Ministry of Agriculture of the Republic of Kazakhstan
Non-Commercial Joint Stock Company «S. Seifullin Kazakh Agrotechnical Research University»

APPROVED
Chairman of the Board – Rector
NCJSC «Saken Seifullin Kazakh
Agrotechnical Research University»
__________ M.K. Tireuov
Protocol No. 18 dated 04 2025

EDUCATIONAL PROGRAM

7M04118 «Accounting and Business Analytics»

Code and Classification of the Field of Education: 7M04 Business, Management, and Law

Code and Classification of the Study Program: 7M041 Business and Management

Code according to the International Standard Classification of Education (ISCED): 0410
Degree awarded:: Master of Business and Management in the educational program «7M04118-Accounting and Business Analytics»

Astana 2025

Academic Committee:

№	Full Name	Academic Degree, Title	Position	Place of Work	Signature
1	A.K. Baidakov	Candidate of Economic Sciences, Professor	Acting Professor of the Department of Accounting and Finance, Committee Chair	Saken Seifullin KATRU	
2	Shaikenova N.T.	PhD	Associate Professor of the Department of Accounting and Finance	Saken Seifullin KATRU	
3	Yesetov O.O.	Master of Economics	Head of Internal Audit Service	JSC "KEGOC"	
4	Alieva V. I.	Candidate of Philological Sciences	Chairperson of the Board	Public Association "League of Professional Accountants"	
5	Nurushev S. H.	Master of Economics	Accountant, graduate of the educational program of 2024	"School-Lyceum No. 93" of Astana	
6	Bazarbai A.K.		1st year Master's student of the educational program 7M04118 "Accounting and Business Analytics"	Saken Seifullin KATRU	

The educational program has been endorsed by employer representatives:

№	Full Name	Position	Place of Work	Signature and Seal
1	Aliyeva V.I	Chairperson of the Board	PA «League of Professional Accountants»	

The Academic Committee was approved by the order of the Chairman of the Board – Rector of the NJSC "Saken Seifullin Kazakh Agrotechnical Research University" No. 1.8.1-3/435-н dated 12 December 2024.

Educational Program 7M04118 "Accounting and business analytics":

Reviewed:
at the meeting of the Department of Accounting and Finance, minutes No. 8 dated 03.02 2025.

at the meeting of the Faculty Academic Quality Council, minutes No. 8 dated 05.03 2025.

at the meeting of the University Academic Council, minutes No. 7 dated 19.03 2025.

Date of the latest update of the Educational Program Passport: July 24, 2025

Content

1. Regulatory references

The development of the educational program refers to the following regulatory legal acts:

1. Constitution of the Republic of Kazakhstan;
2. Labor Code of the Republic of Kazakhstan;
3. Law of the Republic of Kazakhstan "On Education";
4. "State Compulsory Standards of Higher and Postgraduate Education," approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022, No. 2 (hereinafter – SCHE);
5. "Rules for Organizing the Educational Process Using Credit Technology in Higher and Postgraduate Education Institutions," approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated April 20, 2011, No. 152;
6. "Model Rules for the Activities of Higher and Postgraduate Education Institutions," approved by the Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 30, 2018, No. 595;
7. "Qualification Requirements for Educational Activities of Organizations Providing Higher and/or Postgraduate Education, and the List of Documents Confirming Compliance," approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated January 5, 2024, No. 4;
8. Order of the Minister of Education and Science of the Republic of Kazakhstan dated March 20, 2015, No. 137 "On Approval of Requirements for Educational Organizations Regarding the Provision of Distance Learning and Rules for Organizing the Educational Process in Distance and Online Learning Forms for Higher and/or Postgraduate Educational Programs";
9. Guidelines for the Use of the European Credit Transfer and Accumulation System (ECTS);
10. Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG);
11. Guidelines for the Development of Higher and Postgraduate Educational Programs, Appendix 1 to the Order of the Director of the National Center for Higher Education Development of the Ministry of Science and Higher Education of the Republic of Kazakhstan dated May 4, 2023, No. 601 n/q;
12. "Rules for Maintaining the Register of Educational Programs Implemented by Higher and/or Postgraduate Education Institutions, as well as the Grounds for Inclusion and Exclusion from the Register," approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated October 12, 2022, No. 106;
13. Professional Standard "Accountant," approved by the Order of the Minister of Finance of the Republic of Kazakhstan dated December 29, 2023, No. 1340;
14. Sectoral Qualifications Framework "Financial and Economic Activity: Accounting, Audit, and Taxation," approved by the Minutes of the Sectoral Council on Professional Qualifications in Accounting and Financial Reporting dated November 8, 2024, No. 4;

