

RYAZAN STATE RADIO ENGINEERING

UNIVERSITY

IT-SPECIALISTS TRAINING





FACULTY OF COMPUTER ENGINEERING Dear applicants and their parents!



Our faculty is one of the top IT-faculties in the Russian Federation. It provides training for highly qualified specialists in demand with specialties related to a wide range of modern computing technologies.

Among the main traditions of the Faculty are high academic performance, professionalism, discipline, collectivism and mutual assistance. The selection of applicants is carried out according to the criteria: stable knowledge, individual personal qualities and awareness of the chosen profession.

A great desire of students to get an in-demand job, highly qualified teaching and scientific staff of the departments, good software and methodological equipment allow training specialists who are in demand by leading enterprises and organizations of Ryazan region, Central Federal District and the Russian Federation as well as foreign companies.

Come to the faculty family, join us!

Dean of Faculty, Dmitry Aleksandrovich Perepelkin



FACULTY OF COMPUTER ENGINEERING

founded in 1964

5 depart-ments
 60 CSc.
 20 PhD.
 20 place in terms of graduate salaries (Superjob.ru)

Department of Computer Aided Design of Computing Facilities

Department of Computational and Applied Mathematics

Department of Electronic Computers

Department of Information Security

Department of Space Technologies



RSREU Rector Mikhail Viktorovich Chirkin

Doctor of Sciences in Physics and Mathematics, Professor, Honorary Worker of Russian Higher Professional Education



Dean of Faculty of Computer Engineering Dmitry Aleksandrovich Perepelkin

Doctor of Sciences in Engineering Science, Professor, expert of the Russian Academy of Sciences (RAS), expert of the Federal Service for Supervision of Education and Science (Rosobrnadzor), federal expert of the scientific and technical sphere of the Russian Federation in "Information and telecommunication technologies"



Head of "Electronic Computers" Department Boris Vasilievich Kostrov

Doctor of Sciences in Engineering Science, Professor, Honorary Worker of Russian Higher Professional Education



Head of "Computer Aided Design of Computing Facilities" Department Vyacheslav Petrovich Koryachko

Doctor of Sciences in Engineering Science, Professor, Honored Worker of Science and Technology of the Russian Federation



Head of "Information Security" Department Viktor Nikolaevich Przhegorlinsky

Candidate of Sciences in Engineering Science, Associate Professor, member of EMA Council for education in information security at ICCI of Academy of the FSB of Russia



Head of "Space Technologies" Department Sergei Igorevich Gusev

Doctor of Sciences in Engineering Science, Professor, Vice-Rector for Research and Innovations



Head of "Computational and Applied Mathematics" Department Gennady Vladimirovich Ovechkin

Doctor of Sciences in Engineering Science, Professor

DIRECTIONS

| Bachelor's degree program | 02.03.01 | Mathematics and Computer Sciences |
|--------------------------------|----------|---|
| | | Fundamental Informatics and Information Technologies |
| | 02.03.03 | Mathematical Support and Information Systems Administration |
| | 09.03.01 | Informatics and Computer Engineering |
| | 09.03.03 | Applied Informatics |
| | 09.03.04 | Software Engineering |
| Specialist's degree program | 10.05.01 | Computer Security |
| | 10.05.03 | Information Security of Automated Systems |

Military Training Center

Reserve Officers Training

Direction **02.03.01**

Space Technologies Department

"Mathematics and Computer Sciences"

Alumnus

- Programmer
- System Analyst
- R&D Specialist



Disciplines

- Basics of Algorithmization and OOP
- Mathematical and Computer Modeling
- Basics of Building Information Communication Systems
- Basics of Electronic Means Design
- Geoinformatics
- Mathematical Methods in Space Technologies
- · Space Systems and Technologies
- Technologies of Programmable Logic Integrated Circuits

Direction 02.03.02

CAD of CF **Department**

"Fundamental Informatics and Information Technologies"

Alumnus

- Programmer
- · Software Architect
- Web and Multimedia Apps Developer
- Network Administrator
- Big Data Specialist

