

DIPLOMA SUPPLEMENT

Federal State Autonomous
Educational
Establishment of Higher
Professional Education
"Southern Federal
University"

34.08-34/77

CONTROL NUMBER

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 QUALIFICATION

1.1 Family name / first name:	PELENITSYN ARTEM
1.2 Date, place, country of birth:	24.09.1986, Rostov-on-Don, Russia
1.3 Student number or code:	Diploma ББА 0344255

2. INFORMATION IDENTIFYING THE QUALIFICATION

2.1 Name of title (full, abbreviated):	Degree of BACHELOR OF SCIENCE IN APPLIED MATHEMATICS AND COMPUTER SCIENCE (Akademicheskaya stepen' «Bakalavr Nauk»)
2.2 Main field(s) of study for the qualification:	Field of Study: "Applied mathematics and computer science" Specialization: "Foundations and software engineering for computer science"
2.3 Name of institution awarding qualification: status (type / control)	Federal State Educational Establishment of Higher Professional Education "Southern Federal University" Федеральное государственное образовательное учреждение высшего профессионального образования «Южный федеральный университет»
2.4 Name of institution administering studies: status (type / control):	State Educational Establishment of Higher Professional Education "Rostov State University" Государственное образовательное учреждение высшего профессионального образования «Ростовский государственный университет»
2.5 Language(s) of instruction/examination:	Russian

3. INFORMATION ON THE LEVEL OF QUALIFICATION

3.1 Level of qualification:	First stage of tertiary university level higher education. According to the International Standard Classification of Education (ISCED) the qualification applies to the first stage of higher education (scale 5A)
3.2 Official length of the programme:	Period of studies – 4 years or 8631 academic hours (according to the Russian Federation State Educational Standard).
3.3 Access requirement(s):	High secondary school certificate and entrance examinations.

4. INFORMATION ON THE CONTENTS AND RESULTS GAINED

4.1 Mode of study:	Full-time study
4.2 Programme requirements:	Field of studies of <i>Bakalavr</i> is more academic than professional. Academic activity consists of lectures, seminars and practical training. Theoretical education includes scientific and research work of students, practical courses including laboratory courses. Examinations, testing, academic year papers and projects are the principal forms of knowledge control. Final qualification exam includes passing of the state interdisciplinary exam and public defence of final research <i>Bakalavr</i> paper in the presence of the committee of teachers and outresourced experts.

4.3 Programme details: See below and in official Russian form of diploma supplement attached to *Bakalavr Diploma*.

No	Subjects	Total number of academic hours	Credits ECTS	Grades
Year 1 (2003-2004)				
Semester 1				
1.	Foreign language (English)	136	4	passed
2.	History of Russia	136	4	passed
3.	Russian language: culture of oral and written speech	68	2	passed
4.	Physical training	76	2	passed
5.	Calculus	180	5	passed
6.	Geometry and algebra	172	5	excellent
7.	Computer science	92	2	excellent
	Total number of Credits:	860	24	
Semester 2				
8.	Foreign language (English)	136	4	passed
9.	Physical training	76	2	passed
10.	Calculus	180	5	excellent
11.	Geometry and algebra	172	5	good
12.	Discrete mathematics	153	4	excellent
13.	Practical course on computer programming	80	2	passed
	Total number of Credits:	797	22	

