.</p> <p>60% of classrooms are equipped with multimedia equipment. There is a specialized computer class with modern hardware and software resources that provide high-quality bachelor's degree training in the educational program.</p> <p>KNUTE infrastructure: libraries, including a reading room, food outlets, assembly hall, sports halls, Stadium, Medical Center, dormitories.</p>  |
| <b>Information, teaching and methodological support</b>    | <p>General scientific and special sources of information on trade management, educational, methodological and monographic literature, information resources of the distance learning system and the Internet.</p>   |

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|   | <p>There is access to databases of periodicals in English of a corresponding or related profile (it is allowed to share the databases with several educational institutions).</p> <p>There is an official website of KNUTE, which contains basic information about its activities (structure, licenses and certificates of accreditation, educational / Educational-Scientific / Publishing / attestation (scientific personnel) activities, educational and scientific structural divisions and their composition, list of academic disciplines, admission rules, contact information): <a href="https://knute.edu.ua">https://knute.edu.ua</a></p> <p>The Department of distance learning support of KNUTE has educational and methodological materials on the academic disciplines of the curriculum: <a href="http://dist.knute.edu.ua/">http://dist.knute.edu.ua/</a></p> |
| <b>9 – Academic mobility</b>                            |  |
| <b>National Credit Mobility</b>                         | <p>Short-term training of students of all educational levels (except for bachelors of the first year of study) in pre-defined courses with credits in universities of Erasmus + member countries with mandatory recognition of learning outcomes (credit transfer) for a period of 3 months (minimum) to 12 months (maximum).</p> <p>For internship / practice - from 2 to 12 months.</p>  |
| <b>International Credit Mobility</b>                    | <p>International credit mobility is implemented by concluding agreements on international academic mobility Erasmus + option K1 / credit mobility, on double graduation, on long-term international projects that provide for the training of students and the issuance of a double diploma, etc.</p>  |
| <b>Teaching foreign applicants for higher education</b> | <p>Conditions and features of the educational program in the context of teaching foreign citizens: knowledge of the Ukrainian language at a level not lower than B1.</p>   |