2. Passport of the Educational Program

2.1 The purpose of the educational program

The goal of the educational program is to train Master of Business and Management students with a high level of competence in accounting and data analysis for making managerial decisions in business.

The 7M04118 Accounting and Business Analytics educational program is a new generation program that has been developed in accordance with the needs of the labor market, based on the State Compulsory Standard for Postgraduate Education in the Republic of Kazakhstan, the National Qualifications Framework, the Dublin Descriptors, and the European Qualifications Framework. When developing the educational program, the requirements of the Accountant Training Center were taken into account (Order No. 1340 of the Minister of Finance of the Republic of Kazakhstan dated December 29, 2023); Sectoral Qualifications Framework "Financial and Economic field of activity: Accounting, Auditing and Taxation" (Protocol No. 4 of the Sectoral Council for Professional Qualifications in Accounting and Financial Reporting dated November 8, 2024); requirements of the International Education Standard IES 2 "Content of Professional Accounting Education Programs" of the International Federation of Accountants and the ACCA (Association of Chartered Certified Accountant) Program of the Association

List of Professional Standards (PS) and Sectoral Qualifications Frameworks (SQF) Relevant to the Professional Activities of Graduates Who Have Completed the Educational Program

N	Name of SQF / PS, Approval Date	Key types of occupations and professions
1	SQF “Financial and Economic Activities: Accounting, Auditing, and Taxation”, Minutes No. 4 dated November 8, 2024 (Level 7 of SQF)	Head of Accounting (Chief Accountant), Chief Auditor
2	Professional Standard “Accountant”, Order No. 1340 dated December 29, 2023 (Level 7 of SQF)	Accounting Manager (Chief Accountant) (other possible job titles: Chief Accountant; Financial Analyst; Financial Director).

The program contributes to the formation of professional knowledge and managerial competencies for effective activities in the field of accounting, auditing, and business analytics.

The program provides comprehensive knowledge and practical skills in the methodology and organization of accounting (tax) in accordance with international financial reporting and auditing standards, legal regulation of economic entities, and management decision-making in crisis situations.

1.2 Learning outcomes

According to the professional standard "*Accountant*", the job functions of the profession include:

Mandatory job functions:

1. Organization, planning, coordination, and control of accounting and tax records, preparation of consolidated financial statements, tax calculations, and company declarations.
2. Conducting management accounting for qualitative and quantitative information in order to plan, make decisions, evaluate performance, and control.

Additional job functions:

1. Interaction with external auditors to assess internal control (internal audit).

Upon successful completion of the 7M04118 "Accounting and Business Analytics" educational program, Master of Business and Management students will be able to demonstrate the following abilities:

ON 1. To have a command of a foreign language at a level that allows for professional activities, including in a foreign language environment.

ON 2. To demonstrate the ability for self-development, personal growth, initiative and leadership qualities.

ON 3. Apply advanced instrumental methods of economic analysis in applied research and develop strategies for the behavior of economic agents in various markets.

ON 4. Be familiar with current concepts, models, and trends in accounting, auditing, and business analytics.

ON 5. Organize the process of compiling and presenting financial and management reports by economic entities.

ON 6. Manage the accounting, analytical, and control departments of economic entities in accordance with professional ethics principles.

ON 7. Develop economically and financially sound management decisions in professional activities and be responsible for them.

3. General characteristics of the educational program

Today, the 7M04118 "Accounting and Business Analytics" educational program is particularly relevant due to the constant changes in legislation and the conditions for the development of small businesses. In a challenging economic environment, specialists with unique competencies in multiple professional fields are in high demand.

