# Concept of Master Programme

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| Programme name: | Project Management[[1]](#footnote-2) |
| Length of programme: | 2 years |
| Delivery mode: | Full-time |
| Total credits: | 120 |

## Baseline

In the context of increasing globalization Russian and international companies are in need of a significant number of high-level managers, who are able to manage different types of projects, programs and portfolios which ensure the rapid development and increasing competitiveness, implement specific innovative projects and seek investors to bring their practical resources of the investment markets.

Project management is an important part of the priority directions of the development of "Management" HSE and one of the youngest and fastest-growing destinations in the world. In a short time were formed professional societies and developed regularly updated national and international standards. There are new practical and scientific journals. Scientific schools are forming. A lot of new interesting and promising methods and management tools are creating. All this aimed at improving management efficiency, reflected in the increase in the proportion of successful projects and, as a consequence, increase the competitiveness of companies.

## Programme Objectives and Intended Learning Outcomes (ILOs)

The mission of the programme is advancement of business society managerial capabilities by the development of project thinking. WepreparehighlyqualifiedandmotivatedprofessionalsinProjectManagement, competitiveinglobalmulticulturalbusinessenvironment.

The aim of the Programme is to train business administration professionals able to bring Russian companiescloser to international standards for competitiveness of goods and services, strategic agility and high socialresponsibility. The Programme graduate are employed as a project manager, programme manager or projectportfolio manager, leader or staff member of strategic (corporate) project management office, consultant,business-analyst in a wide range of industries, or in some cases, an academic researcher, contributing to theadvancement of the body of knowledge in project management discipline.

Inordertoencompassthebroadrangeofcontemporarymanagerialactivities, theprogrammehasthefollowingobjectives:

1. To supply Russian and multinational companies operating in Russia with professionals capable of taking positions in project management structures; to prepare graduates for entrepreneurship career.
2. To create a pool of persons capable to enter academia in the fields of management and business studies.
3. To equip graduates with knowledge, learning abilities, networking, and social skills for success in consulting.

Intended learning outcomes are grouped hereinafter according to the types of activities performed by our graduates.

**Academic activity (research and teaching)**

* Ability to identify and formulate tasks arising from the current companies practices in the fields of project portfolio management, program and project management, critically evaluate and summarize national and international studies in these fields (PC-1);
* Ability to carry out researches in project management and related fields, including:
* to set clear and concise research objectives related to identified gaps in theory or in theory applications;
* to design realistic programmes of study taking into account the desirable research outcomes, possible audiences of research results, resources available and time constraints,
* to identify the data necessary to reveal the properties of the studied phenomena;
* to collect, proceed, analyze and synthesize qualitative and quantitative data from various sources, including field studies and experiments (PC-2);
* Ability to formulate and verifyresearch hypotheses, select and reason research tools and methods, critically evaluate the results obtained, and validate the findings (PC-3);
* Skills in theory building, ability to properly use the methods of quantitative and qualitative data analysis (PC-4)
* Ability to present results of a study in a research report, academic article, executive summary or in oral presentation with multi-media presentation support tools,ability to present results of a study in materials suitable for teaching purposes (PC-5);
* Ability to develop academic programmes and methodological support for teaching project management (PC-6);
* Ability to participate in teaching and research activities of the senior faculty as research and teaching assistants in the area of project management(PC-7);

**Managerial and entrepreneurial activity**

* Ability to be employed in a position of project manager in small and medium-size companies or to work in corporate staff positions related to project management in large companies; readiness for promotion to higher managerial positions without substantial additional executive training; (PC-8);
* Ability to perform the job duties in a global context, including abilities to work in multi-cultural teams; eagerness to maintain high ethical standards of personal and team behavior (PC-9);
* Ability to manage projects in a broad context including abilities to manage project portfolios in order to achieve companies’ strategic objectives, to initiate and plan different types of projects, to manage project teams and communicate with project stakeholders efficiently (PC-10);
* Ability to develop and implement organizational project management based on system approach, to choose an appropriate professional standard or methodology in the field of project management according to the managerial task. (PC-11)
* Ability to identify challenges that company will meet in the future and to choose investment projects and the tasks to answer the defined challenges (PC-12).
* Ability to make financial assessment, to plan costs and develop budgets, cash flow modeling and to organize optimal funding of the projects and the programs (PC-13);
* Ability to choose the appropriate method and mathematical model of project management according to it’s objectives, to develop a schedule and to optimize the timing of the project, taking into account the current resource constraints (PC-14);
* Ability to trace recent trends in project management techniques and tools, to select relevant tools and to master them constantly; willingness and ability to participate in the development of new project management techniques and tools (PC-15);
* Ability to perform entrepreneurial roles, including adaptability to financial and social risks, job ambiguity etc. (PC-16).