### 3.2. The list of components of the educational program and their logical consistency.

#### 3.2.1. List of EP components

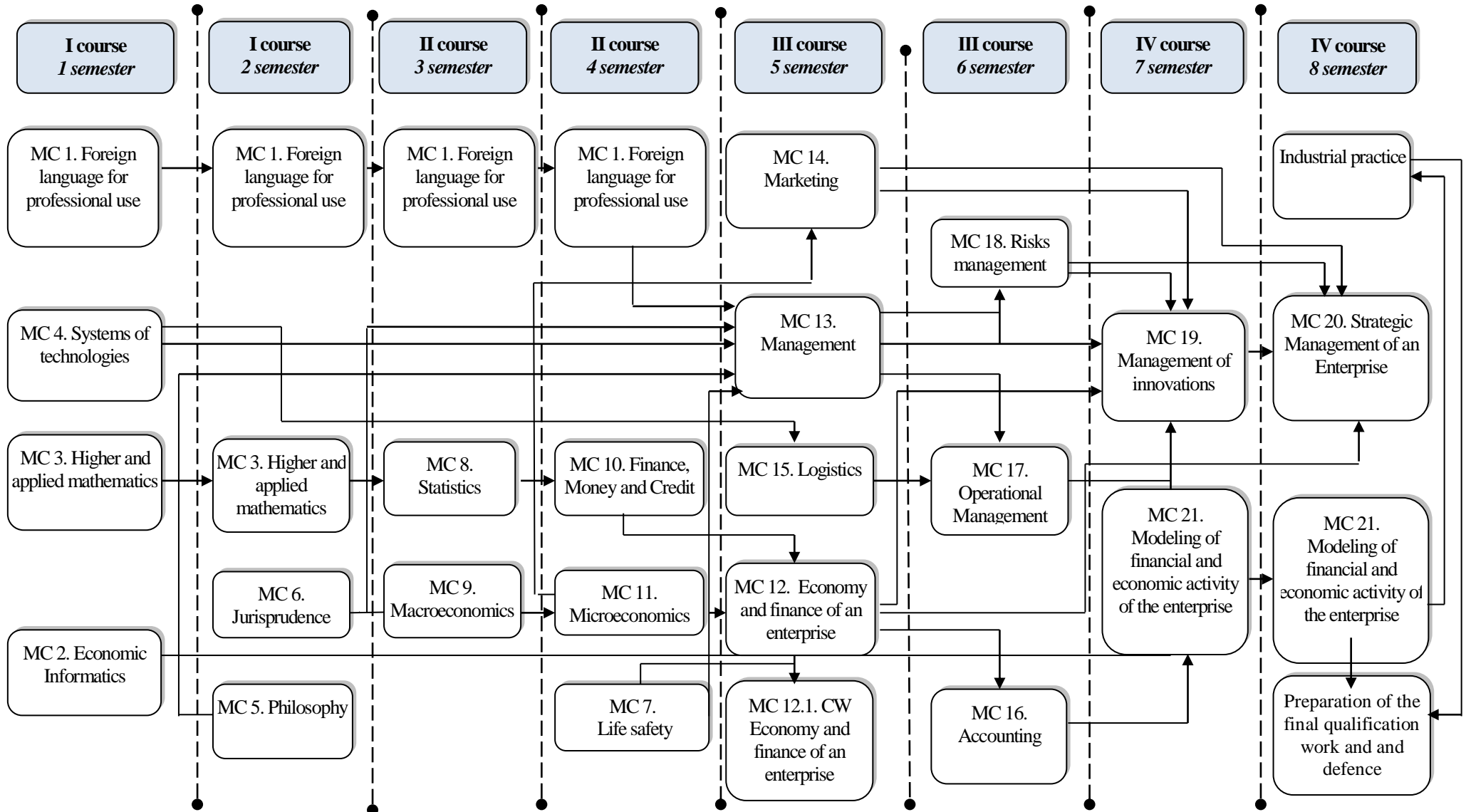
| Code n/o                          | Components of the educational program<br>(educational disciplines, course projects (works), practices,<br>qualifying exam,<br>final qualification work) | Number of<br>credits |
|-----------------------------------|---|----------------------|
| 1                                 | 2   | 3                    |
| <b>Mandatory components of EP</b> |   |                      |
| MC 1                              | Foreign language for professional use   | 24                   |
| MC 2                              | Economic Informatics  | 6                    |
| MC 3                              | Jurisprudence   | 6                    |
| MC 4                              | Systems of technologies   | 6                    |
| MC 5                              | Theory of organizations   | 6                    |
| MC 6                              | Philosophy  | 6                    |
| MC 7                              | Entrepreneurial Law   | 6                    |
| MC 8                              | Statistics  | 6                    |
| MC 9                              | Macroeconomics  | 6                    |
| MC 10                             | Psychology  | 6                    |
| MC 11                             | Enterprise Foreign Economic Activity  | 6                    |
| MC 12                             | Microeconomics  | 6                    |

