# Master's, Doctoral and Post-doctoral Track Program: Business and Management

#### 1. Open Doors winner's skill set

Winning the Open Doors competition requires a firm grasp of business and management concepts, namely:

- basic definitions and theories of management, strategic management;
- basic models and methods for managerial decision-making; categories of required data;
- basics of organizational structure development, features of team behavior, motivation, development, employer branding;
- features of marketing, finance, investment project management, risk management in entrepreneurship;
- basic tools of business analytics, digital tools of management;
- specifics of international management and principles of sustainable development and corporate social responsibility;
- principles of innovation management.

The winner is expected to demonstrate a solid command of the following skills:

- calculating project performance indicators;
- analyzing management risks;
- calculating indicators of marketing campaign effectiveness.

#### 2. List of degree programs covered by the subject area

#### 2.1. List of doctoral degree programs

5.2.6 Management

#### 2.2. List of the master's degree program

38.04.02 Management

38.04.05 Business Informatics

38.04.06 Trade

#### 3. Content

#### Field of science 1. Business Analytics and Digital Transformation of Business

- 1) Fundamentals of business analysis based on existing standards. Changing business processes in digital business transformation.
- 2) Business analysis. Management of software requirements based on current standards.
- 3) Principles and strategies for digital business transformation.
- 4) Corporate governance in the digital economy. The reference corporate standard for managing information technology in an organization.
- 5) Practices of the corporate reference standard for information technology management for the implementation of the digital transformation program.
- 6) Modern digital tools in management: areas, goals, application objectives, artificial intelligence, AR/VR, blockchain, Internet of things.
- 7) Fundamentals of information protection and cybersecurity
- 8) Digital Marketing. Online sales funnel and conversion rates. Segmentation and profiling of online clients. Web analytics and digital marketing performance metrics.

#### Field of science 2. Business and International Management

- 1) International business environment. Globalization and internationalization of the economy.
- 2) International strategies and business development models. International markets' entry. Competitiveness in international business.
- 3) Terms of financing and payments in international business. Contractual, monetary and



financial relations with foreign partners.

- 4) Marketing and logistics in international business. Pricing in global markets. Global value chains.
- 5) Accounting, money, and value in international business. International financial reporting standards.
- 6) Cross-cultural management and its features. Intercultural competencies. Cross-cultural communications and management of cross-cultural teams.
- 7) Corporate social responsibility. Sustainable development goals, sustainable development of a company. ESG principles and ratings. Green finance.

#### Field of science 3. Entrepreneurship

- Business planning within entrepreneurial activities: stages of development, structure, methods.
- Marketing: definition, goals, objectives, functions. Marketing and market orientation of business organizations. Market research and marketing analytics, desk and field market research. Market research planning and execution.
- Strategic marketing management. Marketing management cycle. Marketing mix (4Ps and 7Ps models) and its elements. STP approach (segmentation, targeting, positioning). Marketing performance metrics. Marketing planning. Marketing budgeting. Marketing audit and control.
- Cash flow of a company. Analysis of financial statements as a basis for management decision- making. Financial ratios and ratio-based decision-making.
- Sources of company financing. Choosing a company's capital structure. Relationship between a company's financial, investment, dividend decisions.
- Analysis of investment projects and decision-making on project implementation. Indicators of investment effectiveness (net present value, internal rate of return, profitability index, project payback period).
- Project risks assessment. Main types and groups of risks. Risk assessment methods: decision tree, sensitivity analysis, scenario method, Monte Carlo method.