№	Subjects	Total number of academic hours	Credits ECTS	Grades
Year 2 (2004-2005)				
Semester 3				
14.	Foreign language (English)	136	4	passed
15.	Philosophy	204	6	passed
16.	Physical training	76	2	passed
17.	Calculus	180	5	excellent
18.	Geometry and algebra	176	5	excellent
19.	Practical course on computer programming	80	2	passed
20.	Physics	102	3	passed
21.	Programming languages and compilers	90	2	excellent
22.	Differential equations	102	3	passed
	Total number of Credits:	1146	32	
Semester 4				
23.	Foreign language (English)	136	4	excellent
24.	Physical training	76	2	passed
25.	Calculus	180	5	excellent
26.	Physics	102	3	excellent
27.	Systems and application software	90	2	passed
28.	Differential equations	102	3	good
29.	Economics	170	5	passed
30.	Computer networks	102	3	passed
	Total number of Credits:	958	27	
Year 3 (2005-2006)				
Semester 5				
31.	Calculus of variations and mathematical optimization	136	4	good
32.	Calculus	180	5	excellent
33.	Functional analysis	136	4	excellent
34.	Numerical analysis	76	2	excellent
35.	Advanced algebra	72	2	excellent
36.	Number theory	71	2	excellent
37.	Specialization laboratories	120	4	passed
38.	Continuum mechanics	102	3	excellent
39.	Advanced programming	102	3	passed
40.	Theoretical mechanics	204	3	good
41.	Practical course on computer programming	80	3	passed
42.	Partial differential equations	102	3	passed
	Total number of Credits:	1381	38	

Nº	Subjects	Total number of academic hours	Credits ECTS	Grades
Semester 6				
43.	Functional analysis	136	4	good
44.	Theory of probabilities and mathematical statistics	102	3	passed
45.	Partial differential equations	102	3	excellent
46.	Cryptography	70	2	excellent
47.	Introduction to error-correcting codes	71	2	excellent
48.	English language (elective course)	136	4	passed
49.	Practical course on computer programming	80	2	passed
50.	Bases of political and social science	136	4	passed
51.	Operations research	120	3	passed
52.	Research work (Course paper)	255	7	excellent
	Total number of Credits:	1208	34	
Year 4 (2006-2007)				
Semester 7				
53.	Theory of probabilities and mathematical statistics	102	3	excellent
54.	Databases	102	3	-
55.	Cyclic codes	76	2	excellent
56.	Digital signal processing	52	2	passed
57.	Numerical analysis	77	2	excellent
58.	History of religion	68	2	passed
59.	Practical course on computer programming	88	2	passed
60.	Life safety	102	3	passed
61.	Operating systems	68	2	passed
62.	Specialization laboratories	122	3	passed
63.	Logic and computation (elective course)	34	1	excellent
64.	Research work (Course paper)	226	6	excellent
	Total number of Credits:	1117	31	
Semester 8				
65.	Mathematical models in modern natural science	120	3	excellent
66.	Network security	100	3	passed
67.	Language C# and platform .NET	100	3	passed
68.	Supercomputers	102	3	passed
69.	Jurisprudence	136	4	passed
70.	Specialization laboratories	122	3	passed
71.	Stochastic processes	68	2	passed
72.	Final qualification exam	200	5	good
73.	Preparation and defence of the diploma thesis, 4 weeks	216	6	excellent
	Total number of Credits:	1164	32	
	Programme total:	8631	240	

4.3 Programme details:

Course papers:

1. On databases, excellent
2. Knapsack cryptosystem, excellent

Final qualification exam: Applied mathematics, good

Preparation and defence of the diploma thesis: «Berlekamp-Massey algorithm over Galois fields and its application», excellent

Note:

- a) In Russian Federation (RF) the study workload is evaluated in «академические часы» (*academicheskie chasy* – academic hours or AH). 1 AH = 45 minutes. Now it is possible to evaluate workload in RF Units (RFU, according to the RF Ministry of Education Recommendation № 14-52-988ин/13 from 28.11.2002). 1 RF Unit = 36 academic hours or 27 astronomical hours.
- b) 1 week of full-time study = 54 AH = 1, 5 RFU.