**Consulting activity**

* Ability to be employed by leading national and international consulting companies in managers positions in the field of project portfolio, program and project management:
  + Ability to identify, to collect and to process the data necessary to produce valuable new insights for clients (PC-17);
  + Ability to find effective solutions for identified problems, to offer worthy recommendations and advice to clients (PC-18);
  + Ability to establishrelationshipsof a project management systemwith other managementareasand todevelop and to implementcorporate standards withinproject management system(PC-19);
  + Abilityto select and to applyprofessional techniquesand toolsfor the implementation ofconsulting in project management (PC-20);
  + Ability to manage effectively the relationship with the clients from the beginning to the end of a consulting project (PC-21);
  + Ability to provideadvisory supportto project managersand linemanagement of a company (PC-22).

## Features and Competitive Advantages

### a) Interdisciplinary Approach

Project management involves close links with strategic management (especially in the management of programs and portfolios), investment, finance, human resource management, etc. Moreover, the management of such a special project has a number of interesting features. Each student can specialize gently in these areas by selecting certain courses and the course work and thesis.

### b) HSE ecosystem

Students have the opportunity to attend free seminars and workshops in TheHigher School of Project Management HSE, where they can talk to professional experts in the field of project management and learn from their experiences. Also, there is an opportunity to attend other programs HSE, and lectures by guest professors.

Graduates of our program can continue their education in postgraduate study in HSE and defend a thesis on the board of the Faculty of Management at HSE. Graduate students involved in conducting various workshops and scientific seminars, acquainting students with their research.

### c) Faculty

Teachers of the department are well-known experts and scholars known practices in project management, which in addition to the master's program and also taught at the Higher School of Project Management in HSE (including MBA groups), thus obtaining new data on the use of management techniques and tools projects in the Russian and international companies, leading its activities in Russia. Among the teachers there are graduates of the master's program, some were protecting their masters and doctorate in HSE.

### d) Involvement of Students in Research Activities

Students from the first year are involved in research activities, and the best works presented at international scientific conferences on management and project management, which are in the fall and spring of each year, where you can get advice and talk informally with renowned researchers and practitioners in the field of project management. The most interesting results are published in the journal "Russian Journal of Project Management", created at the initiative and with the support of HSE.

With first-year program begins with Scientific Workshop, which can provide the competencies required to conduct their own research. Scientific seminar lasts two years and ends overcurrent thesis.

Teachers programs maintain their own research and attract students to this work, along with graduate students.

### e) International Aspects

The program meets international and national standards for project management, including: project programs and portfolios management standards of the American Project Management Institute (PMI); competencies baselineof IMPA (SOVNET); PRINCE2; P2M etc.

Each student must get a minimum of 6 credit courses taught in English, for the successful completion of training. The program and the faculty have the growing list of English-language courses.

In the second year, students have the opportunity to continue their education abroad in business schools: ESCP, Paris-12, Laval, Lancaster, etc.

All courses use modern scientific articles and other materials in English.

### f) Innovative Teaching Methods

Most courses taught on the program are copyrighted and unique on the Russian space that ensures implementation of the learning process the results of recent research conducted by professors and researchers, as well as a unique personal experience of teachers and practitioners.

At the courses are widely used modern information technology: a projector, computer classes, e-learning support system (LMS). Most courses involve teamwork, analysis of cases, etc.

### g) Corporate Interactions

The program has strong links with the Russian consulting companies working in the field of project management, whose representatives regularly participate in seminars and conferences, and provide students with the opportunity to practice and post graduate recruit. PM SOFT Company delivers the latest version of the automation project management for Oracle Primavera training and provides certification of students' knowledge in this system. There are also connections with the large companies.

## Programme Structure and Curriculum

The programme structure assumes the foundational knowledge of the basic management disciplines on the bachelor level. Therefore, the programme contains advanced project management courses ensuring acquisition of advanced managerial skills. The unique feature of this programme is that it combines two fundamental topic areas into one coherent programme: the introduction into advance project management is centered around two courses: “Strategic project portfolio and program management” and “Mathematical models and methods of scientific research in project management.”

The rest of the programme is strategically developed along the further development of the two problem areas, which students are expected to master. Topical courses further develop the skills along the two major problem areas of the programme. International perspectives, while introduced in every course in the programme, are covered in a much greater detail in courses titled “Management of major and international projects” “Management of innovation project,” and “Project management competences development.” Instrumental core provides specific managerial, research, and consulting skills. Theoretical foundations of project management are further explored in two courses, “History and methodology of project management” and “Theory of investment analysis and project finance.” Table 1 shows the overall programme structure.