Disciplines

- Python Programming
- Algorithms and Data Structures• Internet Technologies
- Web Programming
- Systems Programming
- Operating Systems
- Computer Networks
- Wireless Networks
- Cloud Computing
- Artificial Intelligence **Technologies**
- Machine Learning and Data Analysis

Direction **02.03.03**

Electronic Computers Department

"Mathematical Support and Information Systems Administration"

Alumnus

- Programmer
- Software Architect
- Database Administrator
- IT Test Specialist

Disciplines

- Basics of Algorithmization and OOP
- SQL Programming
- Information Systems Object Modeling
- Information Systems Development Technologies
- Database Administration
- Client Apps Programming



Direction **09.03.01**

Electronic Computers Department

"Informatics and Computer Engineering" Academic program "Computers, Computer Complexes, Systems and Networks"

Alumnus

- Systems Programmer
- Software Architect
- Network Administrator
- R&D Specialist

Disciplines

- Informatics
- Databases
- Programming Techniques
- Client and Server Databases **Apps**
- Microprocessor Systems and Interfaces
- Computers and Peripheral Items Digital Devices Design
 - Specialized Computers

Direction **09.03.01**

CAD of CF Department

"Informatics and Computer Engineering" Academic program "Computer-aided Design Systems"

Alumnus

- Programmer
- Systems Programmer
- Industrial Designer
- Digital Libraries Development Engineer

<u>Disciplines</u>

- Algorithmic Languages and Programming
- Computer Graphics
- Geometric Modeling
- Parallel Programming
- AI in CAD
- Automation of Engineering and Technological Design



Direction **09.03.01**

Space Technologies Department

"Informatics and Computer Engineering" Academic program "System Analysis and Information Process Engineering"

Alumnus

- System Analyst
- •Web and Multimedia Apps Developer

Disciplines

- Systems and System Analysis Theory
- Systems Engineering Methods and Techniques
- · Basics of Systems Analysis and Decision-making Theory
- CASE-technologies of Engineering
- Information Theory and Information Technologies
- Multimedia Technologies
- Computer Vision Basics



Computational and Applied Maths Department

Direction **09.03.03**

"Applied Informatics"



Alumnus

- Programmer
- IS Specialist
- System Analyst
- IT Project Manager

Disciplines

- •Algorithmic Languages and Programming
- Visual Programming
- IT and Services Marketing
- Team Development of Software Systems
- 1C Solutions Design
- Introduction to Industrial Java Software Development

Direction **09.03.04**

Computational and Applied Maths Department

"Software Engineering"

Alumnus

- Programmer

IT Test Specialist

System Analyst



Disciplines

- Basics of Software Engineering
- Software Design
- Functional Programming
- Network Administration
- Development of Multithreaded Apps
- **Software Testing**
- Industrial Development on MS.NET Platform

Specialty 10.05.01

Information Security
Department

"Computer Security"

Alumnus

- Cyber Security Specialist
- Computer Systems and Networks Security Specialist



Disciplines

- Information Security Basics
- Programming Methods
- Cryptography Methods and Protocols
- Protection in Operating Systems
- Programs and Data Protection
- Basics of Secure Computer Systems
 Building
- Methods and Tools for Intrusion Detection in CS

Specialty **10.05.03**

Information Security
Department

"Information Security of Automated Systems"

Alumnus

- Cyber Security Specialist
- Information Security Specialist in Automated Systems



data analysis, information security and many other areas.

Disciplines

- Reliability Theory Basics
- Mathematical Models of Security Policies
- Cryptographic Information Security Methods
- Development and Operation of Secure Automated Systems
- Monitoring and Auditing Computer System Security

As part of their studies at the Faculty, students receive in-depth knowledge and skills in the field of fundamental computer science and programming, design and construction, computer modeling, network technologies, artificial intelligence and

In the process of studying at the Faculty, special attention is paid to the study of "new mathematics" methods, the formation of algorithmic thinking skills, the ability to quickly analyze heterogeneous unstructured data arrays, interdisciplinary work skills, a research approach to engineering and project activities.