4.4 Grading scheme, grade distribution guidance:	Grades ECTS	Definition	Correlation with the marks of the Russian system of education
	A	Best results with insignificant mistakes	«отлично» (<i>otlichno</i>) excellent;
	B	Upper-intermediate level with several mistakes	«хорошо» (<i>khorosho</i>) good;
	C	Good work but with a number of serious mistakes	
	D	Not bad work but with serious shortfalls	«удовлетворительно» (<i>udovletvoritelno</i>) satisfactory;
	E	Level of knowledge equals minimal requirements	
	FX	Additional effort is needed to get a credit	«неудовлетворительно» (<i>neudovletvoritelno</i>)
	F	Great additional efforts are needed	
	«зачтено» (<i>zachteno</i>) passed «не зачтено» (<i>ne zachteno</i>) The lowest passing grade is «удовлетворительно» and «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.		
4.5 Overall classification:	without honours, без отличия (<i>bez otlichiya</i>)		

5. INFORMATION ON THE FUNCTION OF THE QUALIFICATION

5.1 Access to further study:	The Degree entitles their holders to be admitted to further education – the second cycle of education (Master Degree)
5.2 Professional status:	Bakalavr can be employed on positions prescribed by the legislation of the Russian Federation for individuals with higher professional education.

6. ADDITIONAL INFORMATION

6.1 Additional information:	<p>Southern Federal University (SFedU) is the largest centre of education, science and culture in the South of Russia. Currently SFedU has 49,741 students and 24,229 full-time students.</p> <p>The structure of SFedU includes 36 faculties, 206 chairs and 3 institutes that conduct training in 219 majors and courses, including 136 majors for graduates, 53 courses for bachelors and 30 courses for masters.</p> <p>The university provides effective postgraduate education. More than 2000 post-graduate students and degree candidates specialize in 124 majors and 95 doctor students specialize in 31 majors.</p> <p>There are 37 specialized boards for thesis defence in 88 majors, including 25 boards for doctoral thesis defence, which serve as an acknowledgement of the scientific progress made by SFedU.</p> <p>The staff of SFedU includes more than 8 thousand people, 3 947 of them being teachers, scientists and scholars. 7 people of the latter are full members and corresponding members of state academies, 160 people are members and corresponding members of public Russian and international academies of science, 391 people are doctors of science and 1540 people are candidates of science.</p> <p>The University has 2 campuses in Rostov-on-Don and Taganrog, a vast complex of a botanical garden, a large academic library, research centers at the Black sea coast and in the Caucasus.</p> <p>http://sfedu.ru/docs/ufudoc/license_new.pdf - license of Southern Federal University</p> <p>http://sfedu.ru/docs/ufudoc/akreditacy-ufu.pdf - accreditation of Southern Federal University</p>
6.2 Additional information sources:	<p>http://sfedu.ru - Southern Federal University</p> <p>http://www.ed.gov.ru - The ministry of education and science. Federal agency of education</p> <p>http://en.russia.edu.ru/edu/description/ - Information and analytical system education in Russia for foreigners</p>

*Due to the legislative act of the Government of the Russian Federation from November, 23, 2006, № 1616-p the following state establishments of higher professional education "Rostov State University", "Rostov State Academy of Architecture and Arts", "Rostov State Pedagogical University", "Taganrog State Radiotechnical University" have been reorganized by means of adjunction of the establishments to the university with the constitution of federal state educational establishment of higher professional education "Southern Federal University".

The order of Federal Agency on Education of 17.02.2010 № 125 established federal state autonomous educational establishment of higher professional education "Southern Federal University" by changing the type of existing federal state autonomous educational establishment of higher professional education "Southern Federal University".

7. CERTIFICATION OF THE SUPPLEMENT

This Diploma Supplement refers to the following original documents: Bakalavr Diploma BBA 0344255, date of issue: 01.04.2008.

7.1 Date:	24.11.2011
7.2 The name and signature:	Igor M. Uznarodov,
7.3 Appointment:	professor
	Senior Vice-Rector for Academic Affairs
	Irina N. Savchenkova
	Director of the Center for International Education
7.4 Official stamp:	



8. INFORMATION ON THE NATIONAL EDUCATION SYSTEM