#### Field of science 4. Management of Technology and Innovation

- Innovation activity and its features. Innovations and their types. Innovation potential. Novelty/change and new practices/innovation. Innovation as a process. Participants in innovation activities: actors, facilitators. Technology entrepreneur.
- Classical economic theories of cyclical development. Modern concepts of technological and economic development. Technological paradigm concept. End-to-end technologies.
- Business incubators. Technology parks. Technology transfer centers. Innovation clusters. Investments in innovative business. Business angels. Venture investors. Investment banks.
- Innovation management in a company. Typologies and tools for innovation management. Innovation ecosystem in business. Innovative business strategies. Risks of innovative businesses.
- Innovation climate. Innovative sensitivity. Sociocultural factors and the cultural and historical context of innovation.
- Methods for introducing innovative changes: evolutionary and revolutionary. Advantages and disadvantages. Organizational strategies for innovation and their characteristics.
- Innovation introduction in an organization. Innovation testing and experimenting. Personnel training. Market research. Application of flexible management tools, agile.
- Role of the state in developing innovation activities. State funding and support for research and innovation: direct and indirect methods. Technological priorities of the state. Legal protection of intellectual property. Innovation climate. Open innovation.

Field of science 5. Strategic Management

- Evolution of management. Pre-scientific period, antiquity, scientific period (industrial, systematization, and information periods). Managerial revolutions. Current stage of management development: strategic approach, knowledge economy, digital transformation of business models, shared consumption and meta-markets.
- Schools of thought in management and management theories. School of scientific management, administrative school, school of human relations, school of behavioral sciences (behaviorist school), prognostic (empirical) school, quantitative school, process, system, and situational approaches.
- Control functions. Planning, motivation, coordination, control. Implementation of management functions and process linking in an organization (communications and decisionmaking).
- Organizational environment. Elements of an organization's external environment (environment of direct and indirect influence) and internal environment. Organizational changes. Organizational change management model. VUCA world.
- Corporate culture: types, elements, functions. Leadership: leadership models and effective leadership in an organization. Management ethics and social responsibility. Management of sustainable development of an organization.
- Nature of strategy. Evolution of strategy concepts. Main components of strategic management: strategic vision, mission, goals, strategies, levels of strategic management.
- Strategic planning. Strategic analysis of the external environment and its tools. Strategic analysis of a company's internal environment and its tools; key competencies of a company; analysis of organizational structure, culture, control system. Choosing the strategy; types of strategies.
- Competitive and corporate strategies. Nature and sources of competitive advantage. Porter's competitive strategies. Company size optimization and vertical integration. Diversification strategies.
- Forms of strategic partnership, their organization and functioning; advantages and disadvantages of individual forms of strategic partnership: syndicate, association, cartel, consortium, alliance, concern, holding, and conglomerate.

#### Field of science 6. Decision-Making in Management

- Algorithm for management decision-making. Basic methods of decision-making. Diagnosis of problems and the process of management decision-making. Methods for assessing the effectiveness of management decisions.
- 2) Decision criteria. Qualitative and quantitative criteria. Multiple-criteria decision-making: hierarchical methods and group ranking.
- SWOT analysis and PEST/PESTEL analysis tools. Analysis of a company's resources and capabilities, Porter's Value Chain Analysis, stakeholder analysis, key success factors.
- Project management approaches and methodologies. External and internal environment of a project. Triple constraints of project management. General principles of Waterfall and Agile approaches (Scrum, Kanban).
- Project life cycle management. Network analysis and project scheduling. Gantt charts, PERT method, critical path method, earned value method.
- Portfolio analysis models: comparative analysis of matrices. BCG Matrix, GE-McKinsey, Ansoff matrix, industry life cycle matrix (ADL\LC), product/market evolution portfolio matrix.
- Game theory in management. Cooperation, coordination, and distribution of benefits in game theory. Pricing policy decision-making. Decision-making in an oligopolistic market. Choosing a company's strategy using game theory.

#### Field of science 7. Organizational Behavior and Human Resource Management

- 1) Concept of organization. Levels of organizational behavior analysis. The group in the context of an organization. Life cycle of an organization.
- 2) Organizational structure of a company: classification; features of organizational structure types; advantages and disadvantages.
- 3) Organizational culture and internal communications.
- 4) Strategic human resource management. Key functions of human resource management.
- 5) Employer value proposition. HR brand. Employee lifecycle in an organization.
- 6) Motivation and reward. Theoretical approaches to work motivation analysis. Employee engagement, loyalty, and satisfaction in the context of organizational management. Performance management.
- 7) Talent development. Human capital theory and investment in human resources. Competency model in human resource management.
- 8) Approaches to analyzing the effectiveness of human resource management in an organization.

