Internship Programme

for students entering

the Master's programme in Data Science in 2024

Approved by the Academic Committee of the Master's programme in Data Science Minutes No. 2.3-09/290824-5, dated August 29, 2024

The Internship Programme includes a description of the degree programme's curricular elements that are offered as practical training and come under the "Internship" module of the curriculum.

Practical training under the Master's programme in Data Science is aimed at the development of skills and acquisition of knowledge in computer science. Practical training encompasses a range of activities aimed at developing professional, research and teaching skills.

1. Overview:

The Master's programme in Data Science provides for the following practical training elements (PTE):

Year	Type of internship	Internship form	Feature	Credits per student	Academ ic hrs per student	Timeframe
1	Research / Project	Term paper	Mandatory	3	114	2024/2025 academic year
2	Research / Project	Thesis preparation	Mandatory	12	456	2024/2025 academic year

PTE deadlines

PTE format	Deadline for signing a student assignment	Deadline for submitting a student's interim draft/report	Deadline for submitting a student's final draft/report
Term paper	by 12:00pm on December 15	to be determined by the term paper supervisor	no later than 18 calendar days before the date of the term paper defence
by 12:00pm on December 15		to be determined by the thesis supervisor	no later than 18 calendar days before the date of the thesis defence

2. Internship Content

2.1. PTE: Term Paper

2.1.1 Purpose of the Term Paper PTE

The purpose of a term paper is to deepen a student's knowledge and skills acquired through theoretical and practical classes, as well as help the student master the skills necessary for independently analysing new information and develop competencies that are critical for analytical, research and project activities.

Term papers may be completed either in the form of a *research work* or a *software project*.

2.1.2 **PTE: Content and Special Aspects**

In terms of its content, a term paper may be completed in one of the following two formats:

- a) academic research with the relevant findings presented as a final draft paper;
- b) an applied project presented as a finished intellectual product (e.g., database or election campaign strategy) that resulted from the work of the given student(s), and other reporting documentation outlining the project parameters and the key steps taken in implementing it.
- In terms of its implementation, a term paper may be:
- a) individual;
- b) group.

2.1.3 PTE: Grading and Reporting

A term paper that is awarded a grade in the range of eight to 10 points is subject to a public defence before a board.

Term papers are assessed according to HSE University's 10-point grading system and based on a student's presentation, a reading of their work, and feedback from their supervisor, with all assessments made in accordance with the established grading criteria.

A grade of "Unsatisfactory" (0 points) will be given if the student failed to begin work on the term paper or failed to submit it within the established timeframes or by the set deadlines, as well as if the student is found to have committed any of the violations stipulated by **the Procedures for Applying Disciplinary Measures for Violations of Academic Standards for Student Papers at HSE University,** which is an annex to the **HSE Internal Regulations**, such as copying the work of others, duplication of assessed work, plagiarism, fraud, or the fabrication of data and research findings. A term paper that is not submitted on time shall be deemed a failed assignment.

Further information on writing and defending term papers can be found in the Guidelines for the Preparation of Term Papers for Students in the Master's Programme in Data Science.

2.1.4. **Term paper** deadlines:

No.	Deadline	Timeframes	
1	Approving the term paper topic and	by 12:00pm on November	
	supervisor via the Learning Management	20, 2024	
	System (LMS)		
2	Optional: Changing the term paper topic /	from April 1, 2025 to May	
	supervisor	1, 2025	

3	Submission by the student of the final draft	by 12:00pm on June 13,	
	term paper to the term paper supervisor for	2025	
	the latter's feedback		
4	Uploading by the student of the final draft	by 12:00pm on June 20,	
	term paper in an unscanned electronic format	2025	
	to the special term paper module in the LMS		
	(after which the work will be uploaded to the		
	Antiplagiat system for detecting text		
	similarity and preventing plagiarism)		
5	Term paper defence / submission to the	by the end of June 2025	
	degree programme office	(specific dates to be	
		confirmed)	

- 2.1.5. Term papers presented as software projects may be completed by an individual student or a group of students.
- 2.1.6. When writing term papers, students should adhere to the Guidelines for Writing, Evaluating, Defending, and Publishing Term Papers and Theses.