| ADMISSION POINTS | | | | | | | | | |
|--------------------------------------|------------|------------------------------------|-----|--------------|---------------------------------|--|--|--|--|
| Direction/Specialty | | 2022 EGE points max average min | | EGE subjects | | | | | |
| Computer and Information Sciences | 02.03.00 | 256 | 223 | 211 | Mathematics | | | | |
| Informatics and Computer Engineering | 09.03.01 | 267 | 227 | 216 | | | | | |
| Applied Informatics | 09.03.03 | 265 | 236 | 234 | Physics/ Informatics and ICT | | | | |
| Software Engineering | 09.03.04 | 293 | 249 | 249 | informatics and ici | | | | |
| Information Security | | 256 | 225 | 221 | Russian | | | | |
| Facult | ty Average | Point | 232 | | | | | | |

| ADMISSION PLAN 2023 | | | | | | | | |
|--|--|--------|----------|--|--|--|--|--|
| Direction/Specialty | code | budget | contract | | | | | |
| Computer and Information Sciences Mathematics and Computer Sciences Fundamental Informatics and Information Technologies Mathematical Support and Information Systems Administration Informatics and Computer Engineering Applied Informatics Software Engineering | 02.03.00 02.03.01 02.03.02 02.03.03 | 60 | 45 | | | | | |
| 👸 📮 Informatics and Computer Engineering | 09.03.01 | 69 | 15 | | | | | |
| Applied Informatics | 09.03.03 | 25 | 15 | | | | | |
| Software Engineering | 09.03.04 | 45 | 25 | | | | | |
| Information Security Computer Security Information Security of Automated Systems | 10.05.00 10.05.01 10.05.03 | 55 | 40 | | | | | |
| Tot | al at Faculty | 254 | 140 | | | | | |

SCHOLARSHIP* **CONTRACT TUITION FEE** Type of scholarship Tuition fee sum, rub. Direction/Specialty code rub./year Basic Computer and Information Sciences 1 year 02.03.00 3000 5000 Mathematics and Computer Sciences 2-5 year 02.03.01 Fundamental Informatics and Information 02.03.02 130 000 Enhanced (All "excellent" grades) 7500 Technologies Mathematical Support and Information 02.03.03 Enhanced for Academic Excellence 9500 Systems Administration Bursary Informatics and Computer Engineering 09.03.01 1-2 year +95003-5 year +400009.03.03 **Applied Informatics** Software Engineering 09.03.04 Russian Government Scholarship +5000134 360 Information Security 10.05.00 Russian President Scholarship +7000Computer Security 10.05.01 Relef-Centre Scholarship +1000010.05.03 Information Security of Automated Hardship Grant +5000-25000 Systems

Currently, in Russia, as part of the formation of a new technological order in industry and business, national digitalization programs have been adopted: the national program «Digital Economy of the Russian Federation», the national strategy for the development of artificial intelligence and the strategy for the development of the electronic industry of the Russian Federation for the period up to 2030. In all adopted national programs of scientific and technological development, a large role is assigned to end-to-end digital technologies: big data, neurotechnology, artificial intelligence, distributed database technologies, new production technologies, the industrial Internet, wireless technologies, robotics and sensor components, virtual and augmented reality technologies.

Almost all of the above-mentioned areas of end-to-end technologies are used in the educational process of our Faculty and are associated with the unification of people and objects into unified smart systems and complexes that interact via the Internet.

^{*}The tuition fees and scholarships shown in the table are current for the 2022-23 academic year and are subject to change.