#### 4.Preparation materials

#### 4.1 Recommended reading

#### Field of science 1. Business Analytics and Digital Transformation of Business

#### Reading list in English

George, B., Paul, J. Digital Transformation in Business and Society. Palgrave Macmillan. 2020.  $-306\,\mathrm{p}$ .

URL: https://www.cag.edu.tr/uploads/site/lecturer-files/babu-george-justin- paul-digital-transformation-in-business-and-society-theory-and-cases- springer-international-publishing-palgrave-macmillan-2020-IOAb.pdf (free access)

Kingsnorth, S. Digital Marketing Strategy. 4th edition. Kogan Page. 2018. – 339 p. URL: https://www.academia.edu/43101577/P\_r\_a\_i\_s\_e\_fo\_r\_D\_i\_g\_i\_ta\_l\_Ma\_r\_k\_e\_t\_i\_n\_g\_S\_t\_r\_at\_e\_gy (limited access)

Podeswa, H. The Business Analyst's Handbook. Course Technology PTR - Cengage Learning. – 433 p. 2009. URL: http://analyst.by/wp-content/uploads/2013/02/Course-Technology-The-Business-Analysts- Handbook.pdf (free access)

#### Field of science 2. Business and International Management

#### **Reading list in English**

Fuchs M. Market Entry Modes // International Management: The Process of Internationalization and Market Entry Strategies. – Berlin, Heidelberg: Springer Berlin Heidelberg, 2022. – 337 p. URL: https://link.springer.com/book/10.1007/978-3-662-65870-3 (limited access)

Luthans F., Doh J. P. International management: Culture, strategy, and behavior. – McGraw-Hill, 2018. – 692 p. URL:

https://www.academia.edu/80752559/\_at\_2020\_International\_Management\_Culture\_Strategy\_and\_Behavior\_by\_Fred\_Luthans\_Jonathan\_Doh (limited access)

Paolone F. Accounting, Cash Flow and Value Relevance. – Springer International Publishing, 2020.

URL: 111 p. https://link.springer.com/book/10.1007/978-3-030-50688-9 (limited access)

#### Field of science 3. Entrepreneurship

#### **Reading list in English**

Kotler, Ph., Armstrong, G., Opresnik, M.O. Principles of marketing. Pearson Education Limited

2018. - 736 p.

URL:

 $https://opac.atmaluhur.ac.id/uploaded\_files/temporary/DigitalCollection/ODljY2E4ODIyODViZipkODgzNDUxYWZlNWFhZmY2MGE5MDc0ZDVmYw==.pdf (free access)$ 

Larson, A. Sustainability, Innovation, and Entrepreneurship. Publisher: Saylor Academy. 2012.

 $URL: https://saylordotorg.github.io/text\_sustainability-innovation-and-defined and the sustainability and the su$ 

entrepreneurship/index.html (free access)

Mellor, R., Coulton, G., Chick, A., Bifulco, A., Mellor, N., Fisher, A. Entrepreneurship for Everyone. SAGE. 2009. – 257 p. URL:

http://repository.stikesrspadgs.ac.id/56/1/Enterpreneurship%20for%20everyone-257hlm.pdf (free access)

Rogers, S. Entrepreneurial Finance. 4th edition. McGraw-Hill. 2020. – 59 p. URL:

https://www.accessengineeringlibrary.com/binary/mheaeworks/7ad501c1cd8d3040/c9dd5857abf dc1107b0405112b3de35be19005e7441019a55db12aa7801e5a6d/book-summary.pdf (free access)

#### Field of science 4. Management of Technology and Innovation

#### Reading list in English

Management of Innovation Notes. Gateway School of Business. 2012. - 187 p.