At the moment, the domestic labor market in the economy segment requires specialists with business research skills, project management, and familiar with the compilation of accounting and management reporting. In addition, according to the Atlas of New Professions, changes in the labor market will require supra-professional skills, including working in conditions of uncertainty, systemic thinking, and data analysis. It is such professionals – accountants with in-depth analytical skills – that the 7M04118 Accounting and Business Analytics program prepares.

The master's program provides a comprehensive set of knowledge and skills to train specialists who can generate, collect, and analyze financial and economic data, and make strategic and operational management decisions based on this data.

Distinctive features of the program:

– the program content is integrated with the key provisions necessary for passing the ACCA exams and obtaining the "Professional Accountant of the Republic of Kazakhstan" certification;

– the integrated nature of the program creates a foundation for the professional and behavioral competencies of masters who are able to objectively assess the factors of the organization's external and internal environment, formulate tactical and strategic objectives for the development of an economic entity, and develop its economic and financial policies.

– consistently high quality of education, ensured by the use of interactive methods, innovative technologies, modern means of automation, allowing to transform the theoretical knowledge of the master's students in the field of modern concepts of accounting and analysis of business processes into practical skills.

As part of the implementation of the educational program, unique scientific and educational developments on situational modeling of accounting, electronic systems of payment and settlement operations, as well as audit and legal support of financial activities of economic entities are used.

The competitive advantages of the educational program "Accounting and Business Analytics" are the organization of interdisciplinary training courses that reflect global trends in the theory and practice of accounting, auditing, and analytical activities. After completing the program, a Master of Business and Management not only understands how organizations, institutions, and businesses operate and account for their activities, but also has the ability to provide an audit assessment of their performance. Additionally, they possess the skills to work in uncertain environments, engage in systemic thinking, and analyze data.

Disciplines aimed at professional training of business analysts are implemented jointly with business partners - leading experts in the industry. Social partners participating in the formation and implementation of the educational program are: 1. Professional Organization of Accountants (POA) "League of Professional Accountants"; 2. POA "Union of Accountants and Accounting Organizations of Kazakhstan"; 3. Professional Auditing Organization (PAO) "Chamber of Auditors of the Republic of Kazakhstan"; 4. JSC "Kazakhstan Electric Grid Operating Company" "KEGOC"; 5. BI GROUP Holding; 6. LLP "APK-Invest Corporation"; 7. LLP "Center for Audit and Evaluation".

The educational program is implemented by the teachers of the S. Seifullin Kazakh Agrotechnical Research University (doctors and candidates of science, PhD, holders of certificates of the Professional Accountant of the Republic of Kazakhstan, CIPA, ACCA DipIFR (rus), Tax Consultants of the first category) with the involvement of leading specialists – practitioners of large commercial structures. It provides for the use of e-learning technologies (video lectures, educational videos, virtual whiteboards, online consultations, webinars, video conferences, online testing, and the use of library services), which contribute to a more comprehensive and in-depth study of the material.

Various software products are actively used in the educational process: Your Financial Analyst is a system for intelligent analysis of an organization's financial condition based on accounting data; Audit Expert is an analytical system for diagnosing, evaluating, and monitoring the financial condition of one or a group of enterprises based on financial and management data, including consolidated data; Project Expert is a program for developing business plans and evaluating investment projects; 1C:Enterprise -

automation of accounting and tax accounting, including the preparation of mandatory (regulated) reporting in the organization; STATISTICA is a software package designed for statistical analysis; SPSS Statistics is a software package for statistical analysis.

The knowledge, skills, and competencies acquired by graduates of the educational program will enable them to work as highly qualified specialists and managers in accounting, financial, and analytical services of organizations (firms) in various industries and forms of ownership, as well as in government and local authorities. The program's practical focus and the high competitiveness of the profession ensure that graduates will be in demand and easily adapt to the job market.

4. Competency Model (Graduate Profile)

4.1 Areas of professional activity

Graduates who have completed the master's program can engage in organizational and managerial, project-economic, analytical, and research activities.

Areas of professional activity:

1.1 "Specialists in Business and Administration":

Chief Accountant, Auditor, Chief Economist, Chief Financier, Financial Manager, Financial and Economic Director, Financial Director, Financial Analyst, Financial Consultant, Tax Specialist.

1.2 "Specialists in Education and Science in the Financial and Economic Sphere".

