Ministry of Education and Science of Russian Federation
Federal State Autonomous Educational
Institution of Higher Education «Southern Federal University»
(SOUTHERN FEDERAL UNIVERSITY)

APPROVED

Director of the Institute of computer
technology and information security

_____ Gennady Veselov

Admission information for the Master's degree program
«IT management»

Code and Title of the subject area
09.04.01 Informatics and computer engineering

Program level
Master Program

Study mode
Full-time

Rostov-on-Don – Taganrog 2020

The admission for the master's program "IT management" of the 09.04.01 subject area "Informatics and computer technology" is carried out in the form of an interview on the submitted portfolio of the applicant. The interview may be conducted in person or remotely over the Internet.

The results of the admission test are evaluated on a 100-point scale. The minimum score required to enter the admission competition is 50 points.

The structure of the assessment of the admission test is presented in the table:

Elements of the admission test		Maximum number of points
Portfolio	1. Motivation letter	20
	2. Essay	20
	3. Results of educational activities	15
	4. Results of professional, scientific and research activities	15
Interview		30
Total		**100**

The interview is a mandatory part of the admission test. If an applicant fails to appear for an interview, the result of "no-show" (0 points) is set on the examination sheet for the admission test, regardless of the presence of the presented portfolio.

The structure and criteria for evaluating the portfolio are given in Appendix No.1.

The criteria for evaluating the interview are given in Appendix No. 2.

The portfolio is provided by applicants in their personal account in electronic form (in the form of an archive, including the main text of the portfolio and supporting documents). The portfolio template is given in Appendix No. 3.

Each achievement declared by the applicant must be documented (scanned versions of certificates, diplomas, scientific articles, patents; links to electronic versions of certificates, diplomas, scientific articles, patents located on the official websites of the relevant organizations and publications, etc.).

The results of educational, professional, scientific and research activities declared in the portfolio should be related to the areas of research and / or objects of professional activity of this master's program:

1) Research areas:

E-computing machines, complexes, systems and networks;
Software and platforms for information technology and computing;
Programming languages, algorithms, libraries, and software packages
How hardware, software and software works;
Architecture of hardware, software and software;

A modern project management methodology;
Methods for fixing and controlling changes in the project;
Tools to develop and support the development of automated systems

2) objects of professional activity:

Managing software development processes;
Analytical work in IT projects;
Monitoring and managing IT project resources;
Support for complex IT projects using specialized tools;
Manage the software development infrastructure.

Admission tests are held in accordance with the established schedule. The applicant's portfolio must be provided in the applicant's personal account three days before the date of the admissions test (at each stage of their conduct).

The portfolio and answers to the questions asked during the interview are assessed by the examination committee for the admission test for this master's program, approved in the prescribed manner.

Author of the admission test program:
Head of the educational program
phD, Associate Professor   Yuri Zachinyaev

**Portfolio assessment structure and criteria applicants
for the master's program «IT management»**

The applicant's portfolio is provided in electronic form (in the form of an archive, including the main text of the portfolio and extra documents). Portfolio text formatting requirements: paper size - A4 (210 × 297 mm), page margins - 2 cm each, font - Times New Roman, font size - 14 pt, line spacing - one and a half.

The originality of the text of the "Motivation letter" sections and the "Essay" section must be at least 60% (when checked in the "Antiplagiat" system, https://antiplagiat.ru). If the text is less than 60% original, a score of 0 (zero) points is given for the corresponding section of the portfolio.

Chapter 1. Motivation letter (up to 20 points)

The letter of motivation should disclose the reasons for choosing this master's program and the goals that the applicant sets for himself when studying for this master's program. The recommended length of a cover letter is 1-2 pages. Criteria for evaluating a cover letter:

substantiation of the goals and expected learning outcomes in the magistracy, plans for scientific activities carried out in the course of training - up to 5 points;

substantiation of the choice of the Southern Federal University as a place of study - up to 5 points;

substantiation of the choice of a master's program and its connection with present or future professional (research) activities - up to 10 points.

Chapter 2. Essay (up to 20 points)

The essay is a detailed scientific answer to one of the proposed topics within the thematic area of this master's program. The recommended length of the essay is 7-15 pages.

Suggested essay topics:
1. Global data handling
2. Dark data
3. DevOps for software and hardware
4. Green IT
5. Financial applications- corporate performance management
6. Information Technology Infrastructure Library
7. Managing the Virtual Workforce.
8. Artificial intelligence in Business
9. Applicant's own topic related to the areas of research and / or objects of professional activity of this master's program.

