Master Computer Science as a Second Competence

INVOLVED UNIVERSITIES	- Voronezh State University, Computer Science Faculty: http://www.cs.vsu.ru - 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: http://tempus.seun.ru/information/index.php
HEAD OF TRAINING	Dr. Eduard Algazinov (algazinov@sc.vsu.ru), professor. Voronezh State University, computer science faculty. 394006, Universitetskaya pl., 1, Voronezh, Russian Federation
DIPLOMA	Master degree, Direction 010200 "Mathematics and Computer Science" Master Program «Computer Science as a second competence».
PURPOSE OF THE MASTER	Master degree in "Mathematics and Computer Science" («Computer Science as a second competence»). It concerns students with a bachelor's degree in Sciences (except in Computer Science) or in Social and Human Sciences, Linguistics, etc. 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. The basic course consists of common core in informatics (programming, web technologies, information systems administration, computer system and networks, data mining, software engineering, etc.) Besides, the master program provides courses that address the application of information technologies in the professional area also. 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.
OPPORTUNITIES	Large and various opportunities according to the original discipline of diplomas : • In the field of computer science: system administration, software engineering, data mining, development and application of Web services and multimedia documents, networks management, etc. • 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.), • In the field of Natural Language Processing, • In the field of Computer Modeling and Simulation

PUBLIC	• students
	• employees
	  - students with a bachelor, specialist or master degree (except in computer science);
	  - validation of professional skills.

RECRUITMENT REQUIREMENTS	- The master applicants are accepted according to the following procedure :
	  • A review of the application form. Professional experience may be taken into account.
	  • An interview (mathematics, computer science and foreign language) is held in order to clarify the applicant's skills, motivations and professional project

REGISTRATION PROCEDURES	Administrative registration in Voronezh State University Admissions Committee (see contact bellow). - File collection: 20th of June - Deadline for applications: first week of August
STAFF	15 teachers. Half of them undergo training at EU-partner universities
EVALUATION	- Continuing testing: supervised tasks and/or practice work; - Exams (oral or written) or credits for all courses . - Project, internship, and master thesis with oral presentation
SUCCESS RATE :	- All exams and credits passed, - Project, internship, and master thesis orally defended
LEARNING PROCEDURES	Semester-learning over two years. (see details overleaf)
CONTACT	Secretary : Ms. Lotareva Nina Mickhailovna Master Mathematics and Computer Science (Master Program «Computer Science as a second competence») 394006, Russian Federation, Voronezh, Universitetskaya pl. 1 - Phone: +7 (473) 2208909 - Fax: +7 (473) 2208755 - Web : http://tempus.seun.ru/information/index.php

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Curriculum

The master is organized in 4 semesters as follows :

Semester 1

- 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,   1 ECTS
- Academic Practice   6 ECTS

Semester 2

- Software Engineering   50 hours,   5 ECTS
- Project Management   32 hours,   3 ECTS
- Web Development   50 hours,   4 ECTS
- Computer Security   32 hours,   3 ECTS
- Scientific Knowledge Philosophy and Methodology   16 hours,   2 ECTS
- Computer English 2   34 hours,   2 ECTS
- E-business   32 hours,   3 ECTS
- Software Engineering Project 1   5 ECTS
- Company Internship and Research   3 ECTS

Semester 3

- Mathematics history and methodology   32 hours,   3 ECTS
- Human-Machine Interaction   32 hours,   3 ECTS
- Research and modelling methodology for information systems and technology   48 hours,   3 ECTS
- Data Mining & Data Warehouse   32 hours,   3 ECTS
- Intelligent Systems and Technologies   32 hours,   2 ECTS
- Applied Statistics   32 hours,   2 ECTS
- Information Systems Administration   48 hours,   4 ECTS
- Software Engineering Project 2   5 ECTS
- Company Internship and Research   5 ECTS

Semester 4

- Company Internship   18 ECTS
- Master Thesis Preparation   12 ECTS