

# Summary of Degree Programme 'Data Analytics for Business and Economics'

## Field of Studies

38.04.01 Economics

38.04.02 Management

---

## Approved by

Academic Council Minutes No.10 of 26 October 2022

---

## HSE University Educational Standard

[HSE University Educational Standard: Master's Degree \(from 2022\)\(signature\)](#) (PDF, 1.05 Mb)

[HSE University Educational Standard](#) (PDF, 441 Kb)

---

## Last Update

Minutes of St. Petersburg School of Economics and Management Council Meeting № 8.3.2.4-08/1909-01 from 19.09.2023

---

## Network Programme

No

---

## Length of Studies, Mode of Studies, Credit Load

**2 years** <sup>□</sup>

Full-time, 120

---

## Language of instruction



Instruction in English

---

## Qualification upon graduation

Master

---

## Double-degree Programme

No

---

## Use of online learning

With online tools

# Tracks

## 2023/2024 ACADEMIC YEAR

## People Analytics

---

**Type:** Applied

**Track Supervisor:** [Volkova, Natalia](#)

**Language of instruction:** English

**Use of online learning:** With online tools

**Qualification upon graduation:** Магистр

**Key learning outcomes:**

- KER-1 deal with various information systems and datasets for HR purposes.
- KER-2 collect, analyze and frame details about available resources in the labor market.
- KER-3 manage employee motivation, engagement and workplace discipline.

**Description of the professional field:**

- PC-1 able to develop reasonable HR system to reach organizational goals
- PC-2 able to apply various state-of-the art techniques to analyze HR data
- PC-3 able to anticipate and identify HR problems and search for best solutions that have benefit within and/or outside the organization

**Description of educational modules:**

The module “Key seminars” consists of various activities with focus on project and research skills via Research seminar. Research seminars focus on either business or HR field. The mentor support in People Analytics provides through “Mentor's Seminar”.

The module “Internship”encompasses three types of internships – professional, research and project. The term paper and Master thesis are essential part of research internship.

The module “Major” includes courses that serve for the development of professional, research and data skills. As such, students can gain knowledge and competencies in Economics, Marketing and Human Resource management. The main courses involve gathering together, analyzing, and reporting HR data to measure the impact of a range of HR metrics on overall business performance and make decisions based on data.

The module “MagoLego” provides students with additional knowledge according to their preferences and supports students in strengthening their professional trajectory.

## Customer Analytics

---

**Type:** Applied

**Track Supervisor:** [Pleshkova, Anastasiia](#)

**Language of instruction:** English

**Use of online learning:** With online tools

**Qualification upon graduation:** Магистр

**Key learning outcomes:**

— KER-1 choose tools, modern technical means and information technologies for processing information in accordance with the assigned scientific and practical task in the field of management.

— KER- 2 take decisions using CRM analytics using special methods for analyzing network data and machine learning techniques.

— KER -3 build predictive models of various business outcomes using supervised learning methods for decision-making.

**Description of the professional field:**

— PC-1 able to find and evaluate new market opportunities, form and evaluate business ideas

— PC-2 able to solve managerial problems using best practices of data analysis

— PC-3 able to take managerial decisions using information from large customer datasets

**Description of educational modules:**

— The module “Key seminars” consists of various activities with focus on project and research skills via Research seminar. Research seminars focus on either business or HR field. The mentor support in Customer Analytics provides through “Mentor's Seminar”

— The module “Internship”encompasses three types of internships – professional, research and project. The term paper and Master thesis are essential part of research internship.

— The module “Major” includes courses that serve for the development of professional, research and data skills. As such, students can gain knowledge and competencies in Economics, Marketing and Human Resource management. The main courses involve gathering together, analyzing, and reporting marketing data to make decision about customer behavior and other marketing trends based on data.

— The module “MagoLego” supports students in strengthening their professional trajectory.

## Economic Data Analysis

---

**Type:** Applied

**Track Supervisor:** [Molchanov, Pavel S.](#)

**Language of instruction:** English

**Use of online learning:** With online tools

**Qualification upon graduation:** Магистр

**Key learning outcomes:**

— KER -1 carries out a reasonable choice of data sources and methods for collecting and processing professional information, testing research hypotheses and the reliability of the data obtained, calculates analytical indicators

— KER -2 proficient in programming to solve problems in the field of economics and finance.

— KER -3 Able to collect, analyze and process statistical data, information, scientific and analytical materials necessary to solve economic problems.

#### **Description of the professional field:**

— PC-1 able to collect, “clean”, and analyze economic data, revealing underlying statistical and economic causal relationships

— PC-2 able to formulate an economic and econometric model of the studied problem/object of interest.

— PC-3 able to use the available econometric and machine learning techniques to identify inefficiencies in customer or marketing business policies and propose a solution or an improvement

#### **Description of educational modules:**

— The module “Key seminars” consists of various activities with focus on project and research skills via Research seminar. Research seminars focus on conducting research in economics and data analysis. The mentor support is provided through “Mentorship seminar”.

— The module “Internship” encompasses three types of internships – professional, research and project. The term paper and Master thesis are essential part of research internship.

— The module “Major” includes courses that serve for the development of professional, research and data skills. As such, students can gain knowledge and competencies in Economics, Marketing and Human Resource management. The main courses teach fundamental economic knowledge (microeconomics), econometrics and machine learning. Consequently, will know how to collect, clean the data, formulate a theoretical model, and use the state-of-the-art statistical methods to provide quantitatively sound solutions to a business-problem.

— The module “MagoLego” supports students in strengthening their professional trajectory

## **Competitive Advantages**

— Avant-garde program in management and business-economics taught in English.

— Emphasis on business strategies and economics for emerging markets.

— Emerging markets and their specific traits when it comes to strategic management, economics and data-driven decisions.

— The development of the data skills to interpret and analyze complex phenomena in the fields of marketing, economics, strategy, and human resources, in close cooperation with companies.

— Advanced skills connected with machine learning techniques for extracting predictive patterns and models from digital data.

— Opportunity to choose an applied track or a research-oriented track followed up by PhD study abroad or under supervision of HSE international research centers.

— Cross-Functional Competencies: The programme’s courses cover a wide range of competencies in strategic management and business economics, as well as in big data analytics, quantitative methods, and machine learning.

— An Applied Curriculum: The curriculum is oriented around the knowledge and skills most sought-after among employers in real workplaces.

— Experienced Teaching Staff: Courses are taught by academic and business experts

## **Programme Modules**

## Options for Students with Disabilities

This degree programme of HSE University is adapted for students with special educational needs (SEN) and disabilities. Special assistive technology and teaching aids are used for collective and individual learning of students with SEN and disabilities. The specific adaptive features of the programme are listed in each subject's full syllabus and are available to students through the online Learning Management System.

## Programme Documentation

All documents of the degree programme are stored electronically on this website. Curricula, calendar plans, and syllabi are developed and approved electronically in corporate information systems. Their current versions are automatically published on the website of the degree programme. Up-to-date teaching and learning guides, assessment tools, and other relevant documents are stored on the website of the degree programme in accordance with the local regulatory acts of HSE University.

I hereby confirm that the degree programme documents posted on this website are fully up-to-date.

Vice Rector Sergey Yu. Roshchin

[Summary of Degree Programme 'Data Analytics for Business and Economics'](#)