Skill requirements:

Accepts and is responsible for solving tasks and problems.

Demonstrates knowledge and understanding based on and beyond and/or developing the knowledge and understanding gained at the bachelor's level, which are the basis or opportunity for the original development or application of ideas, often in the context of scientific research. Applies knowledge, understanding, and problem-solving skills in new or unfamiliar situations and contexts within broader (or interdisciplinary) areas related to the field of study. Integrates knowledge, copes with difficulties, and makes judgments based on incomplete or limited information, taking into account the ethical and social responsibility for applying these judgments and knowledge. Clearly and concisely communicates their conclusions and knowledge, as well as their rationale, to both specialists and non-specialists. Continues learning independently.

Demonstrates the ability to formulate and present concept justifications, conduct expertise to solve complex problems, and ensure the implementation of the most functional solutions.

Accepts and is responsible for solving tasks and problems using innovative approaches, methods of building concepts and strategies for activities.

Skills in applying audit (including analytical) procedures.

Skills in negotiating, managing conflict situations, and managing changes.

Skills in detecting fraud.

Knowledge requirements:

In-depth knowledge of professional activities, as well as finance, marketing, international markets.

Knowledge of the rules of enterprise operation, legal acts, approaches, methodology of system analysis and design of professional situations, ways of making managerial decisions, knowledge of the principles of collective and team-building, organization of labor and management.

Knowledge of the current legislation of the RK.

Knowledge of the methodologies of building concepts, strategies, functional models of activity and interaction, ways of setting and systemic solution of tasks and problems.

Synthesis of professional knowledge (including innovative knowledge) and experience in a specific field and/or at the intersection of fields and industries.

Understanding the nature, applicability, and financial implications of the technological, material, and human resources required to perform highly specialized professional activities.

Identifying ways to solve tasks and problems using strategic approaches.

Understanding how to measure, minimize, and manage risks.

Knowledge of international professional internal audit standards and the Code of Ethics for Internal Auditors developed by the Institute of Internal Auditors. Knowledge of the fundamentals of risk management and understanding of the internal control system. Knowledge of the fundamentals of corporate governance. Knowledge of the fundamentals of psychology. Knowledge of the fundamentals of business ethics and occupational health and safety requirements.

Digital literacy knowledge at the advanced user level.

4.2 Types of professional activity

Types of work in the financial and economic sector:

– planning, accounting and control: collection of initial data for calculations of economic and socio-economic indicators characterizing the activities of business entities; calculations of economic and socio-economic indicators based on standard methods, taking into account the current regulatory framework; development of economic sections of plans of enterprises of various forms of ownership, organizations, departments; audit of the main accounting for the availability and movement of assets, liabilities and capital of an economic entity and determining the results of its economic and financial activities; conducting statistical surveys, surveys, questionnaires and initial processing of their results; participating in the development of design solutions in the field of accounting, auditing or economic analysis, preparing proposals and measures for the implementation of developed projects and programs; analytical processing of accounting and reporting information in order to make business decisions and assess the efficiency of facilities;

– production and management: management of employees (groups) with taking responsibility for the result at the level of a department or organization, taking into account the achievement of strategic planning results; analysis and development of solutions to improve the process, development of new approaches, and use of various methods (including innovative ones); determination of the strategy for the activity of a department or organization; negotiation to achieve acceptable solutions to professional issues; development of a rational accounting and reporting system for a specific enterprise based on the selection of an effective accounting policy; preparation and adoption of decisions on the organization of management and improvement of the activities of the accounting department and analytical units of enterprises and institutions.

4.3 Basic (academic and socio-personal) competencies

As a result of completing this educational program, Master of Business and Management students should consolidate and develop the following academic and socio-personal competencies:

To be able to: work independently with educational and scientific literature, statistical information; work in a team; think dialectically and defend their point of view; use the acquired knowledge for the original development and application of ideas in the context of scientific research; critically analyze existing concepts, theories, and approaches to the analysis of processes and phenomena.

to have the skills of: solving standard scientific problems; professional communication and intercultural communication; oratory, correct and logical formulation of their thoughts in oral and written form; expanding and deepening the knowledge necessary for everyday professional activity and continuing education.

to be competent: in the field of scientific research methodology; in the implementation of scientific projects and research in the professional field; in ways of ensuring continuous updating of knowledge, expanding professional skills and abilities.

