

Документ подписан простой электронной подписью
Информация о владельце:
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Discipline annotation

Discipline name	Основы кроссплатформенного программирования / Fundamentals of cross-platform programming
Summary	The syntax of the C++ programming language. Differences from other languages. Basic operators of the C++ programming language. Implementation of functions in C+++. The object-oriented model of Qt. Foundation of visual controls. Interaction between Qt objects. Controls in Qt. Implementation of the model/view/controller pattern in Qt. Working with structured data in Qt.
Learning outcomes of the discipline	<ul style="list-style-type: none"> - sets up software and hardware for building computer networks using cryptographic information protection; manages the operation of information protection hardware in computer networks; controls the correct operation of information protection hardware in computer networks; - configures and controls the correctness of the settings of information protection hardware in computer networks; selects the operating modes of information protection hardware in computer networks; monitors the operation of information protection hardware in computer networks; - understands the procedure for implementing methods and means of network shielding; understands the principles of operation of network protocols, including cryptographic algorithms; understands the principles of operation and operating rules of the operated software and hardware information protection tools. - performs work on the detection of malicious software; eliminates the detected malicious software and the consequences of its operation; formulates requirements for the built-in information protection tools of the software; - takes measures to counter threats to information security arising from the operation of the software; determines the procedure for the operation of the software in order to ensure information security; analyzes the efficiency of the formulated requirements for the built-in information security tools of the software; - understands the procedure for ensuring information security during the operation of software; understands regulatory legal acts in the field of information protection; understands organizational measures to protect information
Workload, c. u.	2 c. u.
Reporting Forms	Credit – 2nd semester
List of essential and supplementary literature necessary for mastering the discipline	
Essential literature	<ol style="list-style-type: none"> 1. Kaufman V. Sh. Programming languages. Concepts and principles. - M.: DMK Press, 2014. - 464 p. - ISBN: 978-5-94074-622-5 2. Kharin V. N., Kushcheva I. S. Informatics. Programming languages. In 2 parts. Part II. Application programming in the Microsoft QBX environment. Study guide. - Voronezh: Voronezh State Forest Engineering Academy, 2013. - 127 p. - ISBN: 978-5-7994-0281-5

	3. V. V. Podbelsky. The C++ language / V. V. Podbelsky. - 5th ed. - M. : Finansy I statistika, 2015 - 560 p. -
Supplementary literature	<p>1. Kharin V. N., Kushcheva I. S. Informatics. Programming languages. In 2 parts. Part I. Basic concepts of programming languages. Study guide - Voronezh: Voronezh State Forest Engineering Academy, 2013. - 79 p. - ISBN: 978-5-7994-0281-5</p> <p>2. Schildt, G. Theory and practice of C ++: Transl. from English. / Herbert Schildt. - St. Petersburg. : BHV-Petersburg, 2014. - 416p. - ISBN 0-07-882209-2. - ISBN 5-7791-0029-2</p> <p>3. Wirth, N. Algorithms and data structures: Transl. from German. - M.: Mir, 2014. - 360 p. - ISBN 5-03-001045-9. - ISBN 0-13-022005-1</p>