

## Master Computer Science as a Second Competence

INVOLVED UNIVERSITIES	<ul style="list-style-type: none"> <li>- Voronezh State University, Computer Science Faculty: <a href="http://www.cs.vsu.ru">http://www.cs.vsu.ru</a></li> <li>- This master program was developed in cooperation with European universities on the basis of the European Union recommendations and supported by the EU in the framework of the ERAMIS TEMPUS-project: <a href="http://tempus.seun.ru/information/index.php">http://tempus.seun.ru/information/index.php</a></li> </ul>
HEAD OF TRAINING	Dr. Eduard Algazinov ( <a href="mailto:algazinov@sc.vsu.ru">algazinov@sc.vsu.ru</a> ), professor. Voronezh State University, computer science faculty. 394006, Universitetskaya pl., 1, Voronezh, Russian Federation
DIPLOMA	Master degree, Direction 230400 "Information System and Technology" Master Program «Computer Science as a second competence».
PURPOSE OF THE MASTER	<p>Master degree in "Information Systems and Technology" («Computer Science as a second competence»).</p> <p>It concerns students with a bachelor's degree in Sciences (except in Computer Science) or in Social and Human Sciences, Linguistics, etc.</p> <p>The main aim is to acquire a further competence in informatics in order to help the applicants to integrate the labor market with a double competence.</p> <p>The basic course consists of common core in informatics (programming, web technologies, information systems administration, computer system and networks, data mining, software engineering, etc.)</p> <p>Besides, the master program provides courses that address the application of information technologies in the professional area also.</p> <p>Double competence enables graduates to solve problems in their professional field at a higher professional level using advanced information technology, or to change the profile of their professional activities in the event of changes in the labor market.</p>
OPPORTUNITIES	<p>Large and various opportunities according to the original discipline of diplomas :</p> <ul style="list-style-type: none"> <li>• In the field of computer science: system administration, software engineering, data mining, development and application of Web services and multimedia documents, networks management, etc.</li> <li>• In the field of the basic competence by putting the acquired background in computer science to good use: engineering of computer tools (drafting of specifications, interface design, etc.),</li> <li>• In the field of Natural Language Processing,</li> <li>• In the field of Computer Modeling and Simulation</li> </ul>
PUBLIC	<ul style="list-style-type: none"> <li>• students</li> <li>• employees <ul style="list-style-type: none"> <li>- students with a bachelor, specialist or master degree (except in computer science);</li> <li>- validation of professional skills.</li> </ul> </li> </ul>
RECRUITMENT REQUIREMENTS	<ul style="list-style-type: none"> <li>- The master applicants are accepted according to the following procedure : <ul style="list-style-type: none"> <li>• A review of the application form. Professional experience may be taken into account.</li> <li>• An interview (mathematics, computer science and foreign language) is held in order to clarify the applicant's skills, motivations and professional project</li> </ul> </li> </ul>
REGISTRATION PROCEDURES	<p>Administrative registration in Voronezh State University Admissions Committee (see contact below).</p> <ul style="list-style-type: none"> <li>- File collection: 20th of June</li> <li>- Deadline for applications: first week of August</li> </ul>
STAFF	15 teachers. Half of them undergo training at EU-partner universities
EVALUATION	<ul style="list-style-type: none"> <li>- Continuing testing: supervised tasks and/or practice work;</li> <li>- Exams (oral or written) or credits for all courses .</li> <li>- Project, internship, and master thesis with oral presentation</li> </ul>
SUCCESS RATE :	<ul style="list-style-type: none"> <li>- All exams and credits passed,</li> <li>- Project, internship, and master thesis orally defended</li> </ul>
LEARNING PROCEDURES	Semester-learning over two years. (see details overleaf)
CONTACT	<p>Secretary : Ms. Lotareva Nina Mickhailovna Master Information Systems and Technology (Master Program «Computer Science as a second competence») 394006, Russian Federation, Voronezh, Universitetskaya pl. 1</p> <ul style="list-style-type: none"> <li>- Phone: +7 (473) 2208909</li> <li>- Fax: +7 (473) 2208755</li> <li>- Web : <a href="http://tempus.seun.ru/information/index.php">http://tempus.seun.ru/information/index.php</a></li> </ul>

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## Curriculum

The master is organized in 4 semesters as follows :

<b>Semester 1</b>		
• Programming	64 hours,	6 ECTS
• Algorithms and Data Structures	64 hours,	5 ECTS
• Operating Systems	32 hours,	2 ECTS
• Computer Networks	32 hours,	2 ECTS
• Mathematics and Fundamentals for Computer Science	32 hours,	3 ECTS
• DataBases	32 hours,	3 ECTS
• Computer English 1	16 hours,	2 ECTS
• Academic Practice		6 ECTS
<b>Semester 2</b>		
• Software Engineering	50 hours,	5 ECTS
• Project Management	32 hours,	3 ECTS
• Web Development	50 hours,	5 ECTS
• Computer Security	32 hours,	3 ECTS
• Logics and scientific methodology	16 hours,	2 ECTS
• Computer English 2	34 hours,	2 ECTS
• Intelligent Systems and Technologies	32 hours,	3 ECTS
• E-business	32 hours,	3 ECTS
• Software Engineering Project 1		5 ECTS
<b>Semester 3</b>		
• Special chapters of math	32 hours,	3 ECTS
• Human-Machine Interaction	32 hours,	3 ECTS
• Research and modelling methodology for information systems and technology	48 hours,	5 ECTS
• Data Mining & Data Warehouse	32 hours,	4 ECTS
• Applied Statistics	32 hours,	2 ECTS
• Information Systems Administration	48 hours,	4 ECTS
• Software Engineering Project 2		5 ECTS
• Company Internship		5 ECTS
<b>Semester 4</b>		
• Company Internship		4 ECTS
• Master Thesis Preparation		26 ECTS