4.4 Professional competencies

After successfully completing this program, Master of Business and Management students in the 7M04118 Accounting and Business Analytics program will be able to demonstrate the following abilities:

1. Apply advanced instrumental methods of economic analysis in applied research and develop strategies for the behavior of economic agents in various markets.
2. Understand current concepts, models, and trends in accounting, auditing, and business analytics.
3. Organize the process of compiling and presenting financial and management reports by economic entities.
4. To manage accounting, analytical and control units of economic entities on the basis of compliance with the principles of professional ethics.
5. To develop economically and financially sound management decisions in professional activities and to be responsible for them.

5. Professional Internship Base

The educational program of the specialized master's program includes an internship in the PD cycle, which is carried out at the place of the master's project in a separate period.

The internship for master's students is a type of academic work aimed at expanding and consolidating the theoretical and practical knowledge acquired by the students during their studies, acquiring and improving practical skills in the chosen master's program, preparing for future professional activities, and collecting factual material for the master's project.

The content of the internship is determined by the topic of the master's research. Forms and content of the internship:

- studying reference and bibliographic systems and methods of information retrieval;
- acquiring skills in working with bibliographic reference books, compiling scientific and bibliographic lists, and using bibliographic descriptions in scientific papers;
- working with electronic databases of domestic and foreign library collections;
- working with the empirical research base in accordance with the chosen topic (creating a program and plan for the empirical research, setting and formulating the objectives of the empirical research, defining the object of the empirical research, selecting the methodology for the empirical research, and studying the methods for collecting and analyzing empirical data);
- conducting statistical and sociological research related to the project topic;
- mastering the methods of questionnaires and interviews (creating a questionnaire, conducting a survey, analyzing and summarizing the results);
- mastering the methods of observation, experiment, and modeling;
- preparing arguments for conducting scientific discussions, including public discussions;
- summarizing and preparing the results of the master's experimental research activities for further scientific research within the postgraduate education system.

The Department of Accounting and Finance has developed programs, concluded contracts with more than 20 organizations and enterprises, research institutions designated as practice bases, such as the Institute of Economics of the Committee of Science of the Ministry of Education and Science of the Republic of Kazakhstan, JSC Institute of Economic Research of the Ministry of Economics and Budget Planning of the Republic of Kazakhstan, JSC KazAgroFinance, enterprises of JSC NMH KazAgro, JSC NC KTZ, JSC Kazakhstan Electric Grid Management Company KEGOC, Holding BI GROUP, Corporation APK-Invest LLP, Center for Audit and Evaluation LLP, Agrofirma Rodina LLP and others.

6. The structure of the educational program

№	Naming of cycles of disciplines and types of activities	Overall labor intensity	
		in academic hours	in academic credits
1	2	3	4
1.	**Theoretical training**	**1170**	**39**
	The cycle of basic disciplines (BD)	**300**	**10**
1)	**The university component**	**180**	**6**
1	Foreign Language (Professional)	60	2
2	Management	60	2
3	Management Psychology	60	2
2)	**Elective component**	**120**	**4**
1	Management accounting in modern business structures	120	4
2	Applied aspects of accounting, auditing, and business analytics		
	Cycle of profiling disciplines (PD)	**870**	**29**
1)	**The university component**	**420**	**14**
1	Financial accounting and reporting according to international financial reporting standards	270	9
2	Business analysis and optimization of solutions in a software environment	150	5
2)	**Elective component**	**300**	**10**
	Analysis and audit of financial statements in the IT environment	150	5
	Internal audit of business processes		
	Financial management and financial analysis	150	5
	Python for data analysis in economics		
3)	**Production practice**	**150**	**5**
2	**Master's Thesis Research Project (MTRP)**	**390**	**13**
1)	Experimental and research work by a master's student, including internships and a master's project	390	13
3	**Final certification**	**240**	**8**
1)	Design and protection of a master's project	240	8
	Total	**1800**	**60**