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| MC 13  | Economy and finance of an enterprise                          | 6          |
| MC 13.1  | CW on Economy and finance of an enterprise                    |            |
| MC 14  | Management  | 6          |
| MC 15  | Marketing   | 6          |
| MC 16  | Logistics   | 6          |
| MC 17  | Accounting  | 4,5        |
| MC 18  | Risk management   | 6          |
| MC 19  | Business Planning   | 4,5        |
| MC 20  | Management of innovations                                     | 6          |
| MC 21  | Strategic Management of an Enterprise                         | 6          |
| MC 22  | Modeling of financial and economic activity of the enterprise | 9          |
| <b>The total amount of mandatory components:</b> |   | <b>150</b> |
| <b>Selective program components</b>              |   |            |
| SC 1   | State Regulation of the economy                               | 6          |
| SC 2   | Ecology   | 6          |
| SC 3   | Economy of Ukraine  | 6          |
| SC 4   | Econometrics  | 6          |
| SC 5   | Economic analysis   | 6          |
| SC 6   | Spatial Economics   | 6          |
| SC 7   | Economic Statistics   | 6          |
| SC 8   | Market statistics of goods and services                       | 6          |
| SC 9   | Statistics of quality   | 6          |
| SC 10  | Antimonopoly regulation of Industry Market                    | 6          |
| SC 11  | Design  | 6          |
| SC 12  | International Economic Relations                              | 6          |
| SC 13  | Customs   | 6          |
| SC 14  | World market of goods and services                            | 6          |
| SC 15  | Finance, Money and Credit                                     | 6          |
| SC 16  | Analysis of economic activity                                 | 6          |
| SC 17  | Audit   | 6          |
| SC 18  | Banking   | 6          |
| SC 19  | Business technologies   | 6          |
| SC 20  | Intereconomic control   | 6          |
| SC 21  | Public administration and local self-government               | 6          |
| SC 22  | Operational Management  | 6          |
| SC 23  | Tax system  | 6          |
| SC 24  | Social responsibility of business                             | 6          |
| SC 25  | Franchising   | 6          |
| SC 26  | HR-management   | 6          |
| SC 27  | Business security   | 6          |
| SC 28  | Controlling   | 6          |
| SC 29  | Technology of start up development                            | 6          |
| SC 30  | Public procurement management                                 | 6          |
| SC 31  | Managerial accounting   | 6          |
| SC 32  | Economic Law  | 6          |
| SC 33  | Labor Law   | 6          |
| SC 34  | E- document management  | 6          |
| SC 35  | E-commerce  | 6          |
| SC 36  | Internet technologies in business                             | 6          |
| SC 37  | Digital technologies in business                              | 6          |

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| SC 38   | Conflictology and Psychology of business communication   | 6          |
| SC 39   | Foreign Language   | 12         |
| SC 40   | Life safety  | 6          |
| SC 41   | Business correspondence                                  | 6          |
| SC 42   | Diplomatic protocol and etiquette                        | 6          |
| SC 43   | History of economics and economic thought                | 6          |
| SC 44   | History of Ukraine                                       | 6          |
| SC 45   | History of Ukrainian culture                             | 6          |
| SC 46   | Aesthetics   | 6          |
| SC 47   | Business Ethics  | 6          |
| SC 48   | Cultural heritage of Ukraine                             | 6          |
| SC 49   | Logic  | 6          |
| SC 50   | National interests in world geopolitics and geoeconomics | 6          |
| SC 51   | Elocution  | 6          |
| SC 52   | Political Science  | 6          |
| SC 53   | Religious studies  | 6          |
| SC 54   | World Culture  | 6          |
| SC 55   | Social leadership  | 6          |
| SC 56   | Sociology  | 6          |
| SC 57   | The Ukrainian language (for professional use)            | 6          |
| <b>Total Amount of Selective Components:</b>                |  | <b>72</b>  |
| <b>Practical training</b>                                   |  |            |
| Industrial practice 1                                       |  | 3          |
| Industrial practice 2                                       |  | 6          |
| <b>Total</b>  |  | <b>9</b>   |
| <b>Certification</b>  |  |            |
| Preparation for Certification                               |  | 3          |
| Preparation of the final qualification work and and defence |  | 6          |
| <b>Total</b>  |  | <b>9</b>   |
| <b>TOTAL AMOUNT OF THE EDUCATIONAL PROGRAM</b>              |  | <b>240</b> |



### 3.2.2. Structural and logical scheme of EP



### **3.3. Form of certification of higher education applicants**

Certification of graduates of the educational program for the specialty 073 "Management" specialization "Business Management" is carried out in the form of qualification work, preparation for certification and defense and ends with the issuance of a document of an established standard for awarding him a bachelor's degree with a qualification degree of higher education «Bachelor» specialty "Management" specialization "Business Management".

The certification is carried out openly and publicly.