2.2. PTE: Thesis

2.2.1 Purpose of the Thesis PTE

The purpose of a thesis (final qualification work) is to further deepen, expand and reinforce the skills and knowledge acquired by students through the completion of term papers.

As a prerequisite for writing a thesis, a student must have earned credits during previous academic periods of the relevant degree programme and mastered the relevant programme components in the scope sufficient for completing this practical training element.

Theses may be completed either in the form of a research work or a software project.

2.2.2 PTE: Content and Special Aspects

In terms of its content, a thesis may be completed in one of the following two formats: a) academic research with the relevant findings presented as a final draft paper;

b) an applied project presented as a finished intellectual product (e.g., database or election campaign strategy) that resulted from the work of the given student(s), and other reporting documentation outlining the project parameters and the key steps taken in implementing it.

In terms of its implementation, a term paper may be:

- a) individual;
- b) group.

2.2.3. Thesis PTE: Grading and Reporting:

The defence of a thesis before an examination board is the final step in its completion (a defence may be conducted either in-person or via video-conferencing).

Students who have successfully completed their study load under a programme in a certain field (concentration) of higher education in full shall be allowed to proceed to take part in the thesis defence process.

The thesis defence shall be conducted in accordance with the established schedule for state qualification examinations at meetings of the examination boards for individual fields of study (concentrations), with at least two-thirds of the board members present.

The assessment of a thesis is conducted via an open vote of the state examination board members, with the grade determined by a simple majority of the votes. In case of a tie vote, the board chair will cast the deciding vote.

2.2.4. Thesis Deadlines:

No.	Deadline	Timeframes
1	Selection of the thesis topic	by 12:00pm on November 20, 2024
2	Optional: Changing the thesis topic / supervisor	Changing a thesis topic - from April 1, 2025 to April 22, 2025 A change in the thesis supervisor must be made by 12:00pm on March 22, 2025.
3	Submission by the student of the final draft thesis, and an abstract of it, in both Russian and English, to the thesis supervisor for receiving the latter's feedback	
4	Uploading by the student of the final thesis draft, in the form of an unscanned electronic copy, to the special term paper module in the LMS (after which the work will be uploaded to the Antiplagiat system for detecting text similarity and preventing plagiarism)	by 12:00pm on May 23, 2025
5	Submitting thesis documents	no later than six days prior to the date of the defence
6	Submitting thesis documents to reviewers for receiving their feedback	by 12:00pm on May 24, 2025
7	Thesis defence	June 2025 (tentatively from June 1 to 13, specific dates to be confirmed)

2.2.5. In writing a thesis, students should adhere to the Methodological Guidelines for Thesis Writing and the General Guidelines for Writing Academic Works.

3 PTE: Resources and Terms

3.1. Resources, equipment and facilities necessary for implementing PTEs

In the process of carrying out a PTE, students may use information technologies, including tools for automating the design and development of software, applied at a given industry-specific organisation hosting an internship, online technologies, etc.

The material and technical support items (equipment and supplies) necessary for implementing PTEs may be specified, if necessary, in practical training (internship) agreements with the respective internship host organisations. Such equipment and supplies must comply with current public health and fire safety regulations, as well as occupational and workplace safety requirements.

3.2. Key features of PTE assignments under restrictive and/or other measures

If restrictive measures are in place (and are ongoing under normal circumstances), the stationary implementation of a specific PTE may be substituted by a virtual internship by

decision of the University, or, if such authority has been delegated to the degree programme, by decision of its Academic Committee.

Other issues involving the implementation of PTE assignments under restrictive conditions will depend on the specific type of restrictions and be specified by the HSE University administration, the faculty, or the degree programme.

4 Special aspects of learning support for persons with disabilities, health limitations or physical conditions

The practical training of students with disabilities, health limitations or physical conditions will be carried out with due consideration for their psycho-physical development, individual capabilities and health status.