SUPPLEMENTARY COURSES FOR STUDENTS

SberTech company



- 1. Architecture of Industrial Automation Systems
- 2. Industrial Java Programming
- 3. Basics of Big Data and Business Intelligence

Tinkoff Development Center



- 1. System and Business Analysis
- 2. Kotlin Programming
- 3. Functional Programming

PROMAVTOMATIKA company



- 1. Introduction to Configuration in "1C: Enterprise 8" System. Main Objects
- 2."1C: Professional" for Users of Software Products"1C:Enterprise"
- 3. Development of Mobile Apps on "1C:Mobile" Platform

D-Link company



- 1. Basics of Data Transmission and Switching in CN
- 2. CN Switching and Routing Technologies
- 3. Basics of Embedded Systems Programming on Linux platform

SCIENTIFIC AND EDUCATIONAL CENTERS

Electronic Computers
Department

Scientific and Educational Centre "Specialized Computers"
D-Link Authorized Education Center
Scientific and Educational Centre "Digital Economy
Competencies"

CAD of CF Department

Centre for Innovative Network and Cloud Technologies (CINCT)

Space Tech. Department

Scientific and Educational Centre "Space Technologies"

Electronic Computers
Department

Regional Educational and Scientific Centre "Information Security"

Regional Olympiads and Competitions

- **01** Regional Database Olympiad
- All-Russian Olympiad on Analytics and Design of Information Systems
- Regional Olympiad "Microprocessor Systems and Their Application"
- Interregional School Olympiad in Mathematics and Cryptography named after I.Ya. Verchenko
- 05 Regional Olympiad on Information Protection
- Regional School Olympiad in Computer Science and Programming
- **07** Web Apps Development Contest
- **08** Contest on Information and Computing Technologies "IT OPEN"
- **09** Contest on Network Technologies Basics
- 10 UX/UI Interfaces Design Competition
- 11 Regional Olympiad on 1C Programming
- 12 Competition for Mobile Apps Development on 1C Platform

Student Practice

Practical training of students of the faculty is carried out in high-tech IT companies and defense industry enterprises of Ryazan and Ryazan region. The main focus of the practical training of students is the acquisition of practical skills necessary for future professional activities.

In the process of internship, students consolidate and deepen the theoretical knowledge they received at the university, acquire practical competencies and skills, as well as experience in independent professional activity.



COUNCIL OF YOUNG SCIENTISTS AND SPECIALISTS OF FACULTY OF COMPUTER ENGINEERING

It is designed to promote the professional development of young researchers, teachers and specialists, the accumulation of experience, self-realization to the maximum disclosure of the scientific potential of students.







You have an interesting idea and a desire to implement it or engage in scientific activities. department if you are interested But you don't know where to start, where and what to submit. how to arrange...

Write to our group or contact the Council representative of your in the project. They will gladly answer all your questions and tell you more

about everything.

We will help you find a scientific supervisor and direct your research in the right direction.







We will tell you what conferences, competitions and grants exist, how to make an application, write a good scientific article and prepare a presentation.

Participate in all-Russian and international events. upgrade your skills, gain achievements in your personal portfolio. Follow the latest news in our Vkontakte group https://vk.com/smusfvt and Telegram channel https://t.me/smusfvt

STUDENTS' LIFE

















ACHIEVEMENTS AND AWARDS





















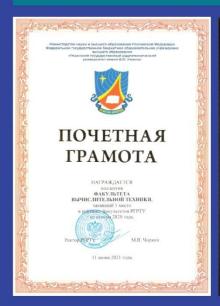








ACHIEVEMENTS AND AWARDS

























OUR ALUMNI



Sergei Anatolyevich Kornishev CEO 000 "Promavtomatika"



Artem Valeryevich Kukharenko **CEO** OOO "Programmnyi Region" Ryazan



Vyushkov CEO 000 "LIDMASHINA" Ryazan



Roman Vitalyevich Vezenov Head of Regional Development GC "INNOTECH" Ryazan



Drozhzhin

Head of Production and Technical Complex AO "Ryazan State Instrument-making Enterprise " Ryazan



Aleksei Nikolaevich Manikhin

Head of Data and Digital Systems Business Area PAO "Nornickel" Moscow



Nikolai Vladimirovich Kravchuk Head of Digital **Transformation Department**

AO "Transmashholding"

Moscow



Kalinkina Head of "Electronic Computing and Information System" Department AO SPC "ELVIS"

Moscow

EMPLOYMENT





























ВИДИКОН



kaspersky













INNOTECH





















High-quality IT Education in Ryazan!





CONTACTS



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