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Thank you for your attention!  
Welcome to NNSTU n.a. R.E. Alekseev!
01.04.02 «Applied Mathematics and Computer Science», master degree program
«Programming and system analysis»

Graduates of the program will be able to operate with modern information and communication technologies for collecting, processing and analyzing various types of data (information). They will also get the necessary skills to test the software quality and will be able to use the software to solve professional problems in various fields.

Special skills will be acquired in the field of applied and computer mathematics. Special skills will be acquired in the field of applied and computer mathematics.

General characteristics of the educational program: 120 ECTS credits, full-time study for 2 years, Master's Degree.

Applicants are required to have Bachelor's.

An academic year consists of 2 semesters, one beginning on 1st September and the other – on 10th February, winter holidays for 2 weeks, summer holidays for 2 months (July, August). Master's Thesis defense is scheduled in June.

Subjects studied in this program:
Modern problems of applied mathematics and computer science
A foreign language
Philosophy and Methodology of Science
Generalized solutions of differential equations
System software
Nonlinear dynamics
Modern computer technology
Modern business planning technology
Legal support of information activities
Mathematical methods for economic forecasting
Modern methods of mathematical simulation
Decision making theory
Fundamentals of research organization
History and methodology of applied mathematics and computer science
Mathematical modeling of control systems
Adaptive time series filtering economics
Internet design Start Up
Information Management

The professional activities of graduates include: high-tech products life cycle management; high-tech enterprises quality management; high-tech products and high technologies marketing; entrepreneurship in the field of high-tech products; engineering firms organization; organization and management of high-tech enterprises investment activities.

The educational program characteristics are: 120 credits, full-time study for 2 years (teaching is conducted in English) and master's degree.

Requirements for applicants: specialized bachelor's degree is a must.

The academic year consists of 2 semesters starting on September the 1st (fall semester) and February the 10th (spring semester), winter holidays for 1 week, and summer holidays for 2 months (July, August). Defense of master's thesis is scheduled at the end of June.

The program includes the following subjects:
Basics of entrepreneurship in the field of science-intensive/ knowledge-based and high-tech products
Philosophy and methodology of science
Valueology
Psychology of technical creativity
Basis of research organization in the field of high-tech industries
Management accounting in high-tech industries
Controlling of high-tech industries
Business foreign language
Methods of management decision-making in high-tech industries
Foreign language in the professional sphere
Modern technologies of business planning
Life cycle management of complex engineering objects
Human resources management technologies in high-tech industries
Organization of science-intensive production teams work
Technology marketing
Marketing research of high-tech products
Modern information technologies in the management of high-tech industries
Project management of complex engineering objects
Knowledge management system
Feasibility study of scientific and technical development projects
Projects organizational and economic justification in the field of science-intensive production technological preparation
Risk management in the life cycle of knowledge-intensive products
Management of high-tech industries organizational and economic stability
Quality management in high-tech industries
The tools of lean manufacturing