Study Programme: Computing And Control Engineering

Course Unit Title: E-Government Technologies

Course Unit Code: SEM013

Name of Lecturer(s): Gostojić Stevan, Savić Goran

Type and Level of Studies: master

Course Status (compulsory/elective): elective

Semester (winter/ summer): winter

Language of instruction: english

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 6

Prerequisites: none

Course Aims:.

Gaining practical knowledge of contemporary IC technologies and tools applicable to e-government.

Learning Outcomes:

After successful completion of the course, student has gained practical knowledge for correct selection and application contemporary IC technologies and tools and their applications to all segments of complex software systems supporting e-government.

Syllabus.

(1) web based software architecture for e-government (electronic services, SOA, Web services, interoperability), (2) standards (types, organizations, processes, services, data, W3C Technology Stack), (3) communication technologies (TCP/IP networks, public networks, private networks), (4) hardware technologies (workstations, servers, storage systems), (5) software technologies (system software, infrastructural applicative software, applicative software), (6) data management technologies (XML, NoSQL databases, electronic documents), (7) business process management technologies (tools, repositories), (8) security technologies (cryptography, identity, PKI), (9) virtualization technologies (hardware, software, storage, data, network) and (10) semantic technologies (architectures and processes integration, ontologies and interoperability, portals and user interaction).

Required Reading:

Relevant literature in English, tbd

Weekly Contact Hours: 2	Lectures: 3	Practical work: 0

Teaching Methods:

Classes, computer exercises, consultations. Exam is oral. Final grade is formed based on computer exercise grade and oral exam grade

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			