



## DIPLOMA SUPPLEMENT

This Diploma Supplement follows the model developed by the European Commission, Council of Europe and UNESCO/CEPES. The purpose of the Supplement is to provide sufficient independent data to improve the international 'transparency' and fair academic and professional recognition of qualifications (diplomas, degrees, certificates etc.). It is designed to provide a description of the nature, level, context, content and status of the studies that were pursued and successfully completed by the individual named on the original qualification to which this Supplement is appended. It should be free from any value judgments, equivalence statements or suggestions about recognition. Information in all eight sections should be provided. Where information is not provided, an explanation should give the reason why.

### 1. INFORMATION IDENTIFYING THE HOLDER OF THE QUALIFICATION

1.1	Family name(s)	<b>Khairulov</b>
1.2	Given name(s)	<b>Timur</b>
1.3	Date of birth (day/month/year)	<b>05/08/2000</b>
1.4	Student identification number or code	<b>B-2023-3295</b>

### 2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1	Name of qualification and title conferred	Bакалавр (Bachelor). Name of title is not applicable.
2.2	Main field(s) of study for the qualification	Information Systems and Technologies Specialization: Information Management Systems
2.3	Name and status of awarding institution	Санкт-Петербургский государственный электротехнический университет «ЛЭТИ» им. В.И. Ульянова (Ленина) (Saint Petersburg Electrotechnical University "LETI"). Status: State University / under jurisdiction of the Ministry of Science and Higher Education of the Russian Federation
2.4	Name and status of institution administering studies	Same as in 2.3
2.5	Language(s) of instruction/examination	Mainly Russian

### 3. INFORMATION ON THE LEVEL OF THE QUALIFICATION

3.1	Level of qualification	According to the International Standard Classification of Education (ISCED-2011) the qualification applies to the ISCED level 6 "bachelor or equivalent" with academic orientation (ISCED program code – 645).
3.2	Official length of programme	At least four years of full-time study, 240 RF units.
3.3	Access requirement(s)	The Certificate of Secondary General Education (Attestat o Srednem Obschem Obrazovanii) or its equivalent and unified state examinations results competition / entrance examinations.

### 4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1	Mode of study	Full-time
4.2	Programme requirements	In accordance with the State Educational Standard the Bachelor's programme includes humanities, social economic courses, mathematical and natural science courses, general professional courses, at least four weeks of professional training, preparation and defence of final project and sitting for final state examination.
4.3	Programme details	Programme details include subjects, study work in RF units, national grades and ECTS grades.
4.4	Grading scheme, grade distribution guidance	In the Russian Federation the study workload is evaluated in Academic Hours (AH). One AH is 45 minutes. Workload of practical training, preparation and defense of Graduation Project is evaluated in weeks. One week of full-time study is 54 AH. One RF units is approximately equal to 36 AH of total workload. The national grades are based on a 2 to 5 scale. Where «excellent» (отлично - otlichno) stands for 5 out of 5; «good» (хорошо - khorosho) stands for 4 out of 5; «satisfactory» (удовлетворительно - udovletvoritelno) stands for 3 out of 5; «fail» (неудовлетворительно - neudovletvoritelno) stands for 2 out of 5. The assessment can be also made in terms of: «passed» (зачтено - zachteeno) or «not passed» (не зачтено - ne zachteeno). The lowest passing grade is «satisfactory» (удовлетворительно) and «passed» (зачтено). Students are only permitted to enroll in the next year of study and to be awarded a Diploma if they have passing grades in each subject of the curriculum. The university grade scale is in the following correspondence with ECTS grades: «excellent» - A; «good» - C; «satisfactory» - D; «fail» - F
4.5	Overall classification	Диплом (Diplom - Diploma)