Essay grading criteria:

- understanding of the proposed topic - up to 5 points;
- level of theoretical knowledge - up to 5 points;
- available practical skills in using information technology tools to carry out research in the chosen area - up to 5 points;
- the level of general scientific culture and analytical skills - up to 5 points.

As an essay, the final qualifying work of the previous level of education can be submitted for the following enlarged groups of specialties and subject areas: 09.00.00,10.00.00, 27.00.00. The final qualifying work is accompanied by the copies of the supervisor's review and work review (if any).

Chapter 3. Results of educational activities (up to 15 points)

If, after evaluating the results of educational activities declared by applicants in this section of the portfolio, the total points will exceed the maximum allowable 15 points, the accumulated amount of points for this section of the portfolio is limited to 15 points.

1.1. Results of the Federal Internet Bachelor Exam (FIEB) in one of the areas of preparation of enlarged groups of specialties and subject areas: 09.00.00, 10.00.00, 27.00.00:

- participant certificate - 2 points;

- bronze certificate - 5 points;

- silver certificate - 7 points;

- gold certificate - 10 points.

1.2. Certificate of English proficiency based on the results of passing international exams (TOEFL, IELTS, TOEIC, ESOL, TELC, PTE):

- the level of English proficiency is not lower than B1 - 5 points;

- English proficiency level B2 and above - 10 points.

1.3. Documented scholarships:

- university level - 2 points;

- regional level - 3 points each;

- All-Russian level - 5 points each;

- international level - 10 points each.

1.4. Certificates of completion of online courses - 5 points each:

Online courses on Coursera: Introduction to Software Product Management, Engineering Project Management, IT Project Management, Configuration Management and the Cloud.

Chapter 4. Results of professional, scientific and research activities (up to 15 points)

If, after evaluating the results of professional, scientific and research activities declared by applicants in this section of the portfolio, the sum of points will exceed

the maximum allowable 15 points, the accumulated sum of points for this section of the portfolio is limited to 15 points.

1.1. Scientific publications in indexed publications on topics related to the areas of research and / or objects of professional activity of this master's program:
- in publications indexed by the RSCI - 2 points for publication;
- in journals from the VAK list - 5 points for publication;
- in journals indexed in Scopus or Web of Science databases - 10 points per publication;
- co-authorship in monographs posted in the RSCI - 10 points each for a monograph.

1.2. Full-time presentation with a report, confirmed by documents, at scientific conferences on topics related to the areas of research and / or objects of professional activity of this master's program:
- university level - 1 point each;
- regional level - 2 points each;
- All-Russian level - 3 points each;
- international level - 5 points each.

1.3. Obtained patents, certificates for the registration of computer programs and other results of intellectual activity on topics corresponding to the fields of research and / or objects of professional activity of this master's program:
- patents for inventions, utility models and industrial designs - 10 points each;
- certificates of state registration of computer programs, databases, etc. - 3 points each.

1.4. Documented participation in the implementation of research works and research projects supported by grants from Russian and international scientific foundations, institutions and organizations:
- the head of the grant - 15 points;
- grant executor - 5 points each.

1.5. Documented membership in international, all-Russian or regional university, scientific, professional communities:
- regional level - 2 points each;
- All-Russian level - 3 points each;
- international level - 5 points each.

1.6. Work experience aimed at solving the problems of professional activity corresponding to this master's program:
- work experience up to 1 year - 3 points;
- work experience from 1 to 2 years - 4 points;
- work experience over 2 years - 5 points.
Work experience is confirmed by an extract from the work book (or a copy of the employment contract) and a copy of the job description, certified by an authorized employee of the organization.

1.7. Certificates of completion of programs of additional professional education (advanced training, professional retraining, etc.) on topics related to the areas of research and / or objects of professional activity of this master's program:
- certificate of professional development - 5 points each;

- diploma of professional retraining - 10 points each;
- professional certificates (Cisco, Microsoft, Google, CompTIA, Oracle, 1C, Citrix, ITIL, Amazon, etc.) - 10 points each.

