

INDIVIDUAL CURRICULUM

For the preparation of a PhD student

1. The code and name of the professional direction:

5.5. Transport, shipping and aviation

2. Doctoral program:

Traffic management and organization

3. Scientific unit:

Department Transport

A. Study work

1. Training in scientific-methodical and optional subjects in the group curriculum for the preparation of doctoral students.

1.1. Scientific and methodological disciplines (only two are selected)

1.1.1. Legal basis for doctoral studies and structure of dissertation work. 3 ECTS.

1.1.2. Means of automation of scientific research. 3 ECTS.

1.1.3. Research methodology. 3 ECTS.

1.1.4. Methods for theoretical study. 3 ECTS.

1.1.5. Experiment theory. 3 ECTS.

1.1.6. Means of automation of research. 3 ECTS.

1.2. Optional subjects.

1.2.1. Application of MATLAB in engineering research – Part I. 3 ECTS.

1.2.2. Application of MATLAB in engineering research – Part II. 3 ECTS.

1.2.3. Application of MATLAB in engineering research – Part III. 3 ECTS.

1.2.4. Optimization with MATLAB. 3 ECTS.

1.2.5. Intellectual property protection. 3 ECTS.

1.2.6. Intellectual Property. 3 ECTS.

1.2.7. Economic aspects of research. 3 ECTS.

1.2.8. Scientific communication and presentation skills. 3 ECTS.

1.2.9. Synthesis and analysis of complex systems. 3 ECTS.

1.2.10. Computer modeling of continuous media. 3 ECTS.

1.2.11. Optimization methods. 3 ECTS.

1.2.12. Planning of scientific projects. 3 ECTS.

1.2.13. International project financing. 3 ECTS.

2. Training in specialized disciplines in the group curriculum - at the discretion of the scholar advisor of the doctoral student.

2.1. Doctoral studies courses / seminars (the exact name is indicated in the individual plan). 3 ECTS.

2.1.1 Seminar: Solving transport problems

3. Passing the exam (s) from the doctoral minimum

3.1. Doctoral minimum – exam on the specifics of the research topic

3.1.1. Management and organization of road transport. 10 ECTS.

3.2. Doctoral minimum – exam on the specifics of the research topic

3.2.1. Modelling and research of production processes in transport. 10 ECTS.

3.3. Foreign language. 5 ECTS.

*Total planned ECTS credits from study work: **34 credits, 680 hours***

B. Research and thesis works

1. Work program plan:

No	Stages	Term	ECTS credits	Hours
1.	Problem status analysis. Formulation of the relevance, purpose, tasks and thesis of the doctorate.	XX.XX.XXXX		
	Writing Chapter I of the Thesis. (for each 25-30 pages of 1800 characters each.)		15	300
	Writing and submitting a report (publishing an article).		5	100
2.	Theoretical research. Formulation of conclusions.	XX.XX.XXXX		
	Writing Chapter II of the Thesis. (for each 25-30 pages of 1800 characters each.)		15	300
	Writing and submitting a report (publishing an article).		5	100
3.	Practical solution to the problem. Formulation of conclusions.	XX.XX.XXXX		
	Writing Chapter III of the Thesis. (for each 25-30 pages of 1800 characters each.)		15	300
	Writing and submitting a report (publishing an article).		5	100
4.	Experimental studies. Formulation of conclusions.	XX.XX.XXXX		
	Writing Chapter IV of the Thesis. (for each 25-30 pages of 1800 characters each.)		20	400
	Writing and submitting a report (publishing an article).		5	100

5.	Formulation of general conclusions and contributions.	XX.XX.XXXX	15	300
6.	Final forming of the thesis.	XX.XX.XXXX		
7.	Writing an abstract.	XX.XX.XXXX		
8.	Preliminary thesis defence	XX.XX.XXXX		
9.	Final thesis defence.	XX.XX.XXXX		
10.	Quarterly reports	September.....	1	20
		December.....	1	20
		March.....	1	20
		September.....	1	20
		December.....	1	20
		March.....	1	20
		September.....	1	20
		December.....	1	20
		March.....	1	20
11.	Annual reports (doctoral attestation)	June	3	60
		June	3	60
		June	3	60
Total:			128	1560

2. Delivering 2 hours of lectures per semester in a discipline related to the thesis topic of the dissertation.

Transport flow theory and logistics

15. ECTS, 300 hours for three years

3. Conducting laboratory, seminar or practical exercises; course work; course project or undergraduate design - up to 50 semester hours.

15. ECTS, 300 hours for three years

4. Preparation of a review of one diploma project

15. ECTS, 60 hours for three years

5. Participation in research projects

15. ECTS, 300 hours for three years

*Total planned ECTS credits from study work: **48 credits, 960 hours.***

*ECTS credits for the whole period of study, pedagogical and scientific work: **210 credits, 3200 hours.***