No	Subjects Studied	RF units	National Grade	ECTS Grade
	<b>1 semester</b>			
1	Philosophy	3	satisfactory	D
2	Algebra and Geometry	5	satisfactory	D
3	Mathematical Analysis	4	satisfactory	D
4	Physics	5	good	C
5	Programming	6	satisfactory	D
6	Information Technologies Fundamentals	4	satisfactory	D
7	Physical Education and Sport	1	passed	A
8	Foreign Language	2	good	C
	<b>2 semester</b>			
9	Mathematical Analysis	4	good	C
10	Physics	5	good	C
11	Programming	5	excellent	A
12	History	3	good	C
13	Discrete Math	4	good	C
14	Algebraic Structures	5	good	C
15	Ecology	2	excellent	A
16	Foreign Language	2	excellent	A
17	Physical Education and Sport (elective course)	-	passed	A
	<b>3 semester</b>			
18	Mathematic Simulation	3	excellent	A
19	Computer and Systems Organization	4	good	C
20	Information Theory, Data, Knowledge	4	excellent	A
21	Algorithms and Structures of Data	5	excellent	A
22	Combinatory and Theory of the Countries	4	good	C
23	Science of Law	3	good	C
24	Foreign Language	2	excellent	A
25	Economics	2	excellent	A
26	Technologies of Databases	3	good	C
27	Physical Education and Sport (elective course)	-	passed	A
	<b>4 semester</b>			
28	Computer Mathematics	3	satisfactory	D
29	Theory of Probability and Mathematical Statistics	4	satisfactory	D
30	Mathematical Logic and Theory of Algorithms	4	satisfactory	D
31	Architecture of Information Systems	4	good	C
32	Physical Education and Sport	1	passed	A
33	Foreign Language	2	excellent	A
34	Operating Systems	4	good	C
35	Software Design	5	excellent	A
	<b>5 semester</b>			
36	Data Management	4	good	C
37	IT Project Management	3	satisfactory	D
38	Machine Learning	3	excellent	A
39	Infocommunication Systems and Networks	4	excellent	A
40	Metrology	4	good	C
41	Web Technologies	4	excellent	A
42	Statistical Analysis	4	good	C
43	Optimization Methods	4	satisfactory	D
	<b>6 semester</b>			
44	Information Systems Design Methods and Tools	5	excellent	A
45	Big Data	5	excellent	A
46	Sociology	2	good	C
47	Theory of Decision Making	3	excellent	A
48	Object Oriented Programming	4	good	C
49	Ethics and Culture of Professional Relations	2	excellent	A

Nº	Subjects Studied	RF units	National Grade	ECTS Grade
<b>7 semester</b>				
50	Information Systems Design Methods and Tools	4	excellent	A
51	Safety for Life and Activity	3	good	C
52	Artificial Intelligence Methods	4	good	C
53	Modeling Systems	5	good	C
54	Computer Graphics	3	excellent	A
55	Marketing	3	good	C
56	Quality of Information Systems and Technologies	4	good	C
57	Digital Processing of Information	4	good	C
<b>8 semester</b>				
58	Administration of Information Systems	2	excellent	A
59	Control Theory	3	good	C
60	Digital Manufacturing	2	excellent	A
61	Interdisciplinary Project "Corporate Information Systems"	3	excellent	A
62	Real Time Systems	2	excellent	A

## **Preparation and defense of the Graduation Paper:**

"Detection and Recognition of Traffic Signs, Road Markings and Traffic Lights Using Deep Learning"

## Practical Training:

1	Academic Internship (Research Project (Acquiring Basic Research Skills)) (4 sem.)	3	good	C
2	Internship (Manufacturing (Design and Manufacturing)) (6 sem.)	9	excellent	A
3	Internship (Pre-degree Internship) (8 sem.)	9	excellent	A

Total Number of Credits: 240

### **Course Papers:**

1	Text Data Processing (1 sem.)	satisfactory	D
2	Image Processing (2 sem.)	excellent	A
3	Implementation of Basic Data Structures (3 sem.)	excellent	A
4	Developing a Static Multi-page Website Using html5, css, and JavaScript (5 sem.)	excellent	A
5	Conceptual and Logical Design of Relational Databases (5 sem.)	good	C
6	Development and Programming of an Object Model of a Queuing System (6 sem.)	good	C
7	Development of an Application for Working with the Product Directory (6 sem.)	excellent	A
8	Development of an Application for Working with Product Specifications (7 sem.)	good	C
9	Development of a Simulation Model (7 sem.)	good	C