URL: https://gateway.edu.in/gsb/pdf/MOI.pdf (free access)

Trott, P. Innovation Management and New Product Development. Pearson. 2017.— 666 p.

URL: https://etu.ru/assets/files/international/winter-school-iqmai4/01-04-innovation-management-and-new-product-development.pdf (free access)

Woźniak, J. Innovation management. Theory and practice. 2015. Łódź University of Technology Monographs. 2015. – 107 p.

URL: https://core.ac.uk/download/pdf/53097202.pdf (free access)

#### Field of science 5. Strategic Management

#### Reading list in English

Daft, R. Management. 12th edition. Cengage Learning. 2017.

https://www.yumpu.com/en/document/read/67388345/management-richard-l-daft-z-liborg (free access)

Kaplan R., Norton D. The Strategy-Focused Organization: How Balanced Scorecard

Companies Thrive in the New Business Environment. Boston, MA: Harvard Business School Press, 2000. 400 p.

URL: https://books.google.ru/books?id=6sC X4DR-

WoC&pg=PA29&hl=ru&source=gbs\_toc\_r&cad=2#v=onepage&q&f=false (free access)

Strategic Management: tutorial / Y.V. Matveeva, E.N. Kirillova, V.P. Matveeva. – Samara: Published by Samara National Research University, 2018. – 76 p.

URL: https://core.ac.uk/download/346511938.pdf (free access)

#### Field of science 6. Decision-Making in Management

#### Reading list in English

Kuster, J., Bachmann, C., Hubmann, M., Lippmann, R., Schneider, P. Project Management Handbook: Agile-Traditional-Hybrid (Vol. 2). Springer, 2023. 476 p.

URL: https://link.springer.com/book/10.1007/978-3-662-66211-3 (limited access)

Li, W. Strategic Management Accounting in a Network Economy. Springer Nature. 2023, 325 p.

URL: https://link.springer.com/book/10.1007/978-981-99-5253-3 (limited access)

Zhang, H. (Ed.). Models and Methods for Management Science. Springer Nature. 2022, 419 p. URL: https://link.springer.com/book/10.1007/978-981-19-1614-4 (limited access)

#### Field of science 7. Organizational Behavior and Human Resource Management

#### **Reading list in English**

Human Resource Management – The Open University of Hong Kong. 2014. – 481 p. URL:

https://www.opentextbooks.org.hk/system/files/export/32/32088/pdf/Human\_Resource\_Man agement\_32088.pdf (free access)

John Stredwick. An Introduction to Human Resource Management. Elsevier. Second edition. 2005. – 498 p.

URL: https://nibmehub.com/opac-

service/pdf/read/An%20Introduction%20to%20Human%20Resource%20Management-%202nd%20edition.pdf (free access)

Organizational Behavior. Rice University. 2019. – 704 p.

URL: https://assets.openstax.org/oscms-prodcms/media/documents/OrganizationalBehavior-OP\_TtwWIeQ.pdf (free access)

Schein, E. H. Organizational Culture and Leadership (4th ed.): Jossey-Bass, 2010.

URL: https://www.oreilly.com/library/view/organizational- culture-and/9780470190609/ (limited access)

Stephen P. Robbins, Timothy A. Judge, Katherine E. Breward. Essentials of organizational behavior. Pearson. 2018. - 432 p.

URL: https://nibmehub.com/opac-

service/pdf/read/Essentials%20of%20Organizational%20Behaviour.pdf (free access)

#### 4.2 Recommended online courses

#### Field of science 1. Business Analytics and Digital Transformation of Business

Online course in English	Link	Online course description
Analysis for Business Systems	Course link	The course focuses on the standard model
		for systems development, known as the
		systems development life cycle (SDLC).
		The course consists of several thematic
		modules. Students will learn how to read
		and also create the specific deliverables that
		business systems analysts prepare during the
		SDLC.
Digital Transformation	Course link	The course explores the transformative
		impact of technology on business,
		examining the mechanics of disruption,
		historical and emerging digital trends, and
		the processes of digital transformation.
		Through focused modules, students will
		learn to describe the underlying economics
		of innovation, technology, and market
		disruption; assess the advantages and
		limitations of current digital technologies;
		and apply BCG's digital transformation
		framework as a practical guide for digitizing
		organizations.