Table 1. Programme Coverage and Content

|  |  |
| --- | --- |
| **Advanced Problem Area Courses** | |
| * Strategic project portfolio and program management | * Mathematical models and methods of scientific research in project management |
| **Topical (Specialized) Courses** | |
| * Management of production projects * Consulting in project management * Organization of investment business projects | * Management of culture projects * Management of investment project * Management of venture projects |
| **International Perspective in Project Management** | |
| * Management of major and international projects * Management of innovation project * Project management competences development | |
| **Instrumental Courses** | |
| * Forecasting and modeling of project risks * Processes and tools of project management * Techniques of nonstandard project solutions * Financial analysis of the projects | |
| **Theoretical Background Development** | |
| * History and methodology of project management * Theory of investment analysis and project finance | |

It is worth noting that the courses shown above are not being administered in the order shown; Table 1 only demonstrates the overall structure of the programme. Some of these courses are mandatory in the programme; others are electives. Every student has an opportunity to create his/her own curriculum taking into account individual preferences and career paths. A two-year plan is shown in the Table 2 below.

Table 2. Overall Programme Structure with Courses, Hours, and Credits

| **Course title** | **Total Credit** | **Total Hours** | **First Year** | | **Second Year** | |
| --- | --- | --- | --- | --- | --- | --- |
| **Credits** | **Total Hours** | **Credits** | **Total Hours** |
| **required core** |  |  |  |  |  |  |
| History and methodology of project management | 3 | 108 | 3 | 108 |  |  |
| Strategic project portfolio and program management | 4 | 144 | 4 | 144 |  |  |
| Processes and tools of project management | 7 | 252 | 5 | 180 | 2 | 72 |
| Mathematical models and methods of scientific research in project management | 5 | 180 | 5 | 180 |  |  |
| Theory of investment analysis and project finance | 6 | 216 | 4 | 144 | 2 | 72 |
| Forecasting and modeling of project risks | 4 | 144 |  |  | 4 | 144 |
| **Total required core** | **29** | **1044** | **21** | **756** | **8** | **288** |
| **First year electives (4 from 44)** |  |  |  |  |  |  |
| Search techniques of project solutions | 5 | 180 | 5 | 180 |  |  |
| Project management competences development | 4 | 144 | 4 | 144 |  |  |
| Organization of investment business projects | 5 | 180 | 5 | 180 |  |  |
| Management of venture projects | 4 | 144 | 4 | 144 |  |  |
| Management of innovation project | 4 | 144 | 4 | 144 |  |  |
| Management of investment project | 4 | 144 | 4 | 144 |  |  |
| Management of culture projects | 4 | 144 | 4 | 144 |  |  |
| Management of production projects | 4 | 144 | 4 | 144 |  |  |
| **First year: common pool electives** | **25** | **900** | **25** | **900** |  |  |
| **Second year electives**  **(2 from 3)** |  |  |  |  |  |  |
| Consulting in project management | 3 | 108 |  |  | 3 | 108 |
| Management of major and international projects | 3 | 108 |  |  | 3 | 108 |
| Financial analysis of the projects | 3 | 108 |  |  | 3 | 108 |
| **Second Year: Electives** | **6** | **216** |  |  | **6** | **216** |
| **First year research activity (Seminars, Internships)** |  |  |  |  |  |  |
| Course paper | 6 | 270 | 6 | 270 |  |  |
| Research seminar “Methodology of scientific research” | 3 | 108 | 3 | 108 |  |  |
| Research seminar “Problems of project portfolio and program strategic management” | 5 | 180 | 5 | 180 |  |  |
| Research seminar “Problems of project management theory and methodology” | 5 | 180 | 5 | 180 |  |  |
| **Total First Year**  **Research Activity** | **14** | **558** | **14** | **558** |  |  |
| **Total first year** | **60** | **2214** | **60** | **2214** |  |  |
| Internship | 12 | 540 |  |  | 12 | 540 |
| Research seminar “Research Project” | 6 | 216 |  |  | 6 | 216 |
| Research seminar “Methodology of Scientific Research” | 4 | 144 |  |  | 4 | 144 |
| **Total Second Year**  **Research Activity** | **22** | **900** |  |  | **22** | **900** |
| Master thesis preparation and defence | 24 | 810 |  |  | 24 | 810 |
| **Total Second Year** | **60** | **2214** |  |  | **60** | **2214** |
| **TOTAL THE PROGRAMME** | **120** | **4428** |  |  |  |  |

## Graduates Career Placement

The graduates of the program will have a high competitive qualities in the labor market will be in demand in the various sectors of the economy. They are:

* Consulting firms engaged in the implementation of project management methodology in companies;
* Large vertically integrated companies and holdings in the energy, oil and gas, manufacturing and high-tech sectors of the national economy;
* Small and medium manufacturing companies in other industries and trade - a company of this type must have a comprehensive professional profile that can simultaneously solve the problems in different areas.

