

Faculty: FACULTY OF TELECOMMUNICATIONS AND MANAGEMENT
Department: INFORMATION TECHNOLOGIES
Professional Field: 5.3 COMMUNICATION AND COMPUTER TECHNOLOGY
Specialty: COMPUTER ADMINISTRATION OF SOFTWARE APPLICATIONS
Educational-qualification degree: PROFESSIONAL BACHELOR

LEARNING COURSE DESCRIPTION

1.Course title: WEBLOGIC APPLICATION SERVER 1

2.Course code: P.16.030.1

3.Type of the course: compulsory

4.Level: professional bachelor

5.Year of study: 2

6.Semester: 4

7.Number of credits: 6

8.Name of the lecturer: Assoc. Prof. Dr. Eng. Ivan Ivanov

9.Course learning outcomes:

The aim of the course is to give the students in a systematized form theoretical and practical knowledge about Weblogic 1 applications namely Java Enterprise Edition, Java Web Application components, Server Oriented Architectures (SOA) and running web application on Apache Tomcat Server.

The lectures present the main components and principle of operation of a Java web application from the moment of development to its launch in a real environment.

Students who have completed the course should have the skills to start Tomcat Server and install a web application, explain theoretically the structure of a Java application and its various components.

Competences: Upon successful completion of the course, students should be able to:

- to install and configure server-oriented architectures;
- run a web application on Apache Tomcat Server;
- work as administrators and analyze errors in a web application.

10.Teaching methods:

Training in the discipline "Weblogic 1 Application Server" is carried out in the fourth semester according to the current curriculum through lectures grouped in a block of two study hours per week for 15 weeks and practical exercises grouped in a block of two study hours per week for 15 weeks.

The lectures are conducted in the classic way, with the students getting to know the intended material sequentially. The statements are illustrated with examples that make the students' work in the exercises as easy as possible. The lectures are richly illustrated with graphic material, which is presented through presentations with a multimedia projector and supplemented with examples. The practical exercises take place in a laboratory equipped with the necessary computer equipment for installation, configuration and administration of web servers. Before each practical lesson, students are informed about the need for preliminary preparation on the relevant topic.

11. Prerequisites:

Networks and protocols 1, Networks and protocols 2, Operating systems, Processes in information technologies (ITIL), etc., included in the curriculum of the specialty "Computer administration of software applications".

12. Course contents:

Java Virtual Machine components, Java Web Application components, Apache Tomcat Server, Apache Tomcat - Web Server integration, web application and JVM error analysis are studied.

13. Bibliography

Basic literature:

1. Bill Venner, Inside the Java Virtual Machine, <http://www.artima.com/insidejvm/ed2/index.html>, последно посетен на 10.06.2021
2. The Java Community Process(SM) Program – JSRs: Java Specification Requests – detail JSR# 924. // Jcp.org.

3. Tomcat 8.5.14 Released, <http://tomcat.apache.org/download-80.cgi> , последно посетен на 10.06.2021
4. Tomcat Connectors 1.2.42 Released, <http://tomcat.apache.org/download-connectors.cgi>, последно посетен на 10.06.2021

Additional literature:

1. Java web development with Eclipse WTP – Tutorial, Lars Vogel (c) 2008, 2016 vogella GmbH Version 2.8, 06.07.2016, <http://www.vogella.com/tutorials/EclipseWTP/article.html>
2. Apache Tomcat 6.0. Security Manager HOW-TO, <http://tomcat.apache.org/tomcat-6.0-doc/security-manager-howto.html>, последно посетен на 10.06.2021

14. Assessment methods and criteria:

The discipline ends with an exam.

The written exam is conducted in the form of a test with open questions on the material specified in the synopsis and presented in the lectures on the subject.

The criteria are: comprehensiveness, accuracy and thoroughness in answering the questions asked in the test. Maximum number of points – 100.

15. Language of instruction: *Bulgarian/English*