7. Correlation of Achievability of Learning Outcomes of the Educational Program and Academic Subjects

№	Name of the discipline	Brief description of the discipline	Number of credits	Formed learning outcomes (ON)						
				1	2	3	4	5	6	7
		Cycle of Basic Disciplines University Component (6 credits)								
1	Foreign language (professional)	The language is used for professional and academic purposes at an advanced level, which allows students to freely operate the scientific and conceptual apparatus of their field, expand their scientific and information base, and develop the skills of interpreting scientific information, argumentation, persuasion, scientific debate, and academic writing.	2	v						
2	Management	During the study of the discipline "Management", students will be familiarized with the role and place of management in the system of economic sciences, the essence of management functions, the content of the process of making and implementing management decisions, the principles of building an organization and the main types of organizational structures, their advantages and disadvantages, the professional and personal requirements for a manager, and the factors that determine the effectiveness of management.	2		v					
3	Psychology of management	During the study of the discipline "Management Psychology", the following topics will be covered: the conceptual framework of management psychology, the relationship between managers and employees, conflicts in the workplace, management communication, decision-making technology, the concept of the subject and object of management, the difference between managers and leaders, the psychology of orders, the personality as a subject and object of management, the psychology of criticism, the psychotypes of communication subjects, and the psychological techniques of persuasion.	2		v					
		Basic Disciplines Cycle Elective Component (4 credits)								
4	Management accounting in modern business structures	During the course, students will gain the skills to assess the performance of various business structures, to compile budgets at the enterprise, taking into account the specifics of the organization; they will gain the skills of analysis and decision-making on the data of management accounting. The course examines the key provisions necessary for passing the ACCA exams and certification "Professional Accountant of the RK" on management accounting.	4					v	v	v
5	Applied aspects of accounting, auditing, and business analytics	The course is aimed at deepening the knowledge of master's students in the field of research methodology, project, analytical and organizational and managerial activities, developing the skills and abilities of using general scientific and specialized research methods in solving applied problems. Studying the course will contribute to the formation of skills in performing project work, justifying	4			v	v		v	

		decisions, deepening practical knowledge in the field of accounting, auditing and business analytics.								
Cycle of core disciplines University component (14 credits)										
6	Financial accounting and reporting according to international financial reporting standards	During the course, students will gain knowledge and practical skills about the features of financial accounting and reporting under IFRS, as well as how to evaluate and present assets, capital, income, and expenses in financial statements. The course covers the key concepts required for passing the ACCA F7: Financial Reporting exams and the Professional Accountant of the Republic of Kazakhstan certification.	9				V	V	V	
7	Business analysis and optimization of solutions in a software environment	During the course, students will gain practical knowledge in the development, analysis, and decision-making of economic decisions in business under conditions of risk and uncertainty. The course includes the study of methodological techniques and procedures for modeling business situations; the presentation of business task models in software and analytical decision support systems; and the analysis and interpretation of business decisions.	5			V	V			V
Cycle of core disciplines Elective component (10 credits)										
8	Analysis and audit of financial statements in the IT environment	During the course, students will gain practical knowledge in conducting audits using a risk-based approach and will learn how to perform auditing and analytical procedures using modern intelligent audit and analysis systems. At the end of the course, students will be able to develop an audit strategy and plan for a commercial company's financial statements and interpret audit procedures.	5			V	V			
9	Internal audit of business processes	During the course, students will gain theoretical knowledge and practical skills in using internal audit methods in organizations. By the end of the course, students will be able to: create a business process diagram for the company; assess the risks associated with business processes; and develop proposals for improving the efficiency of the internal control system in order to reduce the risks associated with business processes and monitor them.	5				V		V	V
10	Financial management and financial analysis	The course is aimed at mastering financial management methods that can be used to effectively manage a company's cash flows in order to achieve growth in the value of its equity. The course covers the key concepts necessary for passing the Professional Financial Manager exams and the Professional Accountant of the Republic of Kazakhstan certification. The course's practical focus will provide students with the skills they need to advance their careers in the financial sector.	5						V	V
11	Python for data analysis in economics	During the course, students will explore the rapidly evolving field of data analysis with a particular focus on the Python programming language. Students will learn the concepts,	5			V				

		methods, and tools necessary to make meaningful inferences from real-world economic data. The course is designed for individuals with no prior programming experience.								