

Документ подписан простой электронной подписью
 Информация о владельце:
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 Должность: и.о. директора Института цифрового развития
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Practice annotation

Kind of practice	Educational
Type of practice	учебно-лабораторная практика / educational and laboratory practice
Summary	introductory lecture, safety briefing, collection, processing and systematization of factual and literary material, observations, measurements, performance of an individual task, analysis, processing and systematization of the material, preparation of a report
Learning outcomes of the Practice	knows the basic concepts related to ensuring the information and psychological security of the individual, society and the state, the concepts of information confrontation, information warfare and the forms of their manifestations in the modern world; knows the sources and classification of threats to information security; knows how to classify and evaluate threats to information security; knows the classification, typical structures and principles of organization of computer networks, the purpose and main components of database systems; knows how to make queries and perform remote access to databases; masters the skills of searching for information in the Internet and the skills of preparing documents in the environment of typical office suites; knows the basic methods of differential and integral calculus of functions of one and several real variables, methods for studying numerical and functional series; is able to explore functional dependencies and use typical models and methods mathematical analysis in solving standard applied problems; knows the basic concepts of probability theory, numerical and functional characteristics of distributions of random variables and their basic properties, basic concepts of the theory of random processes; knows the basic provisions of electricity and magnetism, oscillations and optics, the principles of quantum physics; is able to solve basic applied physical problems, draw conclusions and formulate them in the form of a report on the research work done; knows the methods of analysis of electrical circuits; is able to measure the parameters of an electrical circuit, analyze the processes occurring in linear and non-linear electrical circuits; masters the methods for calculating simple linear and non-linear electrical circuits; knows and is guided in his/her professional activities, by the basics of: the Russian legal system and legislation, the legal status of the individual, the organization and activities of public authorities in the Russian Federation, the basic concepts and characteristics of the main branches of law used in the professional activities of the organization; knows the legal basis for organizing the protection of personal data and the protection of the results of intellectual activity; is able to justify decisions related to the implementation of legal norms for the protection of information within the limits of official duties, take the necessary measures to restore violated rights; knows the system of regulatory legal acts and standards for licensing in the field of security protection of state secrets, technical protection of confidential information, certification of informatization objects and certification of information security tools, a system of organizational measures aimed at protecting restricted information, regulatory, guidance and methodological

	documents of authorized federal executive bodies for the protection of restricted information; knows the main threats to the security of information and the model of the intruder of the informatization object; is able to develop threat models and models of the intruder of the informatization object, draft instructions, regulations, guidelines and orders governing the protection of restricted information in an organization; is able to determine the policy for controlling access of employees to restricted information; knows the principles of building a computer, forms and methods of presenting data in a personal computer, areas and features of using high-level programming languages; knows how to work with an integrated software development environment, develop and implement algorithms for solving typical professional problems in a high-level language; knows basic data structures, basic data sorting and retrieval algorithms, basic combinatorial and graph-theoretic algorithms, general information about the methods of designing, documenting, developing, testing and debugging software; knows how to apply available programming methods and the capabilities of the underlying programming language to solve typical professional problems; has the skills to develop algorithms for solving typical professional problems; knows the principles and procedure for the operation of information and reference systems, methods of searching and processing of information, methods of working with scientific information, principles and rules for making judgements and assessments; knows how to use information and reference systems; has the skill of compiling and formatting an abstract based on the results of a review of scientific and technical literature, regulatory and methodological documents; knows how to use information and reference systems; has the skill of compiling and formatting an abstract based on the results of a review of scientific and technical scientific literature, regulatory and methodological documents
Workload, c. u.	3 c. u.
Reporting Forms	Graded credit – 4th semester
List of essential and supplementary literature necessary for the Practice	
Essential literature	1 Zubkova Yu. O. Educational and work practices: teaching aid / comp. by Yu. O. Zubkova; O. G. Ivashkevich / Electronic source: Kazan National Research Technological University; Kazan, 2020. - 52 p. - The book is in the basic version of IPRbooks ELS, unlimited copies. 2. Educational practice / V. A. Alyaev / G. V. Kargin / A. V. Burmistrov / S. A. Bulaev: study guide; ed. by L. G. Shevchuk / Electronic source: Kazan National Research Technological University; Kazan, 2020. - 88 p. - The book is in the basic version of IPRbooks ELS. - ISBN 978-5-7882-1445-0, unlimited copies
Supplementary literature	Educational practice / V. A. Alyaev. - Kazan: KNRTU Publishing House, 2021. - 90 p. - ISBN 978-5-7882-1445-0, unlimited copies