### 3.4.1. Matrix of compliance of program competencies to the mandatory components of the educational program

| Components EP                    |    | MC 1 | MC 2 | MC 3 | MC 4 | MC 5 | MC 6 | MC 7 | MC 8 | MC 9 | MC 10 | MC 11 | MC 12 | MC 13 | MC 14 | MC 15 | MC 16 | MC 17 | MC 18 | MC 19 | MC 20 | MC 21 | MC 22 |   |
|----------------------------------|----|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| Competencies                     |    |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| <i>General competencies</i>      | 1  |      |      | +    |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|                                  | 2  |      |      |      |      |      | +    |      |      | +    |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|                                  | 3  |      |      |      |      |      | +    |      |      |      |       |       | +     | +     | +     | +     |       | +     |       | +     | +     | +     | +     |   |
|                                  | 4  | +    |      |      |      |      |      |      |      | +    | +     |       | +     | +     |       |       |       |       |       |       |       |       | +     |   |
|                                  | 5  |      |      |      |      | +    |      |      |      | +    |       |       | +     | +     | +     |       |       |       |       |       |       |       |       |   |
|                                  | 6  |      |      | +    |      | +    | +    |      |      |      |       |       |       |       | +     |       |       |       |       |       |       |       |       |   |
|                                  | 7  | +    |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
|                                  | 8  |      | +    |      | +    |      |      |      |      |      |       |       |       |       | +     | +     | +     | +     | +     | +     |       | +     | +     |   |
|                                  | 9  |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |       |       | +     | +     |   |
|                                  | 10 |      | +    |      |      |      |      |      |      | +    |       |       |       | +     |       | +     |       |       |       |       |       | +     | +     | + |
|                                  | 11 |      |      |      |      |      |      |      |      |      | +     |       |       |       | +     |       |       |       |       |       |       | +     | +     |   |
|                                  | 12 |      |      |      |      |      |      |      |      |      |       |       |       | +     | +     |       |       |       |       |       |       | +     | +     |   |
|                                  | 13 | +    |      | +    |      | +    |      |      |      |      | +     |       |       |       | +     |       |       |       |       |       |       |       |       |   |
|                                  | 14 | +    |      |      |      |      |      |      |      |      |       | +     |       |       | +     |       |       |       |       |       |       |       |       |   |
|                                  | 15 |      |      |      |      | +    |      |      |      |      | +     |       |       |       | +     |       |       | +     |       |       |       | +     |       |   |
| <i>Professional competencies</i> | 1  |      |      |      |      | +    |      |      |      |      |       |       |       | +     |       |       |       |       |       |       |       |       | +     |   |
|                                  | 2  |      |      |      |      |      |      |      | +    |      | +     |       |       | +     |       |       |       | +     | +     |       |       | +     | +     |   |
|                                  | 3  |      |      |      |      |      |      |      |      |      |       |       |       | +     |       |       |       |       |       |       |       | +     | +     |   |
|                                  | 4  |      |      |      |      |      |      |      |      |      |       |       |       | +     | +     |       |       |       | +     |       |       |       | +     |   |
|                                  | 5  |      |      |      |      |      |      |      |      |      |       |       |       |       | +     |       |       |       |       |       |       |       | +     |   |
|                                  | 6  |      |      |      |      | +    |      |      |      |      |       |       |       |       | +     |       |       |       |       |       |       |       |       |   |
|                                  | 7  |      |      |      |      |      |      |      |      |      |       |       |       |       | +     |       |       |       | +     |       | +     | +     |       |   |
|                                  | 8  |      |      |      |      |      |      |      |      |      |       |       |       |       | +     | +     |       | +     |       |       |       | +     |       |   |
|                                  | 9  |      |      |      |      | +    |      |      |      |      | +     |       |       |       | +     |       |       | +     |       |       |       |       |       |   |
|                                  | 10 |      |      |      |      |      |      |      |      |      |       |       |       |       | +     | +     |       |       |       |       |       | +     |       |   |
|                                  | 11 |      |      |      |      | +    |      |      |      |      |       |       |       |       | +     | +     |       |       |       |       |       | +     |       |   |
|                                  | 12 |      |      |      |      |      |      |      |      |      |       |       |       |       | +     | +     |       |       |       |       |       | +     | +     |   |
|                                  | 13 |      |      |      |      |      |      |      | +    |      |       |       |       |       |       |       |       |       | +     |       |       | +     | +     |   |
| 14                               |    |      |      |      |      |      |      |      |      | +    |       |       |       |       |       |       |       |       |       |       |       |       |       |   |
| 15                               |    |      |      |      | +    |      |      |      |      | +    |       |       |       |       |       |       |       |       |       |       |       | +     |       |   |
| 16                               |    |      |      | +    |      |      |      |      |      |      |       |       |       |       |       | +     |       |       |       |       | +     | +     |       |   |
| 17                               |    |      |      |      |      |      |      |      |      |      |       |       | +     | +     | +     | +     |       |       |       |       | +     | +     |       |   |
| 18                               |    |      |      |      |      |      |      |      |      |      |       |       |       | +     |       |       |       | +     | +     |       |       |       |       |   |



