

## Information Technologies

### Course Overview

<b>Level of study</b>	Bachelor Degree
<b>Workload</b>	<b>ECTS: 2</b> <b>Total Hours: 72</b> <b>Contact Hours: 48</b> <ul style="list-style-type: none"> <li>• <b>Lectures: 16</b></li> <li>• <b>Labs: 24</b></li> <li>• <b>Seminars: 8</b></li> </ul>
<b>Course Code</b>	ДИСЦ.В.М5
<b>Semester</b>	Summer
<b>Prerequisites</b>	Computer science
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• introduction to the modern approaches of the information systems software designing</li> <li>• formation of students' practical skills in the use of software to solve problems of data processing and analysis</li> <li>• To develop in students the need to educate themselves at the expense of activization of the independent informative activity</li> </ul>
<b>Learning Outcomes</b>	Having successfully completed this module, you will be able to: <ul style="list-style-type: none"> <li>• To know basics of modern programming environments for professional tasks</li> <li>• To be able to apply the knowledge of related sciences to solve problems of data processing</li> <li>• To have skills the use of computational tools to solve data problems of the data processing</li> </ul>
<b>Syllabus</b>	<ul style="list-style-type: none"> <li>• Positional number systems</li> <li>• Algorithms and principles of their construction</li> <li>• Basics of C programming language</li> </ul>
<b>Labs</b>	<ul style="list-style-type: none"> <li>• C data types.</li> <li>• C input/output of the information.</li> <li>• C arithmetic operations.</li> <li>• C logic operations.</li> <li>• The branching in C.</li> <li>• The data arrays.</li> <li>• The cycles in C.</li> <li>• The functions in C.</li> <li>• The final task.</li> </ul>
<b>Projects</b>	

<b>Assessment</b>	Credit test
<b>Resources</b>	<ul style="list-style-type: none"><li>• <a href="http://www.c-cpp.ru/">http://www.c-cpp.ru/</a></li><li>• <a href="http://cppstudio.com">http://cppstudio.com</a></li></ul>
<b>Instructors</b>	Lezhnina Inna A. E-mail: lezhnina@tpu.ru <a href="http://portal.tpu.ru:7777/SHARED/1/LEZHNINA">http://portal.tpu.ru:7777/SHARED/1/LEZHNINA</a>