1.8. Winners and awardees of Olympiads, professional competitions and other events in areas (profiles, competencies) related to the areas of research and / or objects of professional activity of this master's program:

- Diploma winners (medalists, winners, prize-winners) of the All-Russian Olympiad for Students "I am a Professional" - 15 points;
- winners and prize-winners of the National Interuniversity Championship "Young Professionals (WorldSkills Russia)" (WorldSkills Russia), industry and corporate championships according to WorldSkills standards - 15 points;
- Winners and awardees of open championships of universities according to WorldSkills standards - 10 points each;
- holders of a certificate (passport of competencies, Skills Passport) on passing a demonstration exam according to WorldSkills standards, obtained as a result of intermediate certification in disciplines (modules) as part of mastering bachelor's or specialist's educational programs - 10 points each;
- winners and awardees of the Student Wing of the Zvezda Olympiad for those entering the magistracy in the direction of master's training - 15 points;
- winners of the "Competition for the best scientific report of students" within the framework of the university "Week of Science - 2021" in sections corresponding to the direction of master's training - 15 points;
- winners and awardees of the final of the certification Olympiad "Trajectory of the Future - 2021" - 15 points;
- winners and prize-winners of the Open Championship of the South of Russia - the Southern Federal University Olympiad in programming "ContestSFedU" (Team tournament, Personal tournament among SFU students) 2017–2021 - 15 points;
- winners and prize-winners of other Olympiads, professional competitions and other events not lower than the regional level in areas (profiles, competencies) related to the areas of research and / or objects of professional activity of this master's program - up to 10 points.

1.9. Other creative works / projects on topics related to the fields of research and / or objects of professional activity of this master's program - up to 10 points.

**Evaluation criteria for the interview applicants
for the master's program "IT management"**

The interview as part of the admission test for applicants for the master's program "IT management" areas of training 09.04.01 Informatics and computing technology is carried out in the sections of the portfolio "Motivation letter" and "Essay" in order to determine the readiness of the applicant to successfully master the educational program, the ability to independent research and / or project activities.

The interview is a mandatory part of the admission test. If an applicant fails to appear for an interview, the result of "no-show" (0 points) is set on the examination sheet for the admission test, regardless of the presence of the presented portfolio.

The duration of the interview is up to 15 minutes per applicant.

The interview is estimated at 30 points. Evaluation criteria for the interview:

- the applicant's ability to reasonably substantiate the choice of this master's program - up to 5 points;
- the applicant's ability to explain the goals that the applicant sets for himself when studying for this master's program - up to 5 points;
- the applicant's ability to summarize the main results of the essay presented in the portfolio - up to 5 points;
- the applicant's ability to substantiate the relevance and describe the current state and main achievements in the field of research corresponding to the chosen topic of the essay - up to 5 points;
- the applicant's ability to conduct a discussion, give substantiated answers to questions on the essay topic and related areas of research and / or objects of professional activity of this master's program - up to 10 points.

PORTFOLIO
John Goodman
(Applicant's first and last name)

**for admission to the master's program «IT management»
subject area 09.04.01 Informatics and computer technology**

Section 1. Motivation letter

The letter of motivation should disclose the reasons for choosing this master's program and the goals that the applicant sets for himself when studying for this master's program.

The recommended length of a cover letter is 1-2 pages.

Section 2. Essays

The essay is a detailed scientific answer to one of the proposed topics. The essay should contain a justification of the relevance, current state, main achievements and prospects for the development of the chosen field of research. The essay must briefly reflect the results of scientific activity available in the field of the chosen research topic, practical skills in using information technology tools to carry out research in the chosen field, and professional experience. The essay should provide an opportunity to assess the level of general scientific culture and analytical abilities of the applicant.

The recommended length of the essay is 7-15 pages.

In the event that applicants are given a final qualifying work as an essay, in the text of this paragraph of the portfolio it is necessary to give the topic of the final qualifying work, the name of the educational program for which it was defended, the name of the educational organization and the year of defense of the work; give a justification for the relevance of the work, indicate the purpose of the work, the subject and object of research and / or design, the information technology tools used; present the main results obtained with an explanation of their scientific or practical significance. The final qualifying work is given in the annex to the portfolio and is accompanied by copies of the work manager's opinion and work review (if any).

Section 3. Results of educational activities

The declared results of educational activities are indicated, correlated with the points of the portfolio structure.

Each claimed result is described in a separate paragraph.

For each result, its type is indicated in accordance with the structure of the portfolio, name, level (if any) and other necessary information. For each result, either confirming hyperlinks to electronic versions of certificates, diplomas located on the official websites of the respective organizations are provided, or links to annexes to the portfolio, which contains scanned versions of the relevant documentary evidence.

Section 4. Results of professional, scientific and research activities

The declared results of professional, scientific and research activities are indicated, correlated with the points of the portfolio structure.

Each claimed result is described in a separate paragraph.

For each result, its type is indicated in accordance with the structure of the portfolio, name, level (if any) and other necessary information. For each result, either confirming hyperlinks are provided to electronic versions of scientific articles, patents, certificates, diplomas, etc., located on the official websites of the relevant publications, organizations, etc., or links to attachments to the portfolio, which contains scanned versions relevant documentary evidence - scientific articles, patents, certificates, diplomas, etc.