Fundamentals of digital	Course link	The course focuses on the digital
management		management of transformation in large
		companies, examining each stage of the
		digital management lifecycle and the
		organization of business process
		management. Each module is dedicated to a
		specific aspect of the subject, providing
		students with a structured understanding of
		how to plan, implement, and oversee digital
		transformation initiatives effectively.
Master in Business Analytics	Course link	The course focuses on the development of
		core competencies in business analytics. The
		course is structured progressively, from
		basic concepts to more advanced topics. The
		course covers integrating and cleaning the
		data, performing data analysis, deriving and
		communicating insights, and fostering a
		managerial culture that leverages enterprise
		data to create competitive advantages.

# Field of science 2. Business and International Management

Online course in English	Link	Online course description
Emerging Multinationals and	Course link	The course examines the international
Global Strategy		strategies of emerging multinational
		enterprises that have proven capable of
		playing a significant role in the global
		market. Delivered through video lectures
		and accompanying texts, the course provides
		a comprehensive understanding of emerging
		markets, outlines the process of formulating
		international strategies, and analyzes how
		institutional, industry-specific, and firm-
		level factors collectively shape strategic
		decision-making.
Financial Accounting	Course link	The course is dedicated to the preparation
		and interpretation of financial statements in
		accordance with International Financial
		Reporting Standards (IFRS). Each module
		addresses a specific aspect of the subject,
		enabling students to apply the fundamental
		principles and concepts underlying financial
		reporting under IFRS effectively.
International Project	Course link	The course provides insight into the impact
Management		of culture on various aspects of project
		management, focusing on managing global
		teams, building trust, and establishing an
		effective framework for global
		collaboration. The course is structured
		progressively, from basic concepts to more
		advanced topics. Students will understand

		the impact of culture on various aspects of international projects.
Introduction to ESG	Course link	The course provides an overview of the ESG framework and its role in supporting a company's overall risk management. The course is structured progressively, from basic concepts to more advanced topics. Students will be able to apply the knowledge gained to address ESG challenges.

# Field of science 3. Entrepreneurship

Online course in English	Link	Online course description
Business Management and Entrepreneurship	Course link	The course covers key issues of corporate management, operations management, project management, fundamentals of accounting, and social entrepreneurship. The course comprises several thematic modules, enabling students to apply the acquired knowledge to address business problems effectively.
Fundamentals of Marketing Concepts	Course link	The course focuses on key marketing concepts and the marketing mix, along with essential methodologies for marketing activities. The course consists of several thematic modules. Students will be able to apply theoretical models to the analysis of specific cases.
Introduction to Corporate Finance	Course link	The course offers a concise introduction to the fundamentals of finance, with a focus on their application across diverse real-world contexts, including personal finance, corporate decision-making, and financial intermediation. The course consists of several thematic modules. The key concepts and applications include: time value of money, risk-return tradeoff, cost of capital, interest rates, retirement savings, mortgage financing, auto leasing, capital budgeting, asset valuation, discounted cash flow (DCF) analysis, net present value, internal rate of return, hurdle rate, payback period.
Risk Management	Course link	The course covers business risk analysis and assessment, the risk identification process, the preparation and implementation of risk management plans, and the assessment of the effectiveness of risk management frameworks. The course trains students to identify and evaluate key issues in risk management. The student will be able to explain the basics of risk management

		theory.
Sales Management	Course link	The course introduces elements of sales
		based on the skills and approaches used by
		successful sales organizations. The course
		materials are delivered through video
		lectures and texts. Students will learn about
		traditional sales principles and the potential
		of social networks, blogs, wikis, and other
		interactive methods of customer
		communication.