More specifically, it is a training of managers of different levels of a wide range of projects, both in the implementation of individual project decisions and complex projects that combine the efforts of many participants, using the resources of various kinds, and projects of business line of vertically integrated companies

* Venture capital funds and private equity funds

For these funds graduates are interesting by their ability to assess risks and business plans, identify sectors, regions and options investment schemes and venture capital out of the projects.

* Innovative companies, including those in parks, regional promotional science and technology parks and science cities.

A clear need for graduates of the program are established and function of science and technology and innovation zones, where they can perform different functions, and held various positions, including heads of organizations, department directors and managers for the commercialization of inventions, project evaluation and business planning, investor relations, evaluation of projects and business planning, investor relations.

Table 3. Programme Design: Curriculum vs. Intended Learning Outcomes

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Intended Learning Outcomes (ILOs)** | | | | | | | | | | | | | | | | | | | | | |
| **Courses** | PC-1 | PC-2 | PC-3 | PC-4 | PC-5 | PC-6 | PC-7 | PC-8 | PC-9 | PC-10 | PC-11 | PC-12 | PC-13 | PC-14 | PC-15 | PC-16 | PC-17 | PC-18 | PC-19 | PC-20 | PC-21 | PC-22 |
| History and methodology of project management |  | + |  |  | + |  |  | + |  |  | + |  |  |  | + |  |  |  | + |  |  |  |
| Strategic project portfolio and program management | + |  |  |  | + |  |  | + |  | + | + | + |  |  |  |  | + |  |  |  |  | + |
| Processes and tools of project management |  | + |  |  |  |  |  | + | + | + |  |  |  |  | + | + |  |  |  |  |  |  |
| Mathematical models and methods of scientific research in project management | + |  | + | + | + |  |  |  |  | + |  |  |  | + | + |  | + |  |  |  |  |  |
| Theory of investment analysis and project finance | + |  |  |  |  |  |  | + |  |  |  |  | + |  |  | + | + | + |  |  |  |  |
| Forecasting and modeling of project risks |  |  |  |  |  |  |  | + |  | + |  | + |  | + |  | + | + | + |  |  |  |  |
| Search techniques of project solutions | + | + |  |  | + |  |  | + |  | + |  | + |  |  |  | + |  |  |  |  |  |  |
| Project management competences development |  |  |  |  | + | + |  | + | + | + | + |  |  |  | + |  |  |  | + |  |  |  |
| Organization of investment business projects |  |  |  |  | + |  |  |  | + |  |  | + | + |  |  |  | + | + |  |  |  |  |
| Management of venture projects |  |  |  |  | + |  |  | + | + |  |  | + | + |  |  |  | + | + |  |  |  |  |
| Management of innovation project | + | + |  |  | + |  |  |  | + | + |  | + |  |  | + | + | + | + |  |  |  |  |
| Management of investment project | + | + |  |  | + |  |  | + |  |  |  | + | + |  |  | + | + | + |  |  |  |  |
| Management of culture projects |  | + |  |  |  |  |  | + | + |  |  |  |  |  |  |  | + | + |  | + | + | + |
| Management of production projects | + |  |  |  | + |  |  | + | + |  |  |  |  |  |  |  | + | + |  |  |  |  |
| Consulting in project management |  |  |  |  | + |  |  |  |  | + |  |  |  |  | + |  | + | + | + | + | + | + |
| Management of major and international projects | + |  |  |  | + |  |  |  | + |  |  |  |  |  | + |  | + | + |  |  |  |  |
| Financial analysis of the projects | + | + |  |  | + |  |  | + |  |  |  | + | + |  |  |  | + | + |  |  |  | + |
| Research seminar “Methodology of scientific research” | + | + | + | + | + | + | + |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Research seminar “Problems of project portfolio and program strategic management” | + | + | + | + | + | + | + |  |  | + |  |  |  | + |  |  |  |  |  |  |  |  |
| Research seminar “Problems of project managementtheory and methodology” | + | + | + | + | + | + | + |  |  |  | + |  |  |  |  |  |  |  |  | + |  |  |

1. Site: <http://management.hse.ru/en/project_man/> [↑](#footnote-ref-2)