**3.5.1. Matrix for providing program learning outcomes with mandatory components of the educational program**

| Components<br>Program learning outcomes | MC1 | MC2 | MC3 | MC4 | MC5 | MC6 | MC7 | MC8 | MC9 | MC10 | MC11 | MC12 | MC13 | MC14 | MC15 | MC16 | MC17 | MC18 | MC19 | MC20 | MC21 | MC22 |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 01                                      |     |     | +   |     |     |     | +   |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 02                                      |     |     |     |     |     | +   |     |     |     |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 03                                      |     |     |     |     | +   |     |     |     |     |      |      |      |      | +    |      |      |      |      |      |      | +    | +    |
| 04                                      |     |     |     |     |     |     |     |     | +   |      | +    |      |      | +    | +    |      | +    | +    | +    | +    | +    | +    |
| 05                                      |     |     |     |     | +   |     |     |     |     |      |      |      | +    | +    |      |      |      |      |      |      |      | +    |
| 06                                      |     | +   | +   |     |     |     |     | +   |     | +    | +    | +    | +    | +    | +    | +    |      | +    | +    | +    | +    | +    |
| 07                                      |     |     |     |     | +   |     |     |     |     |      |      |      |      | +    |      |      |      |      |      |      | +    | +    |
| 08                                      |     |     |     | +   | +   |     |     |     |     |      |      |      | +    | +    |      |      |      |      | +    | +    | +    |      |
| 09                                      |     |     |     |     | +   |     |     |     |     | +    |      |      |      | +    |      |      |      |      |      |      | +    | +    |
| 10                                      |     |     |     |     |     |     |     |     |     |      |      |      |      | +    |      |      |      |      |      |      | +    | +    |
| 11                                      |     |     |     |     |     |     |     |     |     | +    |      | +    |      | +    | +    |      |      |      | +    | +    | +    | +    |
| 12                                      |     |     |     |     |     |     | +   |     | +   |      | +    | +    | +    | +    |      | +    | +    | +    | +    | +    | +    | +    |
| 13                                      | +   |     |     |     |     |     |     |     |     |      |      |      |      | +    |      |      |      |      |      |      |      | +    |
| 14                                      |     |     |     |     |     |     |     |     |     | +    |      |      |      | +    |      |      |      |      | +    |      |      |      |
| 15                                      |     |     |     |     |     |     |     |     |     |      |      |      |      | +    |      |      |      |      |      |      |      |      |
| 16                                      |     |     |     |     |     | +   |     |     |     |      |      |      |      | +    | +    |      |      | +    |      | +    | +    |      |
| 17                                      |     | +   |     | +   | +   |     |     |     |     |      |      |      |      | +    | +    |      |      | +    | +    | +    | +    |      |
| 18                                      |     |     |     |     |     |     |     | +   |     |      |      |      |      |      |      |      |      |      |      |      |      | +    |
| 19                                      |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      | +    |      |      | +    |      |
| 20                                      |     |     |     |     |     |     |     |     |     |      |      |      |      |      |      |      |      | +    |      |      | +    | +    |