### Field of science 4. Management of Technology and Innovation

Online course in English	Link	Online course description
Essentials of Innovation	Course link	The course highlights the distinctions
Management		between innovation and change management
		and examines the essential stages of
		innovation management. The course is
		structured progressively, from basic
		concepts to more advanced topics. Students
		will be able to create a competitive
		advantage for the organization, build an
		ecosystem for innovation and creativity, and
		increase employee engagement and
		motivation.
Innovation management	Course link	The course introduces the basic tools for
		managing innovative projects, developing
		radical innovations, and using external
		partnerships to create new solutions. The
		course consists of several thematic modules.
		Students will learn the basic terminology
		and concepts in innovation management.
Principles of Entrepreneurship	Course link	The course equips students with theoretical
and Innovation Management		and practical tools they need to turn an idea
		into a successful business using the power of
		innovation. The course consists of several
		thematic modules. Students will develop the
		ability to identify emerging opportunities,
		attract investors, optimize resource
		allocation, and establish a sustainable
		competitive advantage in the marketplace.

# Field of science 5. Strategic Management

Online course in English	Link	Online course description
Foundations of Management	Course link	The course covers the key definitions,
		theories, and approaches in management.
		Each module focuses on a specific aspect of
		the subject. Students will acquire the skills
		to develop comprehensive solutions to real-
		world business challenges.

Strategic Management	Course link	The course covers techniques related to strategic flexibility, strategic competitiveness, and internal and external analysis. Each module focuses on a specific aspect of the subject. Students will learn core theories and concepts of strategic management.
Strategic Management Capstone	Course link	The course covers the resources and tools for envisioning, simulating, and developing a Connected Strategy for an organization. The course materials are delivered through video lectures and texts. The student will be able to develop and analyze an organization's strategy.
Strategic management in the context of organizational evolution	Course link	The course introduces fundamental research in the field of strategic planning and management. Each module focuses on a specific aspect of the subject. Students will be able to develop strategies tailored to the stages of an organization's life cycle.

# Field of science 6. Decision-Making in Management

Online course in English	Link	Online course description
Advanced Project	Course link	The course covers the field of project
Management		management, with each module addressing a
_		specific aspect of the subject. Upon
		completion, students will possess skills in
		project planning, execution, monitoring and
		control, as well as problem-solving.
Business Economics and	Course link	The course delves into key business
Game Theory for Decision-		economics theories, interactions among
Making		stakeholders, the basics of business and
_		management decision-making. Each module
		focuses on a specific aspect of the subject.
		Students will gain an understanding of the
		economic concept of elasticity and learn
		how to apply it to make informed pricing
		decisions.
Methods and Statisticsin Social	Course link	The course covers research methods, design
Sciences		and statistical analysis for social science
		research. The course is structured
		progressively, from basic concepts to more
		advanced topics. Students will acquire
		knowledge of data analysis and the
		interpretation of results in the social
		sciences, with a particular focus on
		applications in business and management.
Project Execution and Control	Course link	The course focuses on the execution and
	·	evaluation of project progress within both
		the waterfall and agile project management
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frameworks. It is structured into several
thematic modules. Upon completion,
students will be familiar with current trends
and best practices in the professional field of
project management.

# Field of science 7. Organizational Behavior and Human Resource Management

Online course in English	Link	Online course description
International leadership and	Course link	The course focuses on key approaches to
organizational behavior		selecting suitable employees, motivating and
		evaluating teams, managing workplace
		conflict, and providing effective leadership
		in daily decision-making.
		The course consists of several thematic
		modules. The course equips students with
		theoretical and practical tools in personnel
		management.
Organizational Leadership	Course link	The course equips team leaders with the
		skills, strategies, and tools to rise to
		expanded leadership responsibilities and
		guide organizations effectively. The course
		consists of several thematic modules.
		The course promotes a deeper understanding
		of the complexities of leadership.
Organization Theory/ Structure	Course link	The course offers a comprehensive overview
and Design		of organization theory, with each module
		addressing a specific aspect of the subject.
		Upon completion, the student will possess a
		solid understanding of the fundamental
		theories and concepts in the field.