## 5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

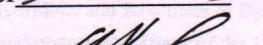
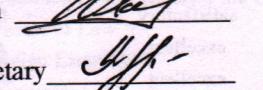
5.1	Access to further study	Bachelor's Degree gives access to the second stage (magistratura) of university level higher education (ISCED-2011 level 7).
5.2	Professional Status	This Diploma gives the right to carry out professional activities in accordance with the level of education and qualification.

## 6. ADDITIONAL INFORMATION

6.1	Additional Information	<p>Saint Petersburg Electrotechnical University "LETI" (ETU "LETI") was established in 1886 as an Engineering College of the Department of Post and Telegraph of Russia. In 1891 it was reorganized into the Imperial Institute of Electrical Engineering – the first in Europe higher education institution for engineers and researchers in the field of Electrical Engineering. Since then ETU "LETI" was renamed several times. In 1992 the Institute was granted the university status and became the first Electrotechnical University in Russia. The University was regularly accredited by State authorities. ETU "LETI" is licensed to hold educational activities in the field of higher education and accredited Federal Service for the Supervision of Education and Science and has indefinite accreditation and license.</p> <p>ETU "LETI" is considered as one of the world largest education and research centers in Radio and Electrical Engineering, Electronics and Computer Science. Nowadays Saint Petersburg Electrotechnical University "LETI" is one of the leading centers of higher education and research in Russia.</p>
6.2	Additional Information Sources	<p>Official website of ETU "LETI": <a href="http://etu.ru">etu.ru</a>          Official website of the Ministry of Science and Higher Education of the Russian Federation: <a href="http://minobrnauki.gov.ru">minobrnauki.gov.ru</a>          Official website of the National Accreditation Agency: <a href="http://nica.ru">nica.ru</a></p>

## 7. CERTIFICATION OF THE SUPPLEMENT

This Diploma Supplement is valid with the original diploma 107824 1033598, issued 30/06/2023

7.1	Date	30/06/2023
7.2	Signature	7.3 Official Stamp/Seal
Rector		
Dean		
Secretary		

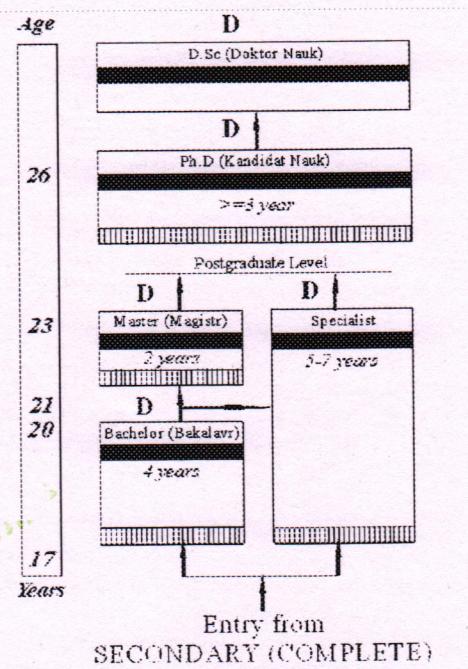
## 8. INFORMATION ON THE NATIONAL HIGHER EDUCATION SYSTEM

Higher education system of the Russian Federation is constituted of two parallel branches:

- one-cycle (monolevelled) training system of Diploma Specialist (5 – 7 years for different specialities);
- two-cycle (two leveled) training system: Bachelor (not less than 4 years) and Master (not less than 2 years).

Higher professional education is based on the State Educational Standards determining requirements for structure and content of training.

Postgraduate education includes two levels of scientific degrees: Kandidat Nauk (3 years) is considered equal to Ph.D. and Doktor Nauk is considered as D.Sc.



■ - Entrance exams ■ - Final attestation

Types of